Ektron CMS400.NET

REFERENCE MANUAL

Version 8.0 Rev 1.3

What do you want your website to do?

Reference Manual

Version 8.0 Rev 1.3

Ektron® Inc.

542 Amherst St.

Nashua, NH 03063

Tel: +1 603-594-0249

Fax: +1 603-594-0258

Email: sales@ektron.com

http://www.ektron.com

To learn what’s new in this release, see

http://dev.ektron.com/cms400releasenotes.aspx

Version 8.0 Rev 1.3, Thursday, January 14, 2010

For the latest version of this manual, go to

http://www.ektron.com/web-content-management-solutions.aspx?id=4020 ektron

EKTRON INC. SOFTWARE LICENSE AGREEMENT

Important: ** READ THIS BEFORE LOADING SOFTWARE**

1. License: Licensor hereby grants to Licensee a worldwide, fully paid, royalty free, irrevocable non-exclusive license (the “License”) to use the following Software:

CMS400.NET [specify Professional with number of URLs and seats, or Enterprise Package with Unlimited Users and Unlimited URLs on a single server]

The Software is licensed for use only in delivered code form. Delivered code is defined as the code base delivered by the Licensor to the Licensee and is comprised of Ektron’s compiled and un-editable source code as well as additional modifiable and customizable code layers. Each copy of the Software is licensed for the number of seats, URLs, or servers listed above. Any use of the Software beyond the number of authorized seats or servers contained in the Professional or Enterprise Package as provided herein shall cause this license to terminate. Should Licensee wish to add seats or servers beyond the Professional / Enterprise Package, Licensee may add seats or servers at the then current price for additional seats.

For purposes of this section, the term “seat” shall mean an individual user provided access to the capabilities of the Software. A “server” should be defined as a specific physical or virtual server managed by the software.

Licensee may not modify, alter, reverse engineer, disassemble, or decompile the Software. The Software is licensed, not sold.

2. Duration: This License shall continue so long as Licensee uses the Software in compliance with this License. Should Licensee breach any of its obligations hereunder and the License is terminated in accordance with Section 6 hereof, Licensee agrees to return all copies of the Software and this License upon notification and demand by Licensor.

3. Copyright: The Software (including any images, “applets,” photographs, animations, video, audio, music and text incorporated into the Software) as well as any accompanying written materials (the “Documentation”) is owned by Licensor or its suppliers, is protected by United States copyright laws and international treaties, and contains confidential information and trade secrets. Licensee agrees to protect the confidentiality of the Software and Documentation. Licensee agrees that it will not provide a copy of this Software or Documentation nor divulge any proprietary information of Licensor to any person, other than its employees or contractors, without the prior consent of Licensor; Licensee shall use its best efforts to see that any user of the Software complies with this License.

4. Limited Warranty: Licensor warrants that the Software will perform in all material respects in accordance with the description in the RFP response submitted by Licensor to Licensee and that the Software will be free from defects in material and workmanship under normal, proper and intended usage for a period of three (3) months from the date of purchase. Licensor warrants that the Software at the time of purchase will be free of malicious code and disabling code and shall not infringe on the intellectual property rights of any third party. Except as provided in the preceding sentence, Licensor does not warrant the use of the Software will be uninterrupted or error free, nor that program errors will be corrected. This limited warranty shall not apply to any error or failure resulting from (i) machine error, (ii) Licensee's failure to follow operating instructions, (iii) negligence or accident, or (iv) modifications to the Software by any person or entity other than Company. In the event of a breach of warranty, Licensee’s sole and exclusive remedy is repair of all or any portion of the Software. If such remedy fails of its essential purpose, Licensee’s sole remedy and Licensor’s maximum liability shall be a refund of the paid purchase price for the defective Software only. This limited warranty is only valid if Licensor receives written notice of breach of warranty no later than thirty days after the warranty period expires.

5. Limitation of Warranties and Liability: EXCEPT AS SET FORTH IN SECTION 4, THE SOFTWARE AND DOCUMENTATION ARE SOLD “AS IS” AND WITHOUT ANY WARRANTIES AS TO THE PERFORMANCE, MERCHANTIBILITY, DESIGN, OR OPERATION OF THE SOFTWARE. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS OFFERED. EXCEPT AS DESCRIBED IN SECTION 4, ALL WARRANTIES EXPRESS AND IMPLIED ARE HEREBY DISCLAIMED. NEITHER LICENSOR OR ITS SUPPLIERS SHALL BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF BUSINESS OR GOODWILL, LOSS OF DATA OR USE OF DATA, INTERRUPTION OF BUSINESS NOR FOR ANY OTHER INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND UNDER OR ARISING OUT OF, OR IN ANY RELATED TO THIS AGREEMENT, HOWEVER, CAUSED, WHETHER FOR BREACH OF WARRANTY, BREACH OR REPUDIATION OF CONTRACT, TORT, NEGLIGENCE, OR OTHERWISE, EVEN IF LICENSOR OR ITS REPRESENTATIVES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS.

6. Indemnification:

(a) General. Except as otherwise expressly provided, each Party to this agreement shall defend, indemnify and hold harmless the other Party and any of the other Party's agents, employees, and invite es against all claims, liability, loss and expenses, including reasonable costs, collection expenses, court costs and attorney's fees, which may arise because of the negligence, misconduct, or other fault of the first Party in the performance of its obligations under this agreement.

(b) Indemnification for Infringement. Licensor will, at its expense, defend, and indemnify Licensee against any actual or threatened action or proceeding by a third party (a "Claim") that the Software infringes a United States patent or copyright of any third party, and will pay all losses, liabilities, damages and claims and all related costs and expenses (including reasonable attorneys' fees, litigation, settlement, judgment, interest and penalties) either awarded by a court or agreed to in an out-of-court settlement approved in advance in writing by Licensor. Licensor may, at its option, either procure for Licensee the right to continue using the Software or replace or modify the Software so that it becomes non-infringing. If, in Licensor's reasonable business or legal opinion, neither option is feasible, Licensee will return the infringing Software to Licensor, the License will be terminated and Licensor will reimburse Licensee a full refund. If Licensee elects to continue using the Software rather than return it to Licensor, Licensor will have no further liability to Licensee. Licensor will not indemnify Licensee for infringement if Licensee has modified the Software without Licensor's assistance.

(c) Indemnification Procedures. If Licensee becomes aware of a Claim that may require indemnification, Licensee will promptly notify Licensor in writing of the Claim and will allow Licensor to assume sole and full control of the defense and settlement of the Claim. Licensee will provide Licensor with reasonable assistance and information necessary to defend and settle the Claims. Licensee's counsel will have the right to participate in the defense and settlement of the Claim, at Licensee's own expense.

9. Assignment: Both parties shall be entitled to assign this Agreement in whole or in part, and its rights and obligations hereunder, without advance notice and without cost, to any current and future parent, subsidiary or affiliate of such assigning party and to a business entity in connection with a merger, or sale or contribution of some or all of its assets. Written confirmation notice of any assignment will be given by the assigning party to the other party to this Agreement as soon as commercially reasonable. Otherwise, all rights and obligations are not assignable without prior written consent of the other party, which consent shall not be unreasonably withheld.

10. Transfer: Upon completion of payment for the software referenced herein the Licensee shall receive perpetual, non-expiring license keys for their production environment. Once delivered to the Licensee, these keys exist in perpetuity in the Licensee's possession. In the event that the Licensee requests a change to the perpetual keys referenced above, Licensor requires a mutually signed license transfer document and Licensee must remit a license transfer fee equal to thirty (30) percent of the initial license purchase cost.

11. Miscellaneous: This Agreement and its performance and all claims arising from the relationship between the parties contemplated herein shall be governed by, construed and enforced in accordance with the laws of the State of Missouri without regard to conflict of laws principles thereof. The parties agree that any action brought in connection with this Agreement shall be maintained only in a court of competent subject matter jurisdiction located in the State of Missouri or in any court to which appeal there from may be taken. The parties hereby consent to the exclusive personal jurisdiction of such courts in the State of New Hampshire for all such purposes. The United Nations Convention on Contracts for the International Sale of Goods is specifically excluded from governing this License. If any provision of this License is to be held unenforceable, such holding will not affect the validity of the other provisions hereof. Failure of a party to enforce any provision of this Agreement shall not constitute or be construed as a waiver of such provision or of the right to enforce such provision. This Agreement may not be modified other than in a writing signed by both parties. This Agreement and the Schedules hereto represent the entire understanding between the parties with respect to its subject matter. This Agreement may be executed in counterparts, each of which shall be deemed an original and which together shall constitute one document. Facsimile copies of signatures shall be acceptable as originals.

LICENSEE HEREBY ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT AND THAT IT UNDERSTANDS THIS AGREEMENT.

Summary Table Of Contents

Detailed Table Of Contents

Securing your Ektron CMS400.NET

Security Checklist

The following is a checklist of things an administrator must do to secure Ektron CMS400.NET.

Change the Admin and Builtin Users' Passwords

Make sure you change the password for the Admin and Builtin user. To change the Admin user's password, navigate to .

☐ **Change Admin user password**

Change the Admin user's password in the Workarea by following these steps.

1. In the Workarea, navigate to **Settings** > **Users**
2. Click the **Admin** user.
3. Click the **Edit Users** button.
4. In the Password and Confirm Password fields enter the new password.
5. Click the **Save** button.

☐ **Change builtin user password**

Warning! If you changed the builtin user password during the site setup, you do not need to change it again. See "Editing Builtin" on page xxv for additional information.

Change the builtin user's password in the Workarea by following these steps.

1. In the Workarea, navigate to **Settings** > **Configurations** > **Setup**.
2. Click the **Edit** button.
3. Find the Built In User field.
4. In the Password and Confirm Password fields enter the new password.
5. Click the **Update** button.

Remove Sample Users and Sample Membership Users

Some sample users and sample membership users are included with Ektron CMS400.NET for evaluation and demonstration purposes. These users should be removed when they are no longer needed.

CMS users have access to the Workarea. They can be content authors, administrators or even developers who need access to information in the Workarea. These people count towards the number of users in your license.

Membership users are typically people who only interact with your Web site. Membership users are a category of users who have limited privileges to Ektron CMS400.NET. Unlike regular CMS users, they cannot use the Workarea and do not count towards the number of users in your license.

☐ **Remove Sample Users and Sample Membership Users**

Warning! Some users in this list might not appear in your User list. Also, you might have sample users that appear in your users lists. This depends on which version of the software you have installed.

Ektron CMS400.NET Users	Membership Users
☐ **jedit** ☐ **tbrown** ☐ **jsmith** ☐ **vs** See Also: "Managing Users and User Groups" on page 15-1	☐ **jmember** ☐ **member@example.com** ☐ **north** ☐ **supermember** ☐ **west** See Also: "Membership Users and Groups" on page 16-4

Removing CMS400.NET Users

To remove Ektron CMS400.NET users in the Workarea, follow these steps.

1. In the Workarea, navigate to **Settings** > **Users**.
2. Click the check box next each user you want to remove.
3. Click the Delete button ( ).
4. Click **OK** in the dialog box that appears.

The page refreshes and the users are removed.

Removing Membership Users

To remove Membership users in the Workarea, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Memberships** > **Users**.
2. Click the check box next each user you want to remove.

3. Click the Delete button ( ).
4. Click **OK** in the dialog box that appears.

The page refreshes and the membership users are removed.

Do Not Allow the Use of Group User Accounts

☐ **Do Not Allow the Use of Group User Accounts**

A group account is an account that multiple people use to log in to Ektron CMS400.NET using the same username and password. This is a serious security issue as you lose the ability to accurately keep track of who is doing what in your Web site's environment. The use of a group user account is a violation of Ektron CMS400.NET's license agreement.

Additional Information

You *do not* need to make these changes if you are using the CMS400.NET for demonstration or evaluation purposes. These changes should be completed once the decision is made to purchase the product and go live with your site.

Warning! Ektron recommends creating your own Administrator user and deleting the Admin user.

Warning! Ektron recommends deleting any users from the CMS400.NET that are not needed on the system.

The Everyone Group

By default, the root folder in Workarea provides the Everyone Group with all permissions except Overwrite Library. Ektron Inc. recommends reviewing the permission needs of the Everyone Group when you add a folder. See Also: "Folder Permissions" on page 5-43

Editing Builtin

Warning! The "builtin" user does not appear in the Users list. This user appears on the application setup screen.

To change the builtin account information, follow these steps.

1. In the Workarea, click **Settings** > **Configuration** > **Setup**.
2. Click the Edit button ( ).
3. Locate the **Built In User** field.
4. Edit the built in user information by changing the username and password.
5. Click the Update button ( ).

Note: If you cannot sign in to Ektron CMS400.NET because the builtin user password was changed and you don't know the new password, use the BuiltinAccountReset.exe utility. This resets your Ektron CMS400.NET user \ password to Builtin \ Builtin. This utility is located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities`.

ServerControlWS.asmx

Best Practice

For improved security, Ektron recommends renaming or removing the Web services file when you move it to your production server. After installation, this file is named ServerControlWS.asmx and resides in the *webroot*/*siteroot*/Workarea folder.

ServerControlWS.asmx is the Web service that lets the server controls talk to Ektron CMS400.NET. The path is coded in the web.config file. This is how it appears:

```
<!-- Web Service URL for Server Controls design time --> <add key="WSPath"
value="http://localhost/CMS400Developer/Workarea/ServerControlWS.asmx" />
```

You will need to edit this line if you change the location or name of the ServerControlWS.asmx file.

Ektron CMS400.NET

Chapter 1

Installing Ektron CMS400.NET

System Requirements

The following components are required when developing or viewing an Ektron CMS400.NET based application.

Server Requirements

Component	Requirements
Recommended hardware configuration	- Intel® Pentium® 4 supporting Hyper-Threading or Intel® Xeon® processor (with 800MHz bus) - 2 GB RAM or higher - RAID array for hard drives
Web server operating system	Microsoft ® Windows® Server 2003 - 32 and 64 bit versions Microsoft Windows Server 2008 - 32 and 64 bit versions Microsoft Windows Server 2000, XP Professional Note: Only use Windows XP for testing and development. Do not use it on your production server. Microsoft Windows Vista Business & Ultimate
Web application server	Microsoft .NET ™ Framework 3.5
Web server	Microsoft® Internet Information Server (IIS) 6.0 or higher
File System	NTFS (FAT 32 is *not* supported)
Database	- Microsoft SQL ™ Server 2008 - Microsoft SQL ™ Server 2005 SP2 and higher (including Express version)

Component	Requirements
	Warning! Ektron CMS400.NET does not support case sensitive databases. Note: Virtual Servers are not recommended for database environments.

PC Client Requirements

Component	Requirements
Operating system	■ Any IBM-PC compatible system running Windows, including Vista® Ultimate and Vista® Business ■ Mac OSX
Browsers for viewing	All major browsers including: ■ Mozilla Firefox ■ Microsoft® Internet Explorer 6.0 or higher ■ Google Chrome
Browsers for editing	■ Mozilla Firefox (but see Firefox Support Summary) ■ Microsoft® Internet Explorer 7.0 or higher Note: Only released versions are supported. **Warning!** If using Firefox, uncheck the **Block Popup Windows** setting. To access this setting, go to **Tools > Options > Content**.
Hardware	Suggested minimum requirements: Pentium 166 MHz or faster with at least 64MB of RAM
Web development tools	■ Visual Studio 2005 / 2008 ■ Visual Web Developer 2005 / 2008 Express For Web site development ■ Visual C# 2005/2008 Express and Visual VB 2005 Express For Plug-in Extensions creation ■ Adobe Dreamweaver

Apple Macintosh Client Requirements

Component	Requirements
Operating system	MAC OS X
Browsers for viewing	All major browsers including: • Microsoft® Internet Explorer • Mozilla Firefox
Browsers for editing	• Mozilla Firefox
Hardware	Apple Macintosh

Note: Ektron does not guarantee support of beta releases for components listed above.

License Keys

Introduction

Ektron controls the use of CMS400.NET through a license key, a unique code assigned to your domain when you purchase CMS400.NET. Your license key is included in the email that Ektron sends when you request or purchase CMS400.NET.

See Also:

- See "License Key Types" on page 1-5
- See "License Key Format" on page 1-6
- See "Inserting the License Key" on page 1-6
- See "WebImageFX License Keys" on page 1-7
- See "Using CMS400.NET without a License Key" on page 1-8
- See "Domains in which You Can Use the License Key" on page 1-8
- See "Register Domains, not IP Addresses" on page 1-8
- See "More Information" on page 1-9

License Key Types

There are three levels of license keys available for use with Ektron CMS400.NET. The features that are available in your specific version of CMS400.NET depend on the license key you purchase. The table below shows the major features at each level.

Feature	Enterprise	Professional	Standard
Analytics	✓	✓	
Document Management	✓	✓	
eCommerce	Optional	Optional	
eSync	✓	Optional	

Feature	Enterprise	Professional	Standard
Multi-site	✓	Optional	
Personalization	✓	✓	
Social Networking	✓	✓	
XLIFF Support	✓	✓	
All Other Ektron CMS400.NET Features	✓	✓	✓

License Key Format

A license key typically begins with a base URL (domain name, computer network name, or IP address) followed by descriptor tags, a question mark, a series of numbers, a hyphen and one or two digits signifying release number. For example:

```
dev.mysite.com(exp-2008-10-25)(modifiers)(users-10)?51510837796786063064924334416-XX
```

License keys cannot contain spaces or line breaks.

Inserting the License Key

If you download the executable (.exe) file, you are prompted to enter a license key during installation. If you choose not to install the license key during the installation, you can enter it by navigating to Workarea > Settings > Setup and clicking the Edit button. Once you are in edit mode, add the license key to the License Key(s) text box.

Changing License Keys Upon Upgrade

If you upgrade to a new release of CMS400.NET and want to replace the old license key with a new one, navigate to Workarea > Settings > Setup and click the Edit button. Once you are in edit mode, add the license key to the License Key(s) text box. On the other hand, if you want to add new keys *in addition to* old keys, create a comma delimited list of keys in the License Key(s) text box.

When cutting and pasting license keys, keep the full license key intact without adding or deleting characters. License keys that are changed in any way render CMS400.NET inoperable.

WebImageFX License Keys

If you are installing WebImageFX with CMS400.NET, a WebImageFX license key is included in the email you receive when you purchase CMS400.NET. A WebImageFX key resembles a CMS400.NET key but includes the string `wifx`.

To add the key to CMS400.NET, navigate to Workarea > Settings > Setup and clicking the Edit button. Once you are in edit mode, add the license key to the Module Licenses text box.

License Key Check

When you login to a Web site that contains CMS400.NET, it checks the license key(s) against the domain.

If the URL of a valid license key matches the URL of the site being accessed, the Workarea appears.

If no valid license key is found for the URL of the site being accessed, CMS400.NET is disabled and you must log in the with Builtin account to change the License Key.

Invalid License Key Message

If you have a broken license key or a license key with an incorrect base URL, an error message appears in the CMS400.NET Login window. The message states, “Error: A license violation has occurred and the application is presently locked. Please see your administrator.”

If this message appears, you can login with the Builtin account and reenter your license key. If the message continues to appear and you are sure you have a valid key, contact Ektron Support.

Using CMS400.NET without a License Key

For evaluation purposes, when you install CMS400.NET, you do not need a license key. During the installation process, leave the License Key field blank and click the next button on the License screen. This allows you to use CMS400.NET as localhost.

Domains in which You Can Use the License Key

The license key is assigned to your base URL, which is typically your domain name. For example, if your domain name is `www.mycompany.com`, the license key follows this pattern: `www.mycompany.com(expdate)(Modifers)?1234567890`.

Each domain name requires its own license key. For example, to support the domain names, `www.mycompany.com`, `sales.mycompany.com` and `support.mycompany.com`, you need three license keys.

Register Domains, not IP Addresses

When you purchase a license key, be sure to register a domain name, not an IP address. For example, register `www.mycompany.com`, not `192.168.0.1`.

Although CMS400.NET supports IP addresses, the domain that you license becomes the required URL in the browser address. For example, if you register `192.168.0.1`, you would need to access the site as `http://192.168.0.1/somedirectory/myloginpage.aspx`.

Since users would typically not identify a Web page by its IP address, you should register the domain name instead.

More Information

Additional information about licenses is available at [http://www.ektron.com/products.aspx?id=1144.](http://www.ektron.com/products.aspx?id=1144)

Development and Staging Configurations

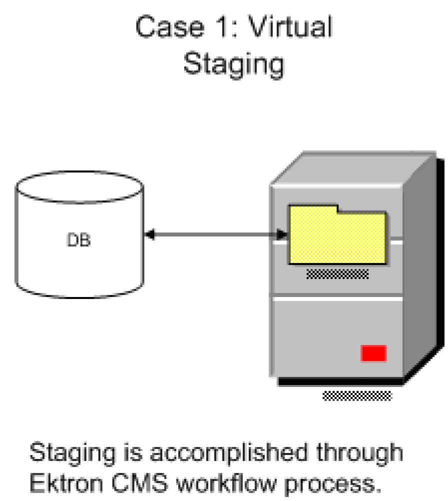
This chapter presents five examples of how to configure your Ektron CMS400.NET Web site. Reading this will help you decide which configuration is the best fit for your particular situation.

Configuration	Properties	Implementation Guidelines
Virtual Staging	Use CMS400.NET's approval process and scheduled publishing of content to manage when content goes live	"Virtual Staging" on page 1-11
Multiple sites, Same Server, Same Database	Production and development/staging sites use separate copies of Ektron CMS400.NET but reside on same server and point to same database Ektron CMS400.NET's settings, managed content, and library files are identical between sites	"Same Server, Same Database" on page 1-13
Multiple sites, Same Server, Different Databases	Production and development/staging sites use separate copies of Ektron CMS400.NET's display layer, reside on same server, but point to different databases Changes to content, configuration, or library files made in one site must be copied to other site	"Same Server, Different Databases" on page 1-11
Multiple sites, Separate Servers, Same Database	Production and development/staging sites reside on separate servers, which point to the same database. Ektron CMS400.NET settings, content, and library files are identical between sites. Changes to templates must be copied between servers.	"Separate Servers, Same Database" on page 1-14
Multiple sites, Separate Servers, Separate Databases	Production and development/staging sites are installed to separate servers and point to different databases Changes to content, configuration, or files must be copied between sites.	"Separate Servers, Separate Databases" on page 1-15

After deciding which configuration is best, read the following sections to learn about procedures for working with multiple sites, servers, and databases.

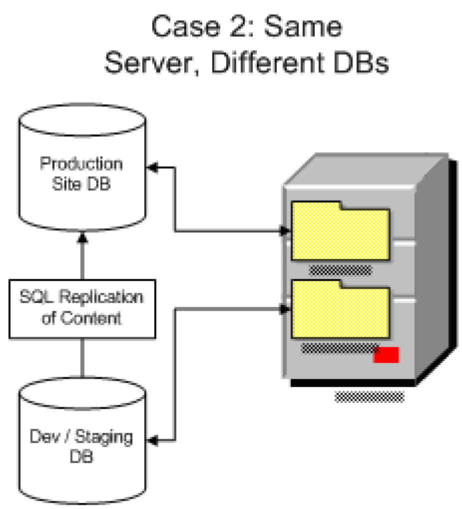
- Installing Ektron CMS400.NET on Several Servers
- "Copying the Site and Database to Other Environments" on page 1-16

Virtual Staging



- Best choice when changes to templates and library files assets are infrequent
- No special implementation guidelines; just an installation on one server
- When upgrading this type of site, make a temporary copy of the site (both display layer and database) on a separate server to test the upgrade

Same Server, Different Databases



To set up this configuration, follow these guidelines.

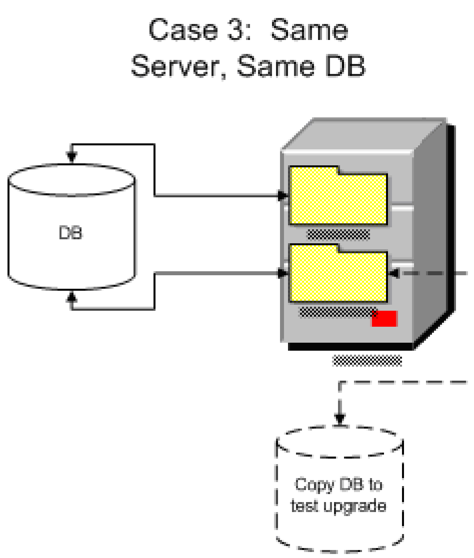
- To maintain file paths between sites, follow these steps.
  - Create separate Web Sites in IIS.
  - Assign different ports to the production and development/staging sites. For example, the production site is `http://www.example.com`, and the development/staging site is `http://www.example.com:8080`.
  - Separate the databases for isolation.
  - One database is the master, and the other is a copy
  - Only edit content in the site connected to the master database
  - Remove the Ektron CMS400.NET login page from the site connected to the copy database
- To copy the Ektron CMS400.NET database, your best choice is Ektron's eSync feature. This is described in See "Synchronizing Servers Using eSync" on page 18-1 .

If you have not implemented eSync, copy site content using a replication tool for the database.

- **SQL Server 2000 SDK Replication** - see http://msdn.microsoft.com/library/en-us/replsql/replover_694n.asp

- Library files - Make the Ektron CMS400.NET `uploadedimages/` and `uploadedfiles/` folders IIS virtual directories that point to the same physical directory.
- Templates and other file system assets - The best way to move these is syncs. If that was not implemented and changes to these items are infrequent, you can manually copy them. For automated replication, use a product such as Microsoft Application Center.
- Upgrading Ektron CMS400.NET - To test an upgrade, make a temporary copy of the site's display layer on a separate server connected to the development/staging database. If the development/staging database is the master, back it up before upgrading.

Same Server, Same Database



To set up this configuration, follow these guidelines.

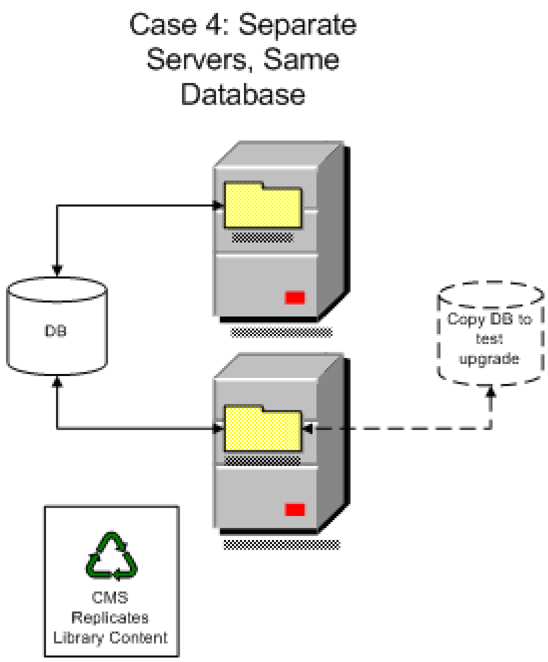
- To maintain file paths between sites, follow these steps.
  - Create separate Web Sites in IIS.
  - Assign different ports to the production and development/staging sites. For example, the production site is `http://www.example.com`, and the development/staging site is `http://www.example.com:8080`.
- Both sites must use the same pathing relative to the Web root. For example, `www.example.com\Workarea\applicationAPI.asp` and `dev.example.com\Workarea\applicationAPI.asp`.
- Because both sites use the same database, editing and publishing content on one site affects the other site. As a result, the development/staging server always has the freshest content.
- Make the Ektron CMS400.NET `uploadedimages/` and `uploadedfiles/` folders IIS virtual directories that point to the same physical directory.
- Template changes must be copied between sites. The best way to copy site templates and other file system assets is eSync. This is described in See "Synchronizing Servers Using eSync" on page 18-1.

  If that was not implemented and changes to these items are infrequent, you can manually copy them.

1. To test and QA an upgrade, make a temporary copy of the site's display layer on a separate server connected to the development/staging database.

   If the development/staging database is the master, back it up before upgrading.

Separate Servers, Same Database



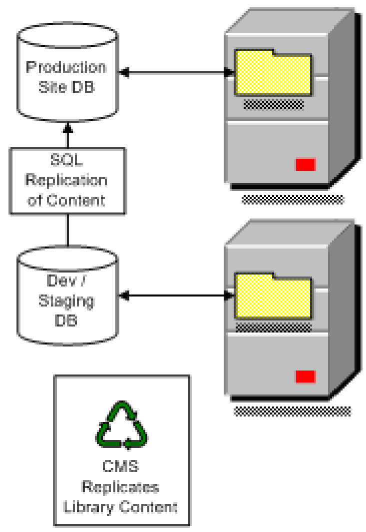
To set up this configuration, follow these guidelines.

- Configure Ektron CMS400.NET's Load Balancing feature to copy uploaded images and files between the servers.
- The best way to move site templates and other file system assets is eSync. This is described in "Synchronizing Servers Using eSync" on page 18-1.

If that was not implemented and changes to these items are infrequent, you can manually copy them. For automated replication, use a product like Microsoft Application Center.

- When upgrading Ektron CMS400.NET, follow these steps.
  - Back up the file system of the development/staging server
  - Make a temporary copy of the production server database
  - Switch the development/staging site to use the copy
  - Test and QA the upgrade on the development/staging server

Separate Servers, Separate Databases



To set up this configuration, follow these guidelines.

- Both sites must have the same pathing relative to the Web root, for example, `www.example.com\Workarea\applicationAPI.asp` and `dev.example.com\Workarea\applicationAPI.asp`.
- Separate the databases for isolation.
  - One database is the master, and the other is a copy
  - Only edit content in the site connected to the master database
  - Remove the Ektron CMS400.NET login page from the site connected to the copied database
- The best way to copy site templates and library files is eSync. This is described in "Synchronizing Servers Using eSync" on page 18-1.

If that was not implemented and changes to these items are infrequent, you can manually copy them. For automated replication, use a product like Microsoft Application Center.

- To copy the Ektron CMS400.NET database (containing HTML and XML content), your best choice is Ektron's eSync feature.

If you have not implemented eSync, copy site content using a replication tool for the database.

  - **SQL Server 2000 SDK Replication** - see http://msdn.microsoft.com/library/en-us/replsql/replover_694n.asp

- Make the Ektron CMS400.NET `uploadedimages/` and `uploadedfiles/` folders IIS virtual directories that point to the same physical directory.
- When upgrading Ektron CMS400.NET, follow these steps.
  - Back up the file system of the development/staging server
  - Make a temporary copy of the production server database
  - Switch the development/staging site to use the copy
  - Test and QA the upgrade on the development/staging server

Copying the Site and Database to Other Environments

Once your project is ready to be tested in house, move the site to a staging server. When the project is ready to go live, move the site to a production (live) server.

You can use the same database for all environments. Back up that database often to keep it safe. Alternatively, create a separate database for each server. For more information about how to configure your Ektron CMS400.NET Web site, see "Development and Staging Configurations" on page 1-10.

Tips on Creating Additional Environments

To create new environments, follow these steps.

1. On the same server or a separate server, create new folders for **Ektron CMS400.NET:** `C:/cmsstage` and/or `C:/cmsproduct`.
2. In IIS, create a new domain for each server. `http://stage.example.com` points to `c:/cmsstage` and `http://www.example.com` points to `c:/cmsproduct`.
3. If all environments are on the same server, you don't need to copy other folders. But, if you are using a separate server for each environment, copy the `c:/assetcatalog` and `c:/assetlibrary` folders to the other servers.
4. For the database, access the SQL manager and make a backup of the development database. Then, create new databases for staging and production. Finally, restore the backup of the development database to the staging and production databases.

5. In the staging and production environments, open web.config. Then, update the database connection information so that it points to the new databases.
6. Test the staging and production environments.

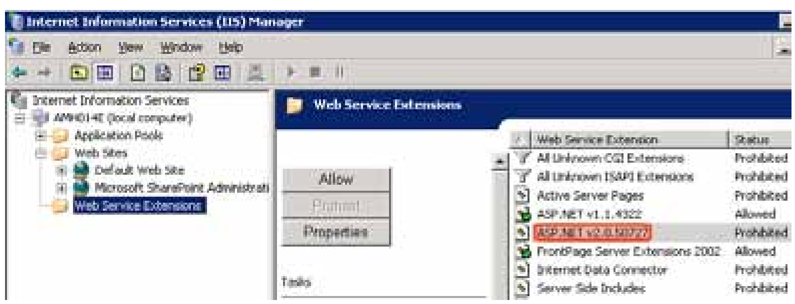
Installing Ektron CMS400.NET

Before You Install

Prior to installing Ektron CMS400.NET, complete these tasks.

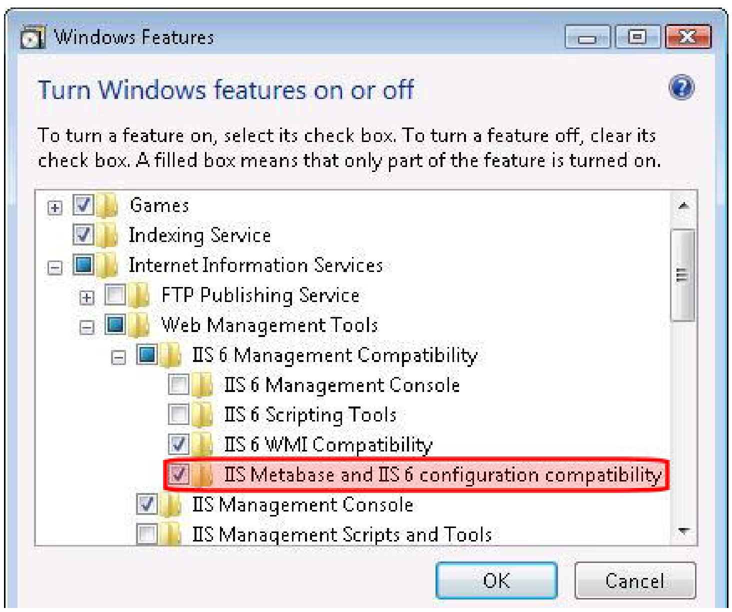
Prerequisites: See See "Installing Ektron CMS400.NET" on page 1-1

1. Create a folder for the site. Make sure the drive and folder to which you install your Ektron CMS400.NET Web site have sufficient space. Anticipate future needs, since the site is likely to grow over time.
2. Make sure that Internet Information Server (IIS) is installed in your server. See "Creating a Web Site in IIS" on page 1-104.
3. Enable the ASP.NET 2 Web Service Extensions. To do this, open IIS Manager, and click the Web Service Extensions folder. Then, click ASP.NET v2.0 and **Allow** (as shown below).



4. Install and configure your Web Application Server. For more information, see http://www.asp.net.
5. If you are setting up one Web site that uses multiple CMS servers and points to a single database server, make sure both servers connect to the same database. This configuration ensures that membership user registrations, forum/blog posts, statistics, etc., are the same on both servers. For more information, see "Moving a Site to Another Directory or Server" on page 1-41.
6. If the server to which you are installing has IIS7 (that is, it's running Windows Vista or Server 2008), enable IIS 6 metabase compatibility. To do that, follow these steps.
   - Open the Control Panel.
   - Click **Programs and Features**.
   - From the left panel, click **Turn Windows Features On or Off**.

- Click to open **Internet Information Services > Web Management Tools > IIS 6 Management Compatibility**.
- Check **IIS Metabase and IIS 6 configuration compatibility**.



- Press **OK**.

Installing the Minimum and Starter Sites

The installation scheme has changed for version 7.0.2 or higher. Previously, when you installed Ektron CMS400.NET, the installation created a site with sample content. (Sample content provides an example of how Ektron CMS400.NET's features can be implemented.) Beginning with 7.0.2, however, the base installation file provides no sample content.

To supplement the base installation, Ektron provides several sample sites. You can install as many as you wish. Many customers install sample content that resembles their environment. For example, a legal practice might install the legal starter site.

Sample sites are available from http://www.ektron.com/cms400-web-cms.aspx?id=4189.

Note: To get the technical information for developers, which was previously available on the Developer's Sample page, install the developer starter site.

Installing a Starter Site

No Current Ektron CMS400.NET Installation

To install one or more sample sites, download them plus the base install file (CMS400Basev80.exe) from www.ektron.com to the same folder on your Web server. Then, click a starter site's .exe file, such as Legal.exe. When you do, it copies the templates and database to your machine. Next, the base install runs until it completes phase 1 of the installation steps listed in "Performing the Installation" on page 1-21.

Once the base installation is complete, the Site Setup portion of the install is run. Once the setup is complete, you can install any number of additional sample sites by downloading and clicking them.

If you want to re-install a Starter Site, click the Site Setup link in **Start** > **Programs** > **Ektron** > **CMS400v8X** > **Utilities** > **CMS400 Site Setup**.

If you are familiar with Ektron CMS400.NET, you do not need to install a starter site. Simply use the base installation and proceed with site development.

Upgrading an Existing Installation

If you have an earlier version of Ektron CMS400.NET, first upgrade to Release 8.0. Then, select one or more starter sites and install them.

Starter Applications

Ektron has also developed several *starter applications* that you can install to better learn Ektron CMS400.NET's capabilities. Starter applications are built on the Ektron CMS400.NET engine and leverage Ektron CMS400.NET's flexible API made available via its SDK. Starter applications are tailored to address the needs and requirements for specific business processes for organizations of any size, but are flexible enough to meet your custom requirements.

Starter applications are shipped open source and are free of charge. They work out of the box and, if needed, can easily be extended. Starter applications are a perfect starting point for building your own web application. The only requirement is that a Ektron CMS400.NET base install exist on your server.

If you install the legal starter site, the Case Management Starter App is automatically installed. If you install any other starter site, the Project Management Starter App is automatically installed.

Starter Applications are available from http://www.ektron.com/products.aspx?id=5948.

Performing the Installation

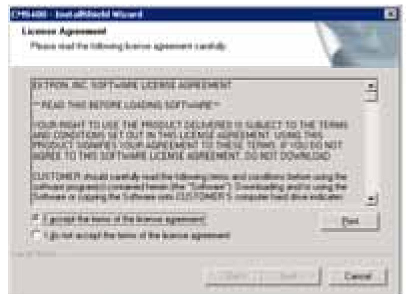
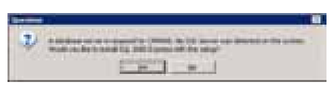
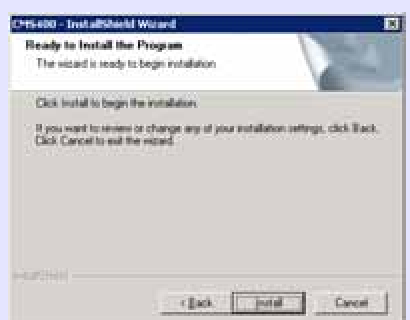
Note: The installation program checks for an installation of MSSQL on your server. If it is not installed, it will attempt to install SQL Express.

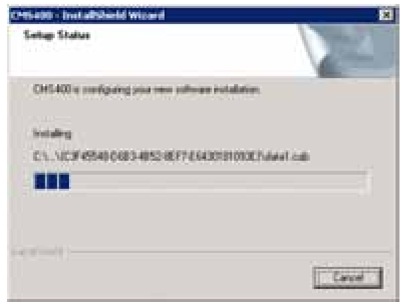
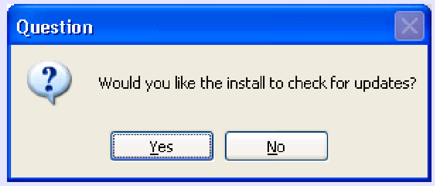
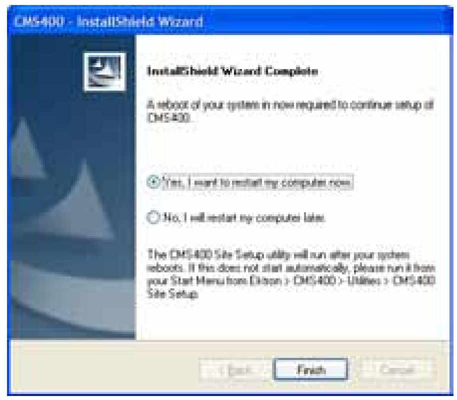
Installing Ektron CMS400.NET involves these actions. The installation program guides you through them.

Phase	Action	What it does	For details, see
1	Copy installation files to `C:\Program Files`	ensures system requirements installs non-working copy of files needed to set up site	"A screen displays Ektron's License Agreement. Please read the agreement." on page 1-23
2	Set up a site - (can be started any time after Phase 1)	moves files based on selected Web folder creates IIS application directories sets upload folder permissions updates web.config (path, version, and build number)	"Setting up a Site" on page 1-25

Phase	Action	What it does	For details, see
3	Set up a database	- references database folder for scripts needed to create a database - creates new tables and populates them - adds and sets user permissions - updates the web.config file - tests database connection	"Setting up a Database" on page 1-28 "Set Up a User for the CMS400.NET Database" on page 1-32

Running the Installation and Setup Program

Step	Setup Screen
1. Go to the Ektron Web site (http://www.ektron.com/download.cfm?product_id=342&purchase=0) and download Version 8.0 Rev 1.3 of Ektron CMS400.NET.	
2. Double click the downloaded CMS400Basev80.exe file.	
3. A screen displays Ektron's License Agreement. Please read the agreement. ▪ Click **I Accept...** to accept the agreement. ▪ Click **I do not accept**. If you do not accept the agreement, this action ends the setup.	
4. Select **Complete** to install all components. Or, select **Custom** to choose which components to install. You can also choose where the components are installed.	
Note: Once you click next, the install checks to see if you have SQL or SQL 2005 Express installed on the server. If you do not, a dialog appears asking if you would like to install SQL 2005 Express. 	
5. The **Ready to Install the Program** screen appears. Click **Install**.	

Step	Setup Screen
6. The installation program copies the necessary files to the `C:\Program Files` folder. **Warning!** - After completing the installation, you should further configure your permissions based on your network security model before using Ektron CMS400.NET.	
7. Click **Yes** to check for updates. This verifies that you have the latest version of CMS400.NET.	
8. You might be prompted to restart your server. If so, Ektron recommends doing a restart now.	

Once you restart, the site setup procedure begins upon completing the restart.

If the site setup does not start once the restart is complete, you can launch the site setup from **Start > Programs > Ektron > CMS400 > Utilities > CMS400 Site Setup**.

Warning! If the above dialog appears, do not run the site setup until the system has been rebooted.

Step	Setup Screen

Setting up a Site

This section allows you to setup a CMS400.NET site. The installation copies the following folders from `C:\Program Files\Ektron\CMS400v8x` to the Web root folder you specify:

- BIN
- workarea
- documentation
- uploaded files and uploaded images
- a login page
- the VS 2005 solution file

The site setup can be run manually by clicking the cms400sitesetup.exe file located in `C:\Program Files\Ektron\CMS400v80\Utilities\SiteSetup` or by clicking **Start** > **Programs** > **Ektron** > **CMS400vXX Utilities** > **CMS400 Site Setup**.

9. This is the Site Setup Welcome screen. It lets you set up a Web site.

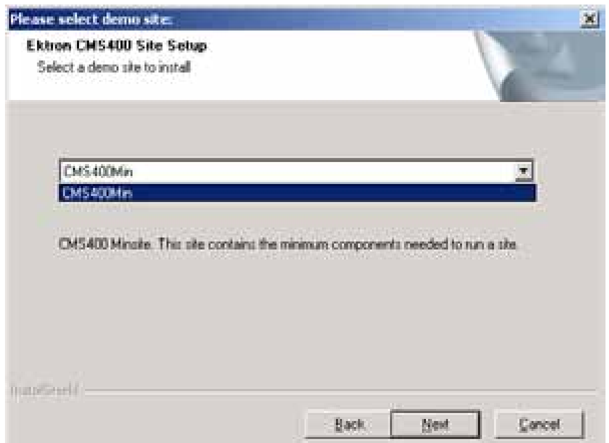
10. The Setup Type screen appears. Choose an option and click Next.

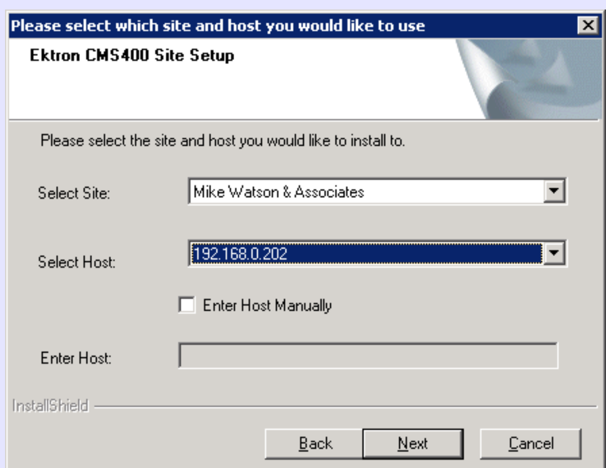
- **CMS400 Full Installation** - For setting up a new site installation.
- **CMS400 Upgrade** - For upgrading existing site. Upgrades the database and site files as necessary.
- **CMS400 Database Setup** - For setting up a new site database. Site files, such as .aspx pages are not included in this setup.

<table>
<tr><th>Step</th><th>Setup Screen</th></tr>
<tr><td>11. In the License Key field, enter your primary license key for Ektron CMS400.NET.

License keys are typically emailed to your organization when you request a copy of the application.

When cutting and pasting a license key, keep the full license key intact without adding or deleting characters.

If you do not have license keys now, you can insert them later. See "Updating Setup Information" on page 19-3.</td><td>
</td></tr>
<tr><td>12. This dialog box allows you select which site you want to install. This screen does not appear the first time you run the site setup for a starter site. If you run it again and have multiple sites, this dialog box will appear.</td><td>
</td></tr>
<tr><td>13. If your server operating system accommodates multiple Web sites (for example, Windows Server 2003), select the site to which you want to install Ektron CMS400.NET from the dropdown list.

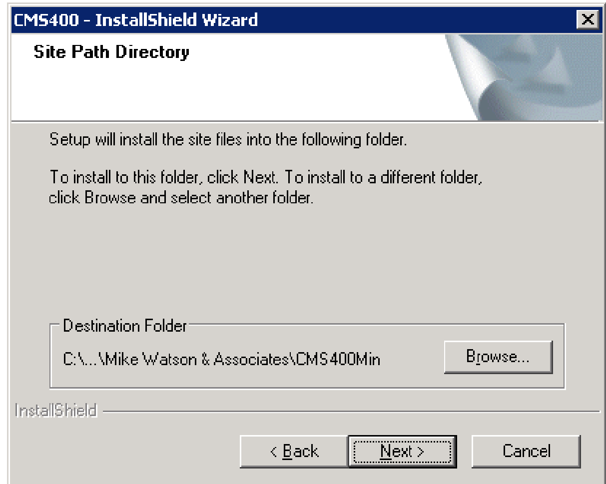
Otherwise, accept the default.</td><td>
</td></tr>
</table>

Step | **Setup Screen**

14. Enter the destination folder for the site.

If your Web site resides in a folder other than the default, click **Browse** and navigate to the correct folder. The default reflects your selection in the previous dialog.

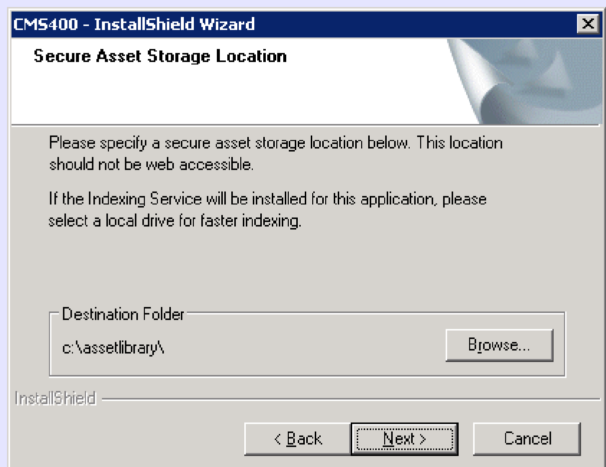
Warning! Do not install under another application's folder within the Web root.



15. Enter the path of the Secure Asset Location.

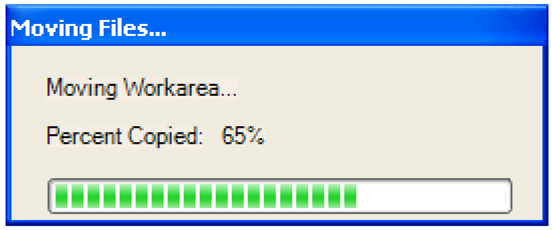
Warning! If you plan to load balance several servers, make sure this path is the same for all servers in the cluster. See Also: See "Load Balancing Support" on page 19-32

Note: Be sure the drive to which you install the asset library has sufficient storage space plus room for growth.



Step	Setup Screen

16. Next, the Moving Files dialog appears and the following things happen.



- files are copied to the site
- permissions are set for the site's directories
- ASPNET or IIS_WPG and IUSE are given permissions to the directories.
- the indexing catalogs are setup
- the site is set up to use .NET 3.5
- web.config settings are configured
- IIS is configured

Setting up a Database

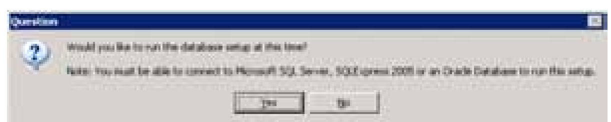
Your database contains information such as users and content blocks.

The database setup program:

- checks for SQL or SQL Express server. If SQL is installed on your server, a SQL database is set up. If SQL Express is installed, an SQL Express database is set up.
- loads database tables
- updates the web.config file with information about your database connection, based on your responses

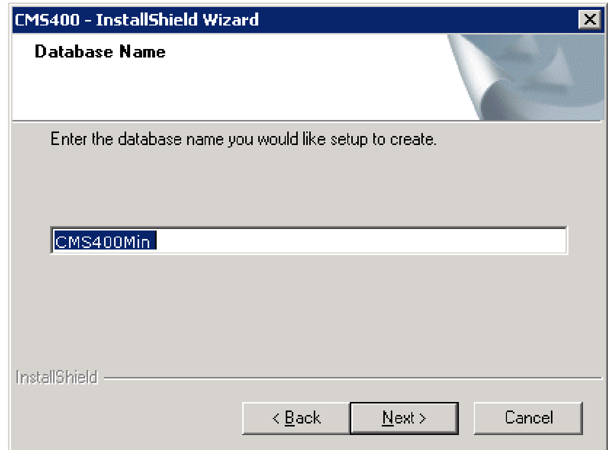
17. You are asked if you want to set up a database.

Click **Yes**.



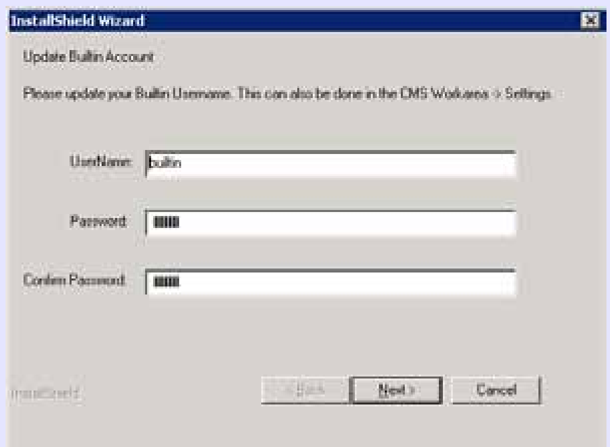
If you are using a separate database server, you need the following information

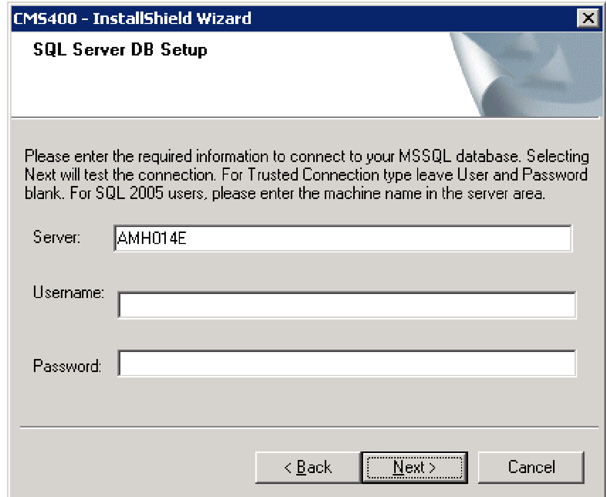
- database server host name or IP address
- if the database server is on the same domain as the application server, it must support NT or SQL authentication
- if the database server is on a separate domain from the application server, it must support SQL authentication
- you must have database administrator or database creator privileges

Step	Setup Screen
18. Enter the name of the database you are creating.	

Warning! Ektron strongly urges you to change the user name and password for the builtin user.

19. Change the builtin user's name and password. For instructions on editing the builtin account in the Workarea, see "BuiltIn User" on page 19-11.



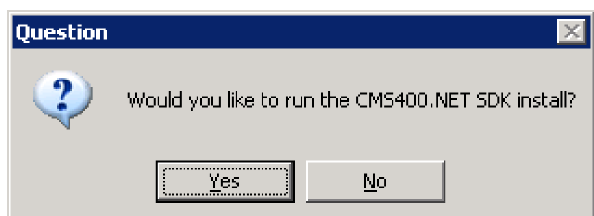
Step	Setup Screen
20. This screen prompts for database connection information. **Server** - List the database server on this system. To setup the database on this server, accept the default. Otherwise, enter a SQL or SQL Express server that already exists. For SQL, this would typically be **(local)** if it's installed on the local server. Otherwise, enter the Server's name. For SQL Express enter **(local)\SQL-EXPRESS**.	

Username - Enter the username you will use to access the database.

Password - Enter the password you will use to access the database.

Note: If you want to use NT authentication, leave the username and password blank. This will set up a trusted connection.

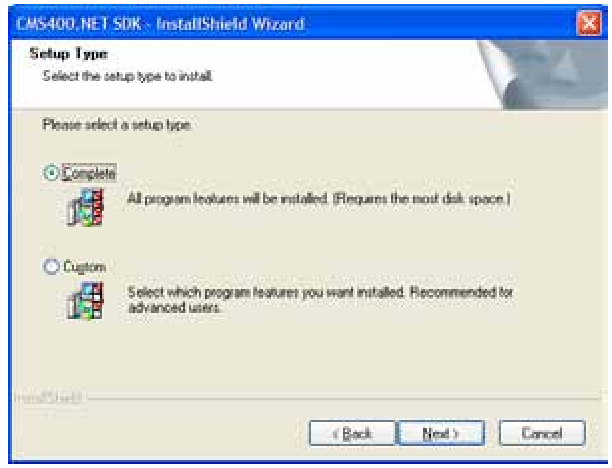
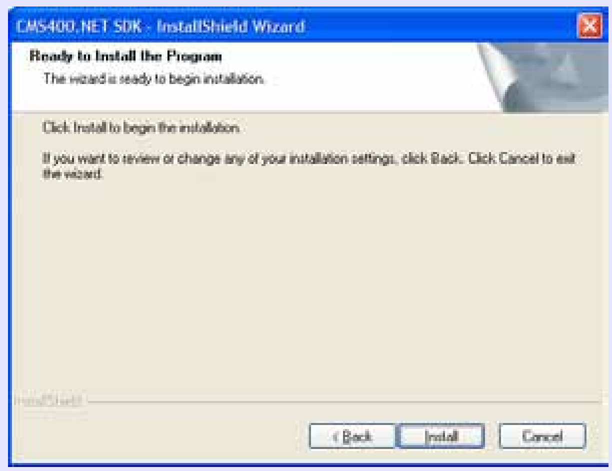
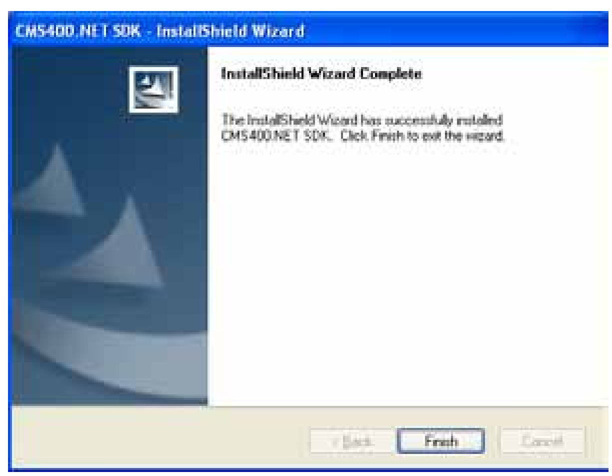
After you complete the screen, the setup tests the database connection to verify the information is valid. If the database name already exists, you are asked to assign a different name. Once a connection is made and the name is available, the installation program creates a database using the provided information.

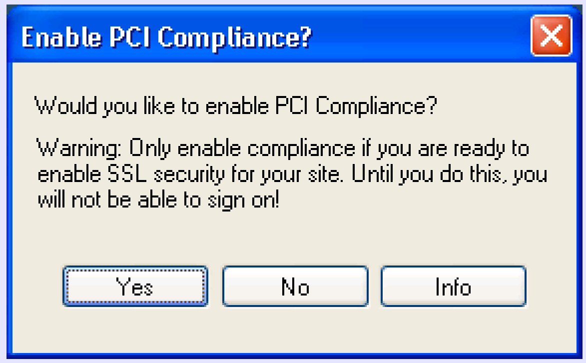
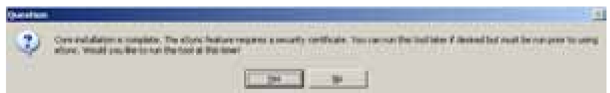
21. If your server has Visual Studio.NET installed, the following prompt appears.	

22. If you want to install Ektron CMS400.NET's Software Developer's Kit (SDK), click **Yes**. Otherwise, click **No**.

If you click **No**, skip to "The site and database setup portion of the install is complete." on page 1-31.

See Also: "Ektron's Developer SDK" on page 21-481.

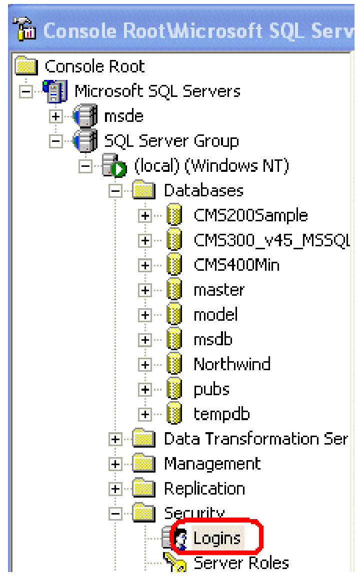
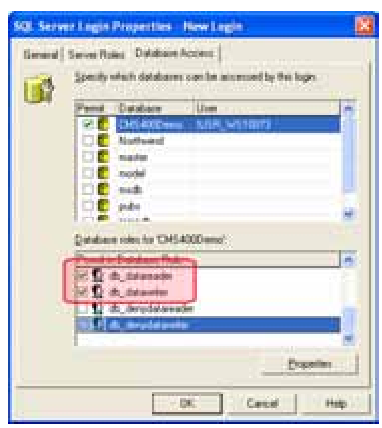
Step	Setup Screen
23. Choose the type of Setup for the CMS400.NET SDK. Click **Next**.	
24. Click **Install** to begin the installation. 25. The Setup Status screen appears.	
26. When the SDK install is finished, the following screen appears. Click **Finish**. The site and database setup portion of the install is complete.	

Step	Setup Screen
27. If your license key supports eCommerce, this screen appears. To learn more about PCI Compliance, see the following KB article: http://dev.ektron.com/kb_article.aspx?id=26304	
28. If your license key is Enterprise-level or Professional with an eSync modifier, this screen appears. For details on how to complete it, see "Managing eSync Security Certificates" on page 18-43.	

Set Up a User for the CMS400.NET Database

The installation automatically sets up user permissions based on data collected during setup. However, if there is a problem setting permissions for the user, this section describes how to set the permissions manually.

Note: If you are using SQL Authentication, you only need to set up the SQL user. If you are using Windows Authentication, you need to set up IUSR and an ASPNET or IIS_WPG user. The IIS_WPG user is used instead of the ASPNET user in Microsoft Windows 2003 server and Microsoft Windows Vista.

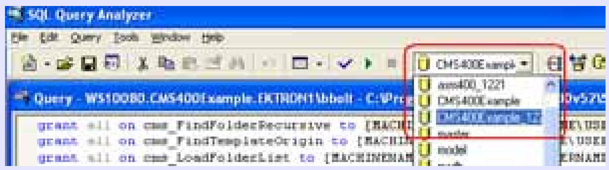
Step	Setup Screen
1. In the SQL Enterprise manager, select **Security > Logins**.	
2. Right click the mouse and select **New Login**. 3. On the Login Properties dialog, click the button to the right of the **Name** field. 4. Select your server. 5. From the user list select the **ASPNET** user or **IIS_WPG** and **IUSR** user. 6. Click **Add** then **OK**.	
7. On the **Database Access** tab, select your CMS400.NET database. Then, assign permission to read and write to that database (as illustrated).	
8. Run the grant permission script. Note: Before doing this, review your users and their permissions. Adjust as necessary for your configuration. Also, if you use Windows Authentication and all users are domain users (and the	

Step	Setup Screen

database administrator wants it this way), you may not have to perform this step.

Follow these steps to do that.

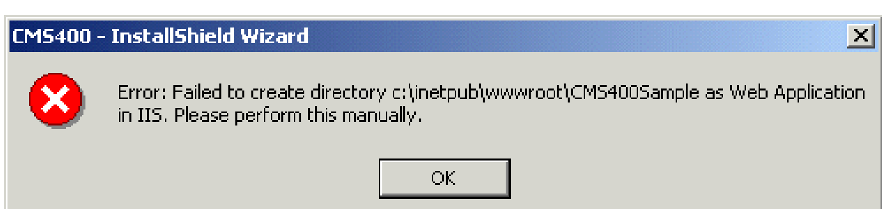
- Open the SQL Query Analyzer.
- From the dropdown list, select the CMS400.NET database.



- Click **File > Open**.
- Open `C:\Program Files\Ektron\CMS400vnn\Utilities\SiteSetup\Database\cms400_permissions.sql`. (*nn* represents the release number)
- Within that file, replace `[MACHINENAME or DOMAINNAME\USERNAME]` with your domain name, backslash (\), and ASPNET (the ASP.NET machine account). For example, `[ws10080\ASPNET]`. Note: If you are using Microsoft Windows 2003 Server or Microsoft Widows Vista, the user is IIS_WPG. For example, `[ws10080\IIS_WPG]`.
- Click the Execute Query button ( ).
- Replace the text between square brackets with your domain name, backslash (\), and the IIS Internet Guest Account. For example, `[ws10080\IUSR_ws10080]`. Click the Execute Query button.
- If using SQL server authentication, replace the text between square brackets with the SQL server authentication name only. Do not include the domain name. Click the Execute Query button.

Possible Error Messages During Installation

Error



Possible Causes and Solutions

Possible cause	Suggested solution
User does not have permission to create objects	Grant user permission to create objects. For information on how to, read IIS Security help topic "Setting NTFS Permissions for a Directory or File." http://localhost/iishelp/iis/htm/core/iidfpsc.htm
IIS is not installed	Make sure IIS is installed on the server.
Host is not localhost	Install Ektron CMS400.NET on localhost machine only.

Error

Cause and Solution

Cause	Solution
You installed Ektron CMS400.NET for .NET 2.0 but have the 1.1 .NET framework.	Install the .NET 2.0 framework. Or, install the version of Ektron CMS400.NET for the 1.1 .NET framework.

Document Management Client Install for Firefox

See "Installing FireFox Plug In" on page 7-411.

eWebEditPro+XML Client Install

Note: If you are using eWebEdit400 as the default editor, you do not need to deploy anything. See Also: "Ektron CMS400.NET Editors" on page 7-20

There are two options for deploying Ektron CMS400.NET's editor, eWebEditPro+XML, to client machines.

- Silently deploy the ewebeditproclient.msi file, which is installed to `C:\Program Files\Ektron\CMS400v8x\workarea\ewebeditpro\clientinstall`. To do this, use this command-line:

msiexec /i "c:\Program Files\E-ktron\CMS400v8x\workarea\ewebeditpro\clientinstall\ewebeditproclient.msi" /qn

The command line parameters are explained on this Web page: http://helpnet.installshield.com/robo/projects/HelpLibDevStudio9/IHelpCmdLineMSI.htm.

- Each time a user connects to Ektron CMS400.NET, his PC is checked for eWebEditPro+XML. If an older version or no version exists, the user is prompted to download ewebeditproclient.exe from the server's `C:\Program Files\Ektron\CMS400v8x\workarea\ewebeditpro\clientinstall` folder.

eWebEditPro with WebImageFX Automatic Download and Installation

The page you are trying to view contains Ektron's eWebEditPro with WebImageFX editor. It will appear within your browser. It allows you to enter content for web pages as easily as using a word processor.

Before you can use eWebEditPro with WebImageFX, it must be downloaded into your browser. When you click the **Install Now** button at the bottom of this page, eWebEditPro with WebImageFX will be automatically downloaded and installed. This process may take several minutes depending on the speed of your network connection. Once downloaded, eWebEditPro with WebImageFX will *not need to download again* unless upgrading to a newer version.

You must have authorization to install programs on your computer.

By default, Internet Explorer prevents ActiveX control installation on your computer. To install eWebEditPro, click on the control or the Information Bar and select Install ActiveX Control.

The user clicks **Install Now** to install eWebEditPro+XML.

To use this procedure, the user must be authorized to install programs on his computer.

Results of Installation

File Locations

By default, the installation inserts files into two locations on the server:

- `C:\Program Files\Ektron\CMS400vXX`: sample and minimal databases, documentation, utilities, site setup files (for creating additional sites)
- `C:\Inetpub\wwwroot\cms400Min`: bin folder, Web Services, scripts, supporting files, uploaded files and images, graphics used in the application, CustomAPI (used to customize Ektron CMS400.NET), etc.

Note: The bin folder stores Ektron CMS400.NET's binary executable files. The .NET environment automatically searches this folder when looking for .dll files.

File Permissions

During installation, the ASPNET or IIS_WPG and IUSR users are given permission to create folders in the following directories:

- `C:\Inetpub\wwwroot\[Your Site]\uploadedfiles`
- `C:\Inetpub\wwwroot\[Your Site]\uploadedimages`

Indexing Service

The installation automatically starts the Indexing service. Ektron CMS400.NET's search uses this service.

If you want the Indexing service to work manually, you need to change the settings. These steps explain how to disable Indexing of the site.

1. Navigate to **Administrator Tools** > **Internet Information Services**.
2. In the IIS window, find the Web site.
3. Right click the site and choose **properties**.
4. On the Directories tab, uncheck the **Index this resource** box.
5. Click **OK**.

Changes to the CMS400.NET web.config File

See Also: "Managing the web.config File" on page 1-69

After you install Ektron CMS400.NET, the web.config file is updated as follows.

web.config setting	Assigned this value by installation
ek_sitePath	*webroot/siteroot*
ek_buildNumber	current build number of Ektron CMS400.NET
ek_version	current version of Ektron CMS400.NET

web.config setting	Assigned this value by installation
Connection String	Information about the how the database is connected to Ektron CMS400.NET.

After Installation

Ektron strongly recommends configuring a secure socket layer (SSL), especially if you are using Active Directory Integration. SSL encrypts passwords that are otherwise sent as clear text to the Ektron CMS400.NET server. See "Configuring SSL" on page 1-94 for more information.

Setting Up an Additional Site

After installing Ektron CMS400.NET, it is easy to create another site. While creating the new site, you can create a sample or minimal site and database. To create a site for your content, you would typically install a minimal site and database, then create your Web page templates. Later, you can add users and content.

Note: Because of Windows Indexing Service limitation, your server can support eight Ektron CMS400.NET Web sites. If you want to install more than 8, you must merge the Indexing Service catalogs. This is documented See "Merging Indexing Service Catalogs" on page 7-462.

To set up an additional site, follow these steps.

- "Step 1: Set up New Site" on page 1-39
- "Step 2: Set up New Database" on page 1-40
- "Step 3: Create Project in Visual Studio.NET" on page 1-40

Step 1: Set up New Site

1. Create a new folder in the Web root folder to contain the site files.
2. From the Windows Start menu, follow this path:

   Start > Programs > Ektron > CMS400 > Utilities > SiteSetup
3. Follow the steps for creating a new site, as described in "Setting up a Site" on page 1-25. When prompted to select a folder to which you want to install the files, choose the folder you created in Step 1.

Step 2: Set up New Database

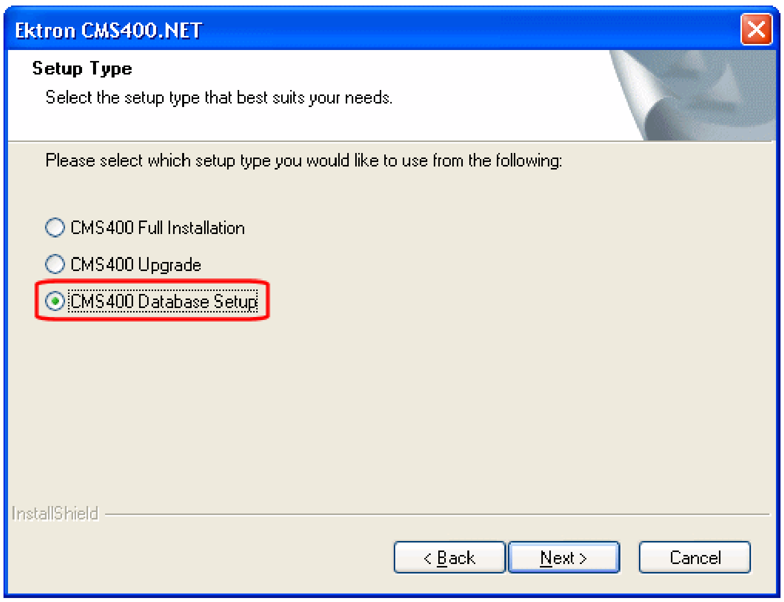
After installing an Ektron CMS400.NET site, it is easy to create a new database. You can create either a sample or minimal database. When creating a database for your content, you typically install a minimal database.

To set up a database, follow these steps.

1. From the Windows Start menu, follow this path:

   Start > Programs > Ektron > CMS400 > Utilities > SiteSetup

2. On the Setup Type screen, choose **Database Setup only**.



3. Follow the steps for creating a new database, as described in "Setting up a Database" on page 1-28.

Step 3: Create Project in Visual Studio.NET

To work with the new site in Visual Studio.NET, you must create a new project for it. To do that, follow these steps.

1. Navigate to the folder that contains the new site.
2. Double click Ektron CMS400.NET's solution file. If you are using the minimal database, the file is `CMS400Min.sln`.

At this point, you can build the project and log in. If you cannot log in because you have not set up the license key, use the builtin account: by default, the username is builtin and password is builtin.

Warning! You should only use the builtin account temporarily. As soon as possible, you should insert the license key and log in under a user name assigned in Ektron CMS400.NET.

To learn about creating templates and using server controls, see "Developer Topics" on page 21-1.

Moving a Site to Another Directory or Server

Use this procedure to move an Ektron CMS400.NET Web site to a new folder or even a different server. For example, you complete work on a site that resides on a development server and want to move it to a production server.

Within this documentation, the original site's folder is referred to as the *source* directory, and the new site's folder is called the *destination* directory. The directories can reside on the same server or different ones.

Moving the site consists of the following major steps. Each step is described below.

Moving a Site vs. Using the eSync Feature

In addition to the Site Move procedure described below, Ektron CMS400.NET offers an eSync feature. That feature automatically pushes new and updated site files to a production server. eSync is especially useful when your site contains sensitive information (for example, pricing) that needs to be carefully reviewed for quality assurance before it goes live. For more information, see "Synchronizing Servers Using eSync" on page 18-1.

When You Would Use the eSync feature

You'd use the eSync feature in these cases.

- Moving a site from staging to production
- Distributing a site among load-balanced servers

When You Would Use the Move Site Procedure

You'd use the Move Site procedure in cases listed below. Additional information that may help you move your site manually can be found at http://dev.ektron.com/kb_article.aspx?id=16408

- You do not have the eSync feature.
- The initial move of a site up to a shared server (or any other server on which you cannot run the .exe installer). Subsequently, you could use eSync if you have it.
- Moving a site to a new server. For example, you purchase a new server to replace your existing one.
- Moving a site between two servers that are not connected by a network.

Step1: Set up an IIS Site on the Destination Server

Note: This procedure assumes your Web server runs Windows 2003 server.

1. On the destination server, go to **Start** > **Control Panel** > **Administrative Tools** > **Internet Information Services**.
2. Click the plus sign (+) next to the computer's name so that you can see the Web Sites folder.
3. Right click the Web Sites folder and select **New Web Site**.
4. The Web Site Creation wizard walks you through the steps of creating a new Web site.
5. At the **TCP Port** field, make sure the IP address/host header/ port combination does not conflict with an existing Web site. For example, if the destination server already publishes a Web site on IP address 172.23.23.231 with host header dev.example.com on port 80, your new site could use the same settings on port 81. The new site is accessible through `http://dev.example.com:81/`.
6. When prompted for the path to the new site, create a new folder for the site in the destination server's file system.
7. When prompted to assign permissions to the new folder, assign **read** and **run scripts** permissions.

Step 2: Copy Files to Destination Directory

1. In the Web root of the destination directory, create a folder with the same name as the folder in the source directory.

Note: You do this in order to set the destination site on the same URL path as the source site on the source server. For example, if you the source site's login page is `http://localhost/MySite/login.aspx` and you're moving it to dev.example.com port 81, place the destination site at `http://dev.example.com:81/MySite/login.aspx`.

Note: It is important for both sites to use the same URL path because Ektron CMS400.NET uses *root relative* pathing in links to pages and images. This means that any managed content item can be displayed on any page in the Web site. Since the path may be embedded in hyperlinks and image paths, changing the URL path on the destination server may cause problems.

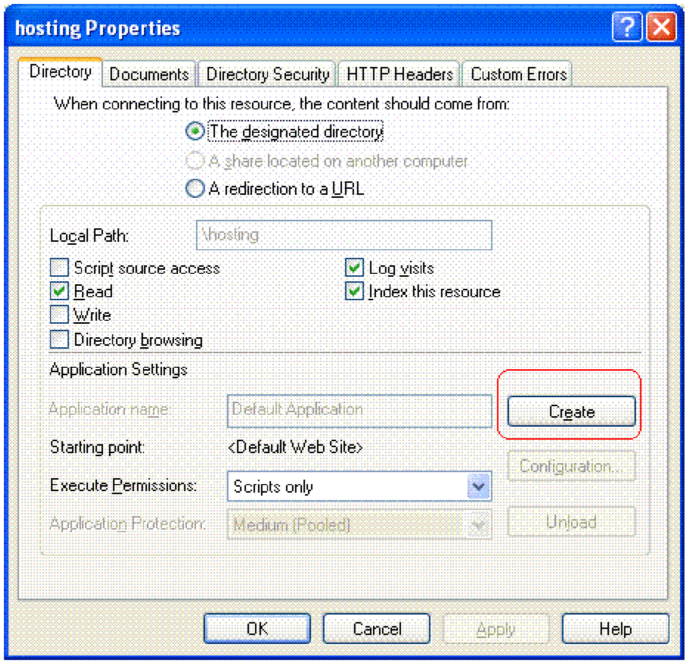
2. Copy all files in the source directory to the destination directory.

Step 3: Set Permissions on the New CMS Web Site

1. Open Windows Explorer.
2. Navigate to new Web site's folder.
3. Right click the `uploadedfiles` directory, and choose **Properties**.
4. On the **General** tab of the properties dialog, ensure the Read-Only attribute is not checked.
5. On the **Security** tab of the properties dialog, ensure that the IIS anonymous user (usually named "IUSR_COMPUTERNAME") has Write permission.
6. Right click the `uploadedimages` directory, and choose **Properties**.
7. Repeat steps 4 and 5 for the uploadedimages directory.

Step 4: Make the New Directory an IIS Application

1. Within IIS manager, right mouse click the folder created in "Step 2: Copy Files to Destination Directory" on page 1-43.
2. Select **Properties**.
3. In the **Application Settings** area, click **Create**.



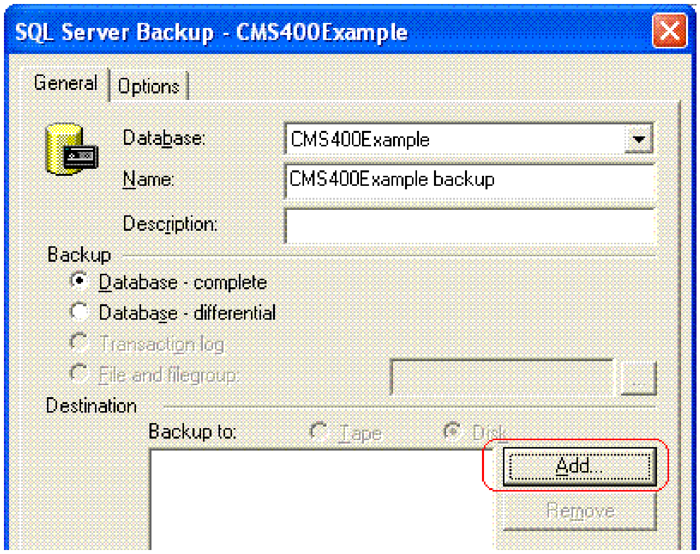
4. Click **OK**.

Step 5: Back up the Database

Warning! Do not use SQL Server Data Transformation Services to move the database. This feature is not compatible with Ektron CMS400.NET.

Ektron recommends backing up the database in the source folder then restoring the database backup to the destination folder. This procedure is described below.

1. In the Ektron CMS400.NET source folder, open the web.config file and verify the name of the database. The database name appears after `key="ek_dbCatalog" value=` .
2. On the source server, open SQL Enterprise Manager and navigate to the database you identified in Step 1.
3. Right mouse click the database then select **All tasks** > **Backup database**.
4. Select a destination file name by clicking the **Add** button in the Destination area of the SQL Server Backup screen.



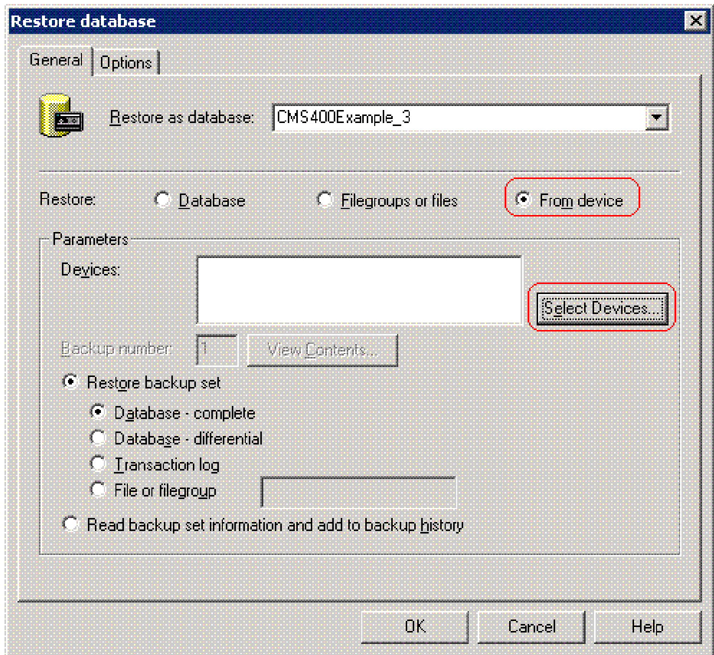
Step 6: Create a New Database

1. On the Destination server, open SQL Enterprise Manager.
2. Expand the display until you see the Databases folder.
3. Right click the Databases folder.
4. Choose **New Database...**.
5. Assign a name to the database.
6. The remaining options can remain as defaults, or you can be edit them as needed.

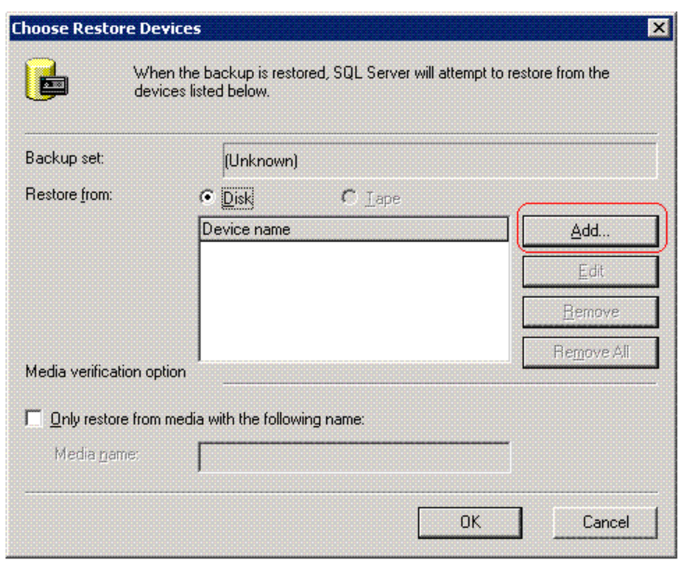
Step 7: Restore the Database

Restore the database to the new destination folder. To do this, follow these steps.

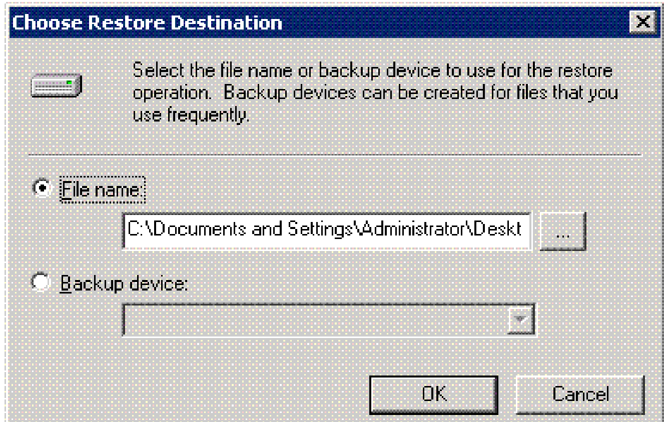
1. Right click the database you created in "Step 6: Create a New Database" on page 1-45.
2. Select **All Tasks** > **Restore database**.



3. In the **Restore as database** field, verify that the database you created in Step 6 appears.
4. In the **Restore** section, click **From device** (circled above).
5. Click the **Select Devices** button (circled above).
6. The Choose Restore Devices screen appears. Click the **Add** button (circled below).



7. On the Choose Restore Destination screen (below), select **File name** and navigate to the backup file you copied to the destination folder.



8. Click **OK** three times. SQL copies the data to the database you created in "Step 6: Create a New Database" on page 1-45.

Step 8: Set Security on the Copied Database

1. This procedure is described in "Set Up a User for the CMS400.NET Database" on page 1-32. Do this for the following users.

- IUSER
- ASPNET User

Step 9: Update web.config on the Destination Site

1. Within the destination site folder, open the web.config file.
2. Update your connection string values (see example below).

```
<connectionStrings>
<add name="Ektron.DbConnection" providerName="System.Data.SqlClient"
connectionString="server=1ER80\SQLExpress;database=CMS400Developer;Integrated
Security=TRUE;user=;pwd=;" />
</connectionStrings>
```

3. Modify the following values as needed.

Web.config element	How to modify
ek_sitePath	The path to the new folder, relative to the server's webroot folder.
WSPath	The full path to the folder that stores the Web Service URL for Server Controls at design time.

Upgrading Ektron CMS400.NET

Warning! If you are upgrading from a version prior to 7.6, run Ektron's Big Int Utility on all Web sites you want to upgrade. If you do not run this utility, your Web site will not compile, and you receive errors related to the *int* (VB) or *int32* (C#) data type. See "Using the Big Int Utility" on page 1-58

Upgrading From Version 6 or higher to Version 8.X

The upgrade procedure copies Ektron CMS400.NET's latest features to your Web server. CMS400.NET is installed to its own folder, `CMS400v8x`. This means it can coexist on the same machine with previous versions -- the template directories are independent.

Warning! During the upgrade procedure, your Web site's Bin, Workarea and Documentation folders are removed. Any customized files in these folders will be lost. So, only store custom files in these folders when absolutely necessary. Even then, you should keep a back-up file in another folder.

The Base Folder

The upgrade installs a base folder (`C:\\Program Files\Ektron\CMS400v8x`), which provides a template for setting up Ektron CMS400.NET Web sites. The Site Setup utility uses the files in the base folder to create and upgrade Ektron CMS400.NET sites.

The base folder contains the following subfolders.

Subfolder	Includes
AssetManagement	Folders and files for the Document Management Functionality
Bin	Required .NET assemblies for Ektron CMS400.NET
CommonFiles	Location for application Global Resources, Web References and Starter Application files.
Documentation	Documentation. The site setup procedure copies this directory to the `workarea` directory when setting up a site.
EktronAsyncProcessor_ Service	Files needed to add Asynchronous Processor for Web Alerts
StarterSites	Files for any starter sites that have been added.

Subfolder	Includes
StudioHelp	Files necessary for adding the API help to Visual Studio 2005
Utilities	Utilities for - database upgrade - database application strings update - email encrypt password tool - a setup Sharepoint Portal - Document Management Registration tool - Load Balancing service files
Workarea	Scripts used for the Workarea Note: The contents of this folder are later copied to a Web site folder, typically in the Web server's web root. The sample provides a good way to learn how to work with an Ektron CMS400.NET site. An alternative is the minimum database. Use this when you understand how to create a site and do not want to place extra, sample files on your server.

The Upgrade Procedure

Upgrading involves the following tasks.

1. Install new files to the new directories. See Also: "Running the Installation and Setup Program" on page 1-23
2. Remove the following folders (and their subfolder) from your site's directory and copy the new folders to the site directory.

- bin
- workarea
- Documentation

Warning! The upgrade procedure removes these folders. Any customized files in these folders will be lost. So, only store custom files in these folders when absolutely necessary. Even then, you should keep a back-up file in another folder.

3. Update the web.config file with new settings.
4. Update your databases using the upgrade and language update utilities. See Also: "Performing the Upgrade" on page 1-50
5. If needed, modify the site to use the server controls. See Also: "Updating the Server Controls" on page 21-6.

Note: After you upgrade Ektron CMS400.NET, you may notice that, for some content that inherits the following property from their folders, the field is not checked: **The content in this folder is private and can only be viewed by authorized users and members.** To resolve this problem, edit the content's **View Permissions for Content** screen and manually check the box.

Note: Before you can check the checkbox, you must disable inheritance. After checking the box, enable inheritance.

Note: The upgrade automatically starts the IIS and Indexing services.

This chapter walks you through the upgrade process.

Performing the Upgrade

.

1. Follow the steps of the installation procedure, "Running the Installation and Setup Program" on page 1-23. These steps instruct you to install Ektron CMS400.NET and restart your server. Return to step two when the Site Setup Selection appears.

2. The Setup wizard appears.

(If this screen does not appear, launch it by following this path from the Windows Start menu:

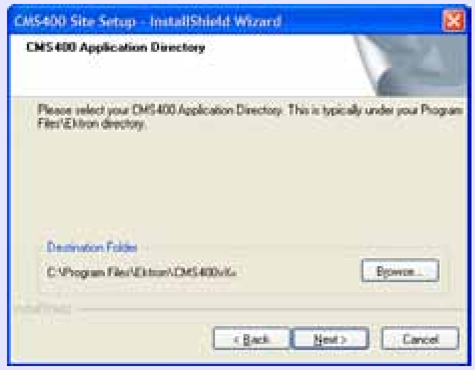
Start > Programs > Ektron > CMS400 > Utilities > Site Setup)

3. The Setup Type screen appears. Choose the **Upgrade** radio button, and click **Next**.

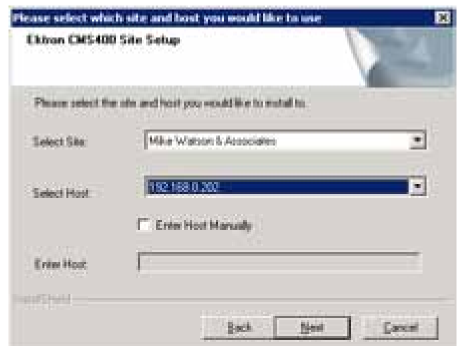
4. Choose an application directory. If you are not sure, use the default (`C:\\Program Files\Ektron\CMS400v8x`).

This directory stores Ektron CMS400.NET components and utilities.

Warning! This dialog appears only when the Setup cannot detect where the site's application is directory located.



5. If your server operating system accommodates multiple Web sites, select the site to which you want to install Ektron CMS400.NET from the dropdown list.
Otherwise, accept the default.

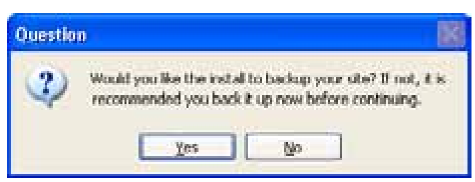


6. Select the path of the Web site you are upgrading.

Note that the upgrade only updates the web.config file, Ektron CMS400.NET assembly files, and Web Service components. It does not update your templates nor other files not mentioned above.

7. Select Yes to backup your site.

Warning! Ektron strongly recommends backing up your site before continuing the upgrade. If you choose No and the upgrade fails, you will not be able to revert the files back.



8. If you choose to backup your site, a dialog asks where to store the backup.

9. You are asked if you want to update your `siteroot/widgets` directory.

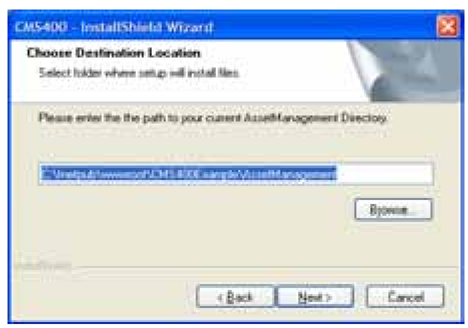
Click **Yes** if you want to install the latest widgets. However, if you customized widgets in that folder and not renamed them, the customized versions will be overwritten.

To prevent this, rename any widgets that you customize.

10. You are notified that files are moving to the starter site directory.

11. The Choose Destination Location screen appears. Enter the path to your AssetManagement Directory.

Warning! This dialog appears only when the Setup cannot find the AssetManagement directory.



12. If you chose to do so, your site is now being backed up. Next, the bin, Workarea and other files are updated. Any missing permissions or Index catalogs are added.

Warning! The previous version's bin and Workarea folders will be removed from your Web site. Any customized files within these folders are lost. If possible, do not store custom files in them unless absolutely necessary. Even then, you should always keep a separate back-up file in another folder.

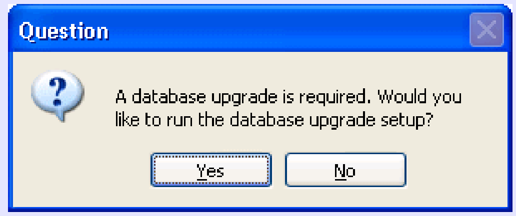
13. Your web.config file is updated with information needed to run Ektron CMS400.NET.

If other applications use the web.config file, the upgrade does not affect their sections.

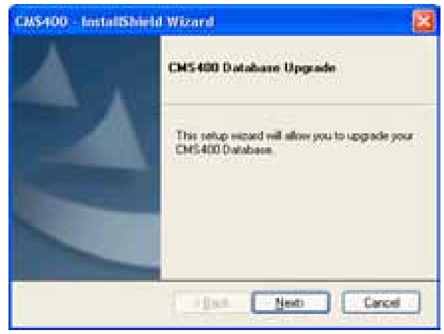
14. A dialog box appears asking if you want to

upgrade the database. Select **Yes** to upgrade. I

f you select **No**, the site will not work properly until the database upgrade has been run. To upgrade the database at a later time, run the Site Setup and select **Database Upgrade**. The site setup is located in **Start** > **Programs** > **Ektron** > **CMS400vXx** > **Utilities** > **CMS400 Site Setup**.



15. If you selected yes, the Database Upgrade Wizard starts.

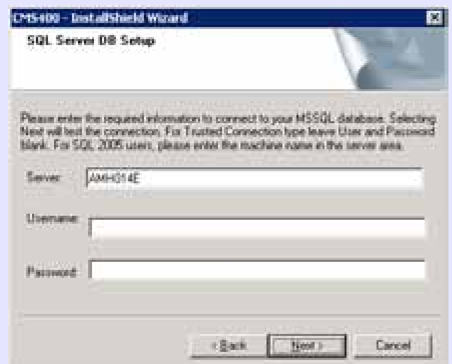


16. This screen prompts for database connection information.

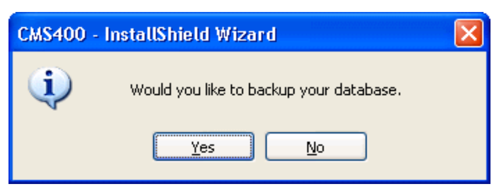
Server - List the database server on this system. To setup the database on this server, accept the default.

Otherwise, enter a SQL or SQL Express server that already exists. For SQL, this would typically be **(local)** if it's installed on the local server. Otherwise, enter the Server's name. For SQL Express enter **(local)\SQLEXPRESS**.

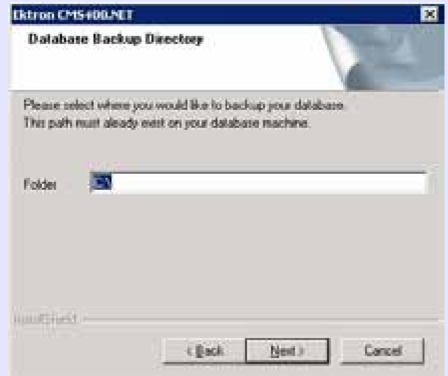
Note: This dialog appears if you are using SQL Authentication. If you are using Windows Authentication, skip to the next step.



17. A dialog box appears asking you to backup your database.



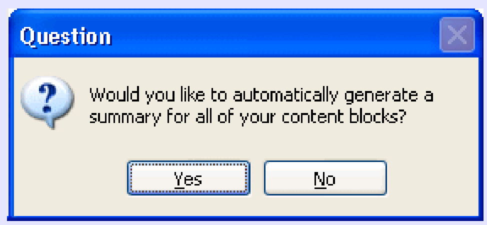
18. If you clicked Yes in the previous step, select the location of your database backup. If this path does not exist on your database machine, the backup will fail.
Otherwise, skip to the next step.



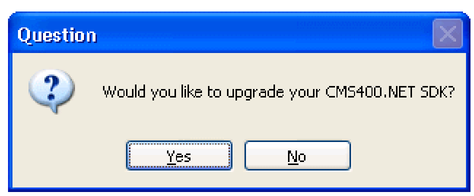
If the backup fails, the following message appears.

Warning! Important: In this case, you should manually back up your database before clicking **OK**. See Also: "Backing Up Databases" on page 1-63

19. Select whether to generate a summary for all content blocks.



20. If it is installed, select whether to upgrade you CMS400.NET SDK.



21. Once the SDK is installed, click **Finish** on the final screens to complete the upgrade.

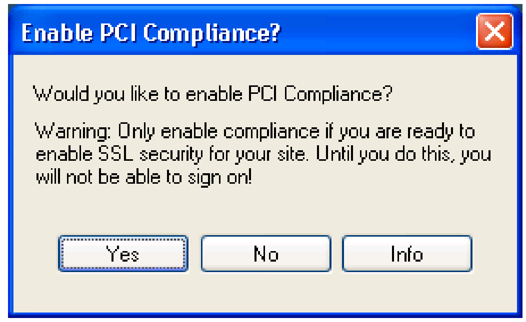
22. A dialog appears asking if you want to enable PCI compliance.

Selecting **Yes** changes the following web.config keys to "true".

```
<add key="ek_ecom_ComplianceMode"
value="false" />
<add key="UseSSL" value="false" />
```

Warning! Enabling compliance requires you to have an SSL certificate installed for your web site.

Note: This dialog only appears if you are upgrading from version 7.6.5 or earlier and have the eCommerce Modifier (E) in your license key.



What Happens Next?

After upgrading your site and rebuilding the solution, you are ready to use Ektron CMS400.NET.

If you did not run the database upgrade or language update during the installation, you need to do it manually. The next sections explain how to do that.

Upgrading Your Database

If the database upgrade was unsuccessful during installation, or you chose to do it outside of the install, you need to manually upgrade your database. Use the Database Upgrade within the Site Setup utility to do so.

Performing the Database Upgrade

Warning! Ektron recommends backing up your database before performing an upgrade. For information on backing up a database, see "Backing Up Databases" on page 1-63.

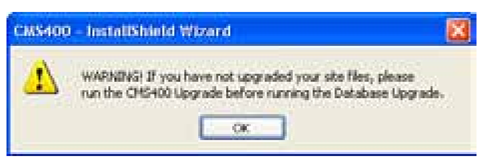
To perform the database upgrade, follow these steps.

1. Click the Windows Start button then follow this path: **Programs** > **Ektron** > **CMS400** > **Utilities** > **CMS400 Site Setup**. (If this path does not work, click the cms400sitesetup.exe file, located under the C:\Program Files\Ektron\CMS400v8x\Utilities\SiteSetup folder.)
2. The Welcome screen appears. Click **Next**.

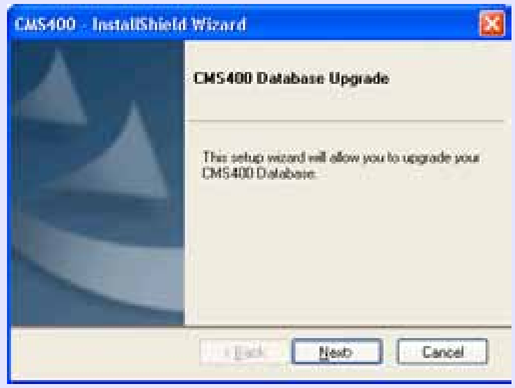
3. The Setup Type screen appears. Select **CMS400 Database Setup** and click **Next**.

4. Select **CMS400 Database Upgrade (SQL Only!)** from the Setup Type screen.

5. A dialog warns you to upgrade your site files before you perform the database upgrade. Click **OK**.

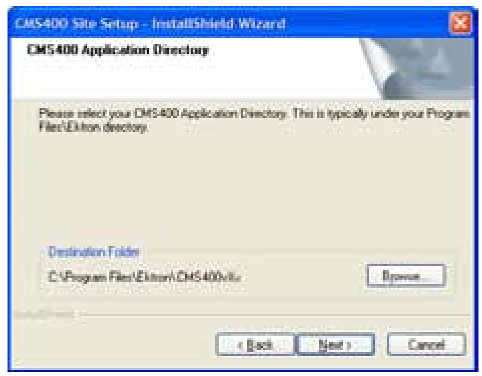


6. If you selected yes to the database upgrade, the Database Upgrade Wizard starts.



7. Choose an application directory. If you are not sure, use the default (`C:\\Program Files\Ektron\CMS400v8x`).

This directory stores Ektron CMS400.NET components and utilities.



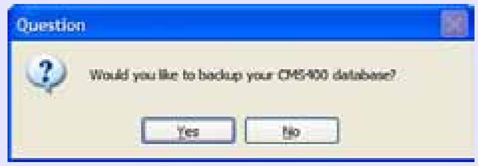
8. Choose the path to your Web site's directory.

9. The upgrade process checks the connection to your database. If it connects, continue on to the next step. Otherwise, a connection dialog appears.

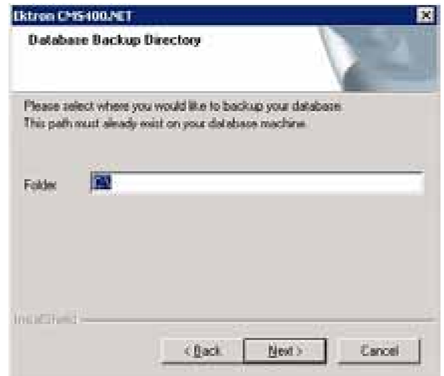
10. A dialog box appears asking if you want to

upgrade your database.

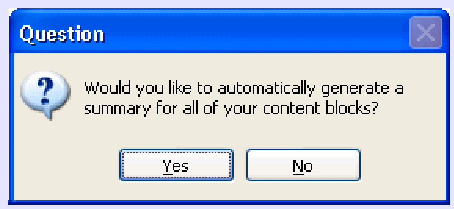
Warning! Important: Ektron strongly recommends backing up the CMS database.



11. If you choose to backup your database, a dialog appears asking you where you to store the backup. If you chose not to upgrade, proceed to the next step.



12. Select whether to generate a summary for all content blocks.



13. After the your database is backed up and updated the **Database Upgrade Complete** screen appears. Click **Finish**.

Using the Big Int Utility

Warning! Only use this utility if you are upgrading from a version of Ektron CMS400.NET that precedes 7.6.

The Big Int Utility changes certain references of the Data Type *int* (VB) or *int32* (C#) to *long* (VB) or *int64* (C#) inside Ektron methods used in your Web site. See Also: "Why Ektron Changed the Data Type" on page 1-59.

It is important to note that this utility might not catch all instances that need to be changed. After running the Big Int Utility, you should precompile your Web site. Next, check for error messages that state: during the compile process, the system cannot convert *int* (VB) or *int32* (C#).

If these messages appear, go to the line of code and change the data type to *long* (VB) or *int64* (C#). For example, The Big Int Utility will not change the Return Type of a function. For information on scenarios where the Big Int Utility does not change a data type, view the following KB article.

http://dev.ektron.com/kb_article.aspx?id=21436

Another way to verify that all the necessary *int* and *int32* references have been changed to *long* and *int64* is to run the Bad link checker located in Workarea > Reports > Contents >Bad Link Report.

Why Ektron Changed the Data Type

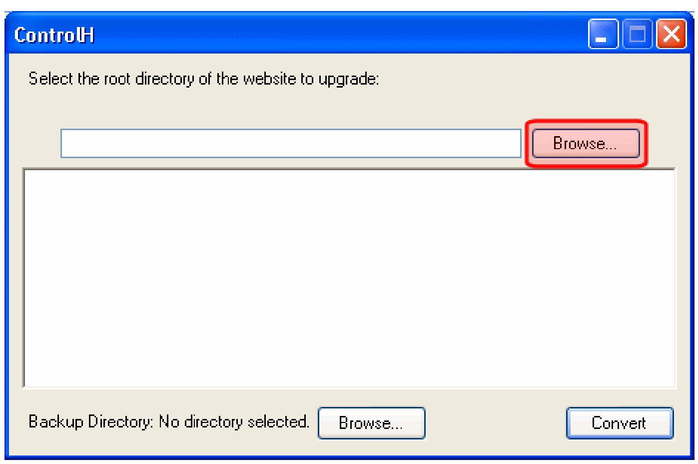
In version 7.6 of Ektron CMS400.NET, Ektron changed the Data Type for its primary IDs from *int* (VB) or *int32* (C#) to *long* (VB) or *int64* (C#). For example, Ektron now uses the *long* or *int64* data type for user IDs and content IDs.

This change was implemented to handle the larger IDs needed for eSync. See Also: "Unique ID Numbering" on page 18-42

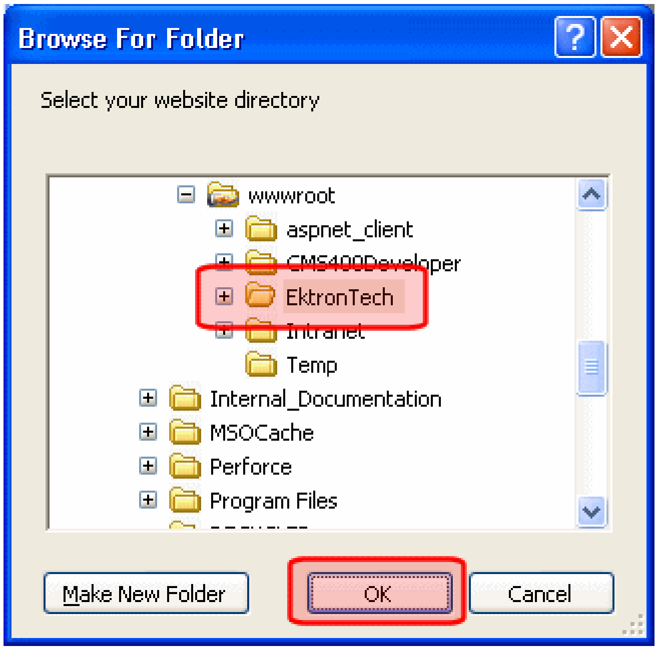
While Ektron made this change to accommodate eSync, the change affects all Ektron CMS400.NET sites being upgraded to version 7.6 or higher.

Running the Big Int Utility

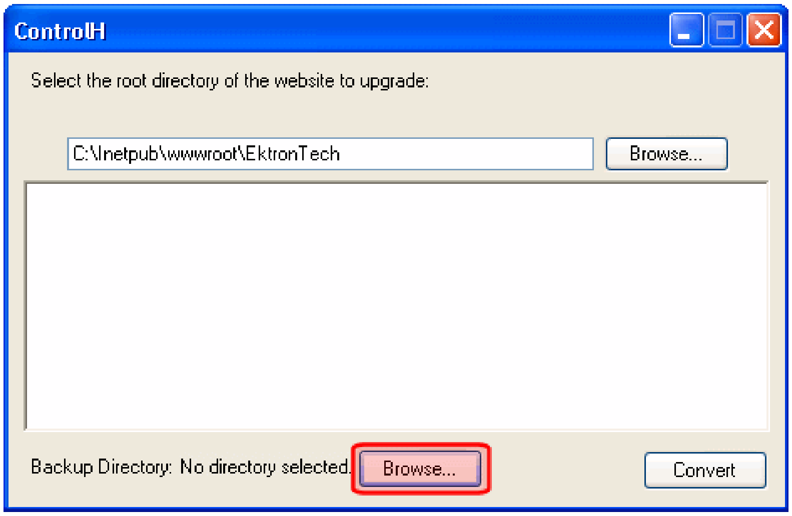
1. Navigate to
   `C:\Program Files\Ektron\CMS400v8x\Utilities\BigIntUtility`
2. Double click **CtrlH.exe**.
3. The Big Int Utility screen appears.



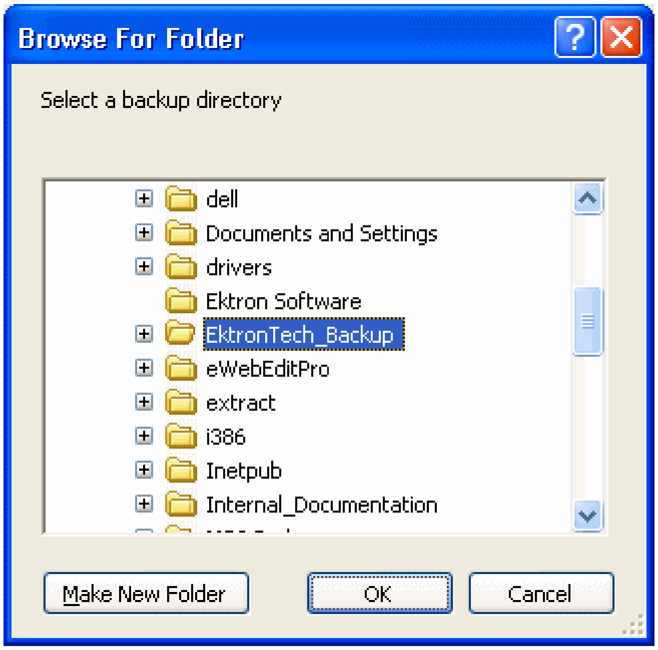
4. Click the **Browse** button.
5. Select the site root folder and click **OK**.



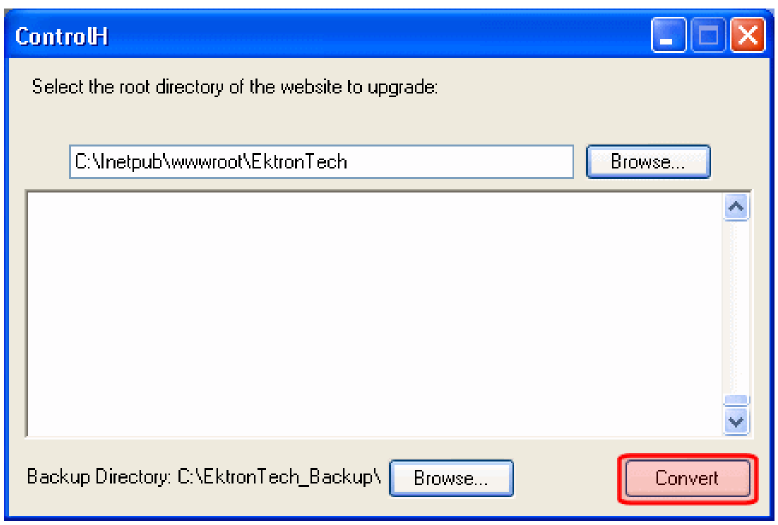
6. Next, click the other **Browse** button to select a location to store the backup.



7. Select the folder where your site will be backed up. If you want to create a new folder, click **Make New Folder**.

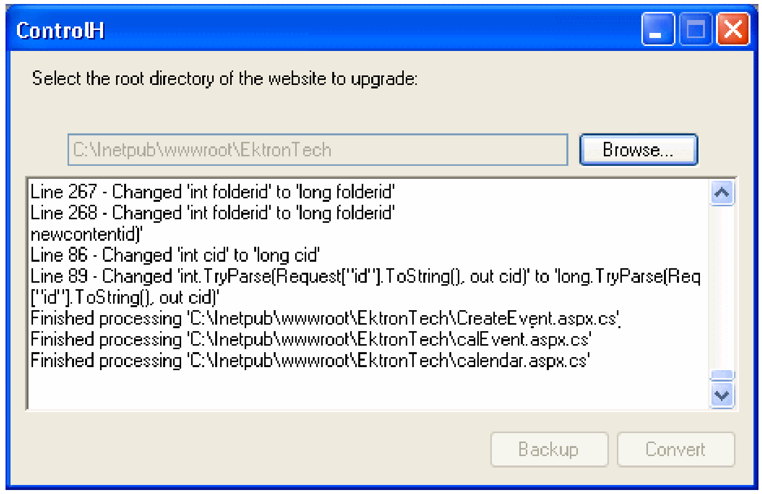


8. Click the **Convert** button.



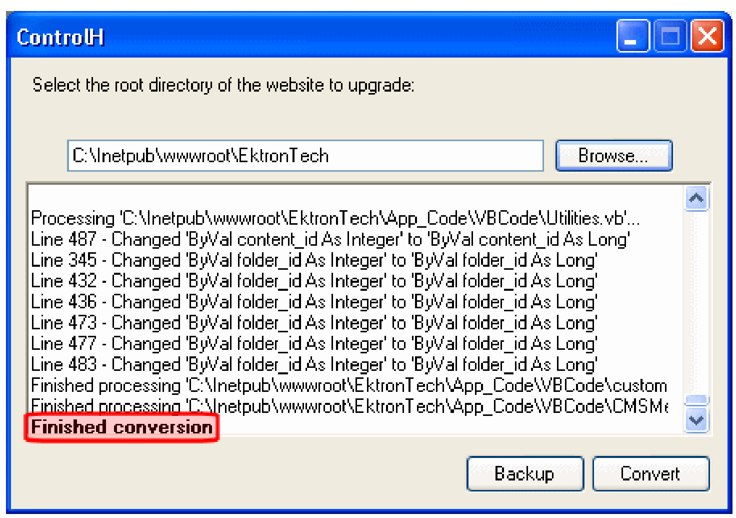
9. The utility goes through your Web site's files, finds references to *int* (VB) or *int32* (C#) in your Ektron methods, and changes them to *long* (VB) or *int64* (C#). An *int* or *int32* is changed only when used inside an Ektron method.

Warning! Whenever a file is changed, a copy of the original is added to the backup directory.



Note: Depending on the size of your Web site, the conversion might take a while to complete.

10. Once the conversion is complete, close the utility by clicking the red X in the upper right corner. Your site has been updated to use *long* (VB) or *int64* (C#) instead of *int* (VB) or *int32* (C#) in Ektron methods.



11. Precompile your Web site.

12. After compiling, check for error messages that state: during the compile process, the system cannot convert *int* (VB) or *int32* (C#). If these messages appear, go to the line of code and change the data type to *long* (VB) or *int64* (C#).

    Another way to verify that all the necessary *int* and *int32* references have been changed to *long* and *int64*, is to run the Bad link checker located in Workarea > Reports > Contents > Bad Link Report.

The Log File

A log file of the changes is located in `C:\Program Files\Ektron\CMS400v8x\Utilities\BigIntUtility`. The log file's name is based on the date and a series of numbers.

This log contains a list of files that were processed. If a file was changed, the log lists the line number and what was changed. For example:

```
Line 487 - Changed 'ByVal content_id As Integer' to 'ByVal content_id As Long'.
```

Backing Up Databases

To protect the information in your database, Ektron recommends backing it up before upgrading. During the upgrade, Ektron CMS400.NET attempts to create a backup of your database. If that fails, use the following MSDN links for instructions on backing up and restoring your database via SQL Server.

To work with this database version	See this MSDN article
Backup SQL Server 2008	http://msdn.microsoft.com/en-us/library/ms187510.aspx Note: The bottom of the above page provides links to options for restoring the backed-up database.
Backup SQL Server 2005	http://msdn.microsoft.com/en-us/library/ms187510(SQL.90).aspx Note: The bottom of the above page provides links to options for restoring the backed-up database.

Warning! Before restoring an SQL database, either stop the Ektron Windows service or force all connections closed. You need to do this because the Ektron Windows Service accesses the database. To view and update the status of the service, go to Computer Management > Services and Applications > Services. For more information, seeSee "Ektron Windows Service" on page 19-13 .

Updating Application Messages

Warning! If upgrading from version 5.0 or later, this section does not need to be completed.

Ektron CMS400.NET provides language support for French and German. If you are upgrading from a previous version and are using your old database, the translated strings are not included. Because of this, the installation includes a utility that lets you populate your old database with the translated strings.

Prerequisites

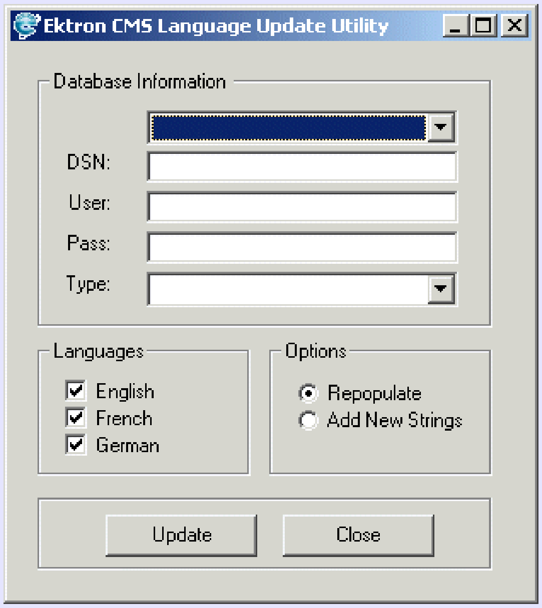
Before using the language upgrade utility, you must upgrade your version of Ektron CMS400.NET. For information on this, see "Performing the Upgrade" on page 1-50. During the upgrade, if you opt to keep your previous database, proceed with this section.

Using the Language Update Utility

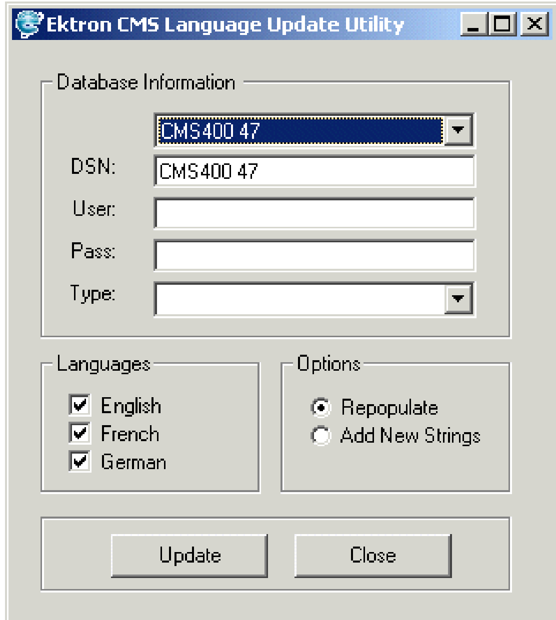
To use the language update utility, follow these steps.

1. Go to **Start > Programs > Ektron > CMS400 > Utilities > Application Strings Update**.

2. The Language Update Utility opens.

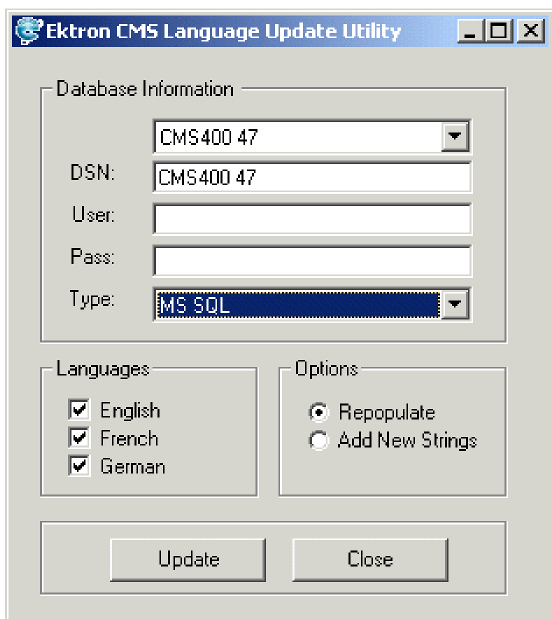


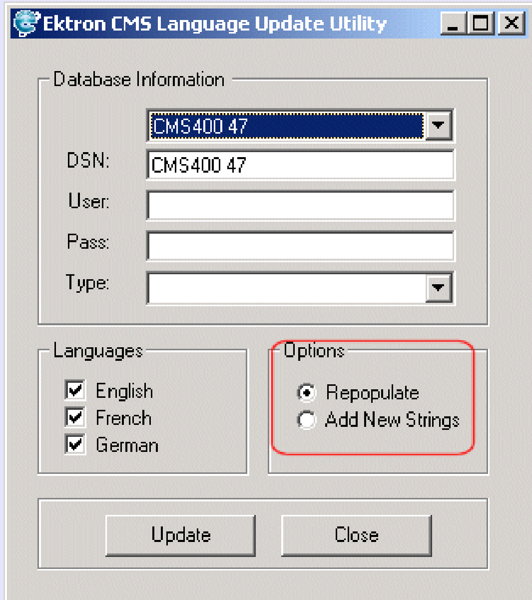
3. Select the DSN for the database from the drop down list.

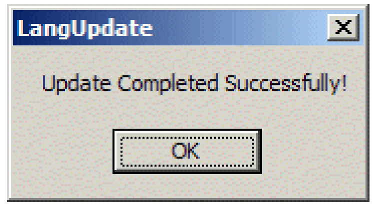


4. Enter a username and password with permissions to the DSN if required.

5. Select the type of database you are using. It will be updated with the language strings.

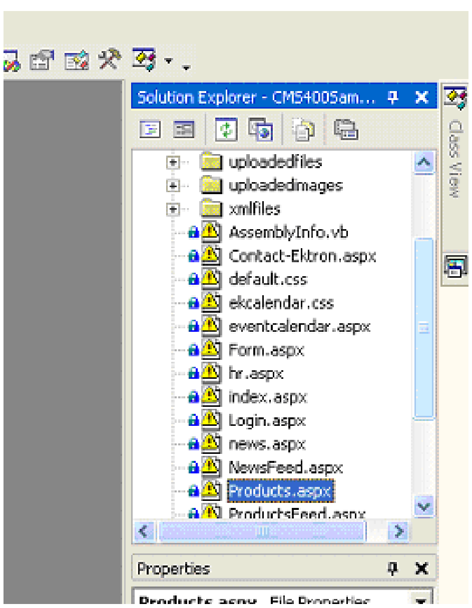


6. Select the action you want to perform. **Repopulate** - deletes all strings and repopulates the database **Add New Strings** - adds only new strings in the current release of Ektron CMS400.NET. (Recommended if you changed existing strings)	
7. Select the languages that you would like to be updated/added to the database.	
8. Click the **Update** button.	
9. When the language update is complete, the following screen appears.	



10. Click **OK** to close the window.
11. Click **Close** on the Languages Update Utility window.

Troubleshooting Upgrade Problems

<table>
<tr><th>Problem</th><th>Solution</th></tr>
<tr><td>After upgrade, Ektron CMS400.NET does not load properly. Also, an error icon appears next to your templates when you open the project in Visual Studio.NET, as illustrated below.
The problem is that your .NET references need to be updated.

</td><td>To verify the problem, open the Ektron CMS400.NET solution file in Visual Studio.NET (<code>webroot\siteroot\cms400sitename.sln</code>; for example, <code>cms400Intranet.sln</code>) and look at the template files.
If your references are broken (as shown in the sample screen on the left), delete all Ektron references. Then, add new references with the same name from the <code>webroot\siteroot\bin</code> folder.</td></tr>
</table>

Problem	Solution
When viewing a page containing CMS400.NET Server controls or API calls, the page returns a fatal error **Compiler failed with Error Code 2000**. Detailed compiler output may say **Fatal error BC2000: compiler initialization failed unexpectedly: The filename, directory name, or volume label syntax is incorrect**. This error message might appear after an upgrade.	See Ektron Knowledge Base article "ERRMSG: Compiler failed with Error Code 2000" (http://dev.ektron.com/kb_article.aspx?id=2029)
After upgrading from Ektron CMS400.NET version 4.8 or earlier, Metadata is no longer applied or required when adding or editing content.	In Ektron CMS400.NET version 4.8 or earlier, Metadata is applied globally. In later versions, metadata is applied to each folder individually. Child folders can inherit the metadata from a parent folder or they can have their own metadata settings. To set the metadata settings back to global, follow these steps. 1. In the Workarea, click on the site's root folder. 2. Next, click **View** > **Folder Properties**. 3. Click the Edit Properties button ( ). 4. Click the **Metadata** tab. 5. Check the all of the appropriate check boxes for **Assigned** and **Required** Metadata. 6. Click the **Save** button ( ). If you have not broken inheritance on any of the folders, your metadata settings are applied globally. See Also: "Assigning Metadata to a Folder" on page 7-165

Managing the web.config File

Ektron CMS400.NET's web.config file lets you control many key functions of the content management system. When you install Ektron CMS400.NET, web.config is placed into *webroot/siteroot*.

This section explains the settings in the web.config file.

If your server is currently running another .NET application, you must merge that web.config file with this one. To distinguish Ektron CMS400.NET's tags from others, all Ektron CMS400.NET settings begin with ek_ and reside within the `<appSettings>` tags of the web.config file.

Settings in the web.config File

Setting	Description
Analytics - see **See "Setup Procedure for Google Analytics" on page 7-755**	
Connection Strings	
For SQL Server	Use this connection string to define an SQL server. ▪ **name**="Ektron.DbConnection" ▪ **providerName**="System.Data.SqlClient" ▪ **connectionString -** this part of the connection string contains the following element. ▪ **server** - the name of the database server to which Ektron CMS400.NET is installed. If installed locally, the value is localhost. This value is set during installation, at the Host screen. ▪ **database** - use the name of the database. ▪ **Integrated Security** - use True or False. **True** - use integrated security. ▪ **user** - If required, specify the username used to connect to the DSN. This user account must have at least read and write permissions to the database. Note: This value can be blank if you are using Windows authentication. ▪ **pwd** - If required, specify the password for the username given. It should match your database name.

Setting	Description
	Note: This value can be blank if you are using Windows authentication. **Warning!** After changing any database settings, you must stop and restart the Ektron Windows Service. See Also: "Ektron Windows Service" on page 19-13
appSettings	
ek_RedirectFromLoginKeyName	Provides a mechanism to return from the login page to the previous page, specify the query string key-name. By default the value is **RedirectUrl**. Currently, the redirect works in two instances. The first, when a user tries to use a forum but is not logged in, it sends them to a login page and returns them. The value in this key used in conjunction with the `ek_RedirectToLoginURL` key sends the user from a forum page to a login page and back to the previous page. For example, a user tries to reply to a forum post, but he is not logged in. He is sent to the login page and then returned to the original page. The second, when a user sends a private message to another user or group administrator from the SocialBar server control, he is retuned to the page where he clicked private message once the message is sent. For example, a user visits a community group's page and clicks Private Message Admin. The user is taken to the private message screen and once he clicks post, he is returned to the community group's page. For additional information, see "Private Messaging from the Social Bar" on page 16-222.

Setting	Description
ek_RedirectToLoginURL	The URL of the login page to automatically redirect to when a site visitor is not logged in as a user or membership user.
GoogleMap	Enter connection information for using Google Maps with the Mapping feature in Ektron CMS400.NET.
VirtualEarthMap	Enter connection information for using Bing Maps for Enterprise with the Mapping feature in Ektron CMS400.NET.
ek_TreeModel	Choose whether or not to use Ajax for the folder tree in the Workarea. - **0** - use the legacy folder tree in the Workarea. - **1** - use Ajax for the folder tree in the Workarea. **Warning! Important**: This key has been removed from the Web.config file. However, you can still use this key by adding it between the `<appSettings>` tags. For example, `<add key=”ek_TreeModel” value=”0”>` changes the folder tree in the Workarea back to legacy.
ek_workareaDateFormat	Choose how you want to display dates in some areas of the Workarea. - **long** - for example, Saturday May 21, 2005 - **short** - for example, 5/21/2005
ek_sitePath	The location of Ektron CMS400.NET relative to the Web root. This value is set during installation at the Site Path Directory screen. If you move Ektron CMS400.NET to another folder, you must update this value.
ek_buildNumber	This value is set by the installation program. You typically would not change it.
ek_version	This value is set by the installation program. You typically would not change it.
ek_appPath	This element is prefixed by the ek_sitePath value and describes the location of the workarea folder. This file stores external applications (such as eWebEditPro and eWebDiff), templates, and the images folder.
ek_xmlPath	The location of the xmlfiles directory. The ek_sitePath path is prefixed to this location. You would only change this value if you want to move the location of the xml files relative to the Web root.
ek_pluginDir	not used currently -- for future use
ek_appName	The name of the application, CMS400. You typically would not change this value.

Setting	Description
ek_RedirectorInstalled	Sets whether the redirector is turned on or off in the Ektron CMS400.NET Workarea. Turning the redirector on enables the option of aliasing the URL of your Web site. The default is **false**. - **True** = Aliasing turned on - **False** = Aliasing turned off See Also: "URL Aliasing" on page 10-1
ek_RedirectorManualExt	Set a comma-delimited list of Web page extensions for which you will want to create aliased pages. For example, ".aspx,.htm,.html,". By default the list contains **.aspx**. **NOTE** You can enter one or more extensions. Each extension must begin with a period, and the last extension must be followed by a comma (,). See Also: "URL Aliasing" on page 10-1
ek_LDAPMembershipUser	Integrate membership users with LDAP or Active Directory. Set the value to **True** for Membership Users to be authenticated using LDAP/AD.
ek_appImagePath	The folder that stores the images within Ektron CMS400.NET, such as toolbar icons. You would only change this value if you need to move the images folder to another location. Note that this value is prefixed by the value set in the ek_appPath variable. By default, ek_appPath is set to *webroot*/cms400Min/workarea/. So, by default, this folder is set to *webroot*/cms400Min/workarea/images/application/.
ek_appeWebPath	The folder that stores eWebEditPro, Ektron CMS400.NET's editor. You would only change this value if you need to move the editor to another location. Note that this value is prefixed by the value set in the ek_appeWebPath variable. By default, ek_appeWebPath is set to *webroot*/CMS400Min/workarea/. So, by default, this folder is set to *webroot*/CMS400Min/workarea/ewebeditpro.
ek_appeXSLTPath	The folder that stores XSLTs. You would only change this value if you need to move the XSLT folder to another location. Note that this value is prefixed by the value set in the ek_appPath variable. By default, ek_appPath is set to *webroot*/CMS400Min/workarea/. So, by default, this folder is set to *webroot*/CMS400Min/workarea/Xslt.
Images - These images appear before the user signs in, so cannot be stored in the database. Update as needed. Their location is set in the ek_appImagePath variable. See Also: "ek_appImagePath" on page 1-72	

Setting	Description
ek_Image_1	close button 
ek_Image_2	small login button 
ek_Image_3	big login button 
SMTP server configuration - See "Configuring SMTP Settings" on page 1-85	
ek_SMTPServer	The server that processes email
ek_SMTPPort	The port your system uses to retrieve email
ek_SMTPUser	The username set up to send and receive email
ek_SMTPPass	The password set up to send and receive email
Mail Format	
ek_MailFormat	The format of the email created in Ektron CMS400.NET. A value of **HTML** generates email in HTML format, while a value of **Text** generates plain text email.
SSL Support - See "Configuring SSL" on page 1-94	
ek_UseSSL	Determines if server will use SSL for security
ek_SSL_Port	SSL port used by Web server.
Active Directory Server Configuration	
ek_ADEnabled	Whether your Ektron CMS400.NET uses Active Directory support.
ek_ADAdvancedConfig	Enable Active Directory advanced configuration.
ek_ADUsername	User name for the Active Directory server.
ek_ADPassword	Password for the Active Directory server.
ek_AUTH_Protocol	The directory access protocol used with the Active Directory feature. The default value is LDAP. Other protocols are GC (global catalog) and WINNT.
Menu Settings	

Setting	Description
ek_UserMenuType	Determines the appearance of the menu that appears within every content block after the user signs in. ▪ **0** - New dynamic menu - only appears when user moves cursor over content block ▪ **1** - Old classic menu - always appears ▪ **2** - Menu without borders - a silver pin head appears above content that has a menu available. Hovering over this pin produces a menu. See Also: "Changing the Appearance of the Web Site Content Menu" on page 7-7
ek_MenuDisplayType	This setting only works if `ek_UserMenuType` is set to zero (0). Determines the appearance of the menu that appears within every content block after the user signs in. ▪ **0** - Horizontal - menu icons are arranged horizontally ▪ **1** - Vertical - menu icons are arranged vertically and include the tool-tip text
Multilingual Settings	
ek_EnableMultilingual	Enable or disable support for multilingual content ▪ **1** - enable ▪ **0** - disable See Also: "Enabling/Disabling Support for Multiple Language Content" on page 14-4
ek_DefaultContentLanguage	Sets the four-digit, decimal representation of the default content language. For example, American English is 1033. If you have a version of Ektron CMS 400.NET that precedes than 4.7, all content blocks are set to this value during the upgrade. See Also: "The Default Language" on page 14-7
ek_ServerURL	Mainly used in Web services to determine the location of a remote server. For example, in a Web farm environment, the content server can reside in a remote location. In this case, the developer's content is replaced with this value, so all `<img src=""…/>` and `<href….` references point to server named here instead of the local one.
Miscellaneous Settings	
WSPath	Determines the location of the Web services page used by the server controls at design time.

Setting	Description
ek_BatchSize	The amount of files that can be uploaded at the same time. The default is **4**, but it can be any non negative number. Note: Users can upload any amount of files. The system handles them four at a time.
ek_CacheControls	Choose whether to enable caching for Ektron CMS400.NET server controls or not. For information, see "Caching with Server Controls" on page 21-31 - **0** - Disable - **1** - Enable
ek_WorkareaSearchResultMode	Sets the Workarea search-results mode. - **text** - returns a text only version of the search results. - **mixed** - returns text and images associated with search results. - **graphical** - returns a images associated with search results. See Also: "Searching the Workarea" on page 9-87
ek_ WorkareaLibSearchResultMode	Sets the Workarea Library search-results mode. - **text** - returns a text only version of the library search results. - **mixed** - returns text and images associated with library search results. - **graphical** - returns a images associated with library search results.
ek_ ShowWorkareaRetErrorReferrer	Choose whether to enable referrer debug information on the RetError.aspx page. - **True** - enable - **False** - disable
ek_QueueName	Path to the message queue.
ek_LogFileName	Path to the log file name for the message queue
ek_loginAttempts	Ektron CMS400.NET has a login security feature that, by default, locks out a user after five unsuccessful attempts to log in. That feature is controlled by this element. See Also: "Restricting Login Attempts" on page 3-9.

Setting	Description
ek_passwordCaseSensitive	By default, passwords are case insensitive. So for example, if the password is TOKEN and the user enters token, the sign-on is successful. If you want to make passwords case sensitive, change the value of this element from **false** to **true**. If you do, and the password is TOKEN and the user enters token, the sign-on is unsuccessful. The user would have to enter TOKEN to sign on. See Also: "Making Passwords Case Sensitive" on page 3-12
ek_LinkManagement	This setting determines if Ektron CMS400.NET uses linkit.aspx when inserting a quicklink. By default, it is set to `true`. If set to `true`, when a user inserts a quicklink, Ektron CMS400.NET inserts a *special link* instead of a quicklink. A special link determines the correct quicklink to use when a site visitor clicks it. For example, a user adds a content block to folder A. A quicklink to that content is `a.aspx?id=10`. Later, if an administrator changes the folder's template but doesn't update the quicklink within the content block, the quicklink is broken. To avoid this problem, enable link management.
ek_LoginScreenWidth	The width of the login screen in pixels. You may need to widen the screen if you are using Active Directory and the database names are long.
ek_ToolBarFormatTag	Note: This setting only applies *after* a user signs in to your site. Change this setting if the colored border that surrounds content looks wrong. (The border color indicates the content's status.) By default, `<table>` tags create the border. If the border looks wrong or inappropriate, change setting to **div**. If you do, `<div>` tags are used to draw the border instead of `<table>` tags. This change typically solves the problem.

Setting	Description
ek_PageSize	This setting determines the maximum number of items that can appear on a page before it "breaks." When a page breaks, additional entries appear on another screen, and the following text appears near the bottom of the items list: **Page 1 of 2** **[First Page] [Previous Page] [Next Page] [Last Page]** Note: The above text changes depending on the page you are viewing. You must click an option to see and update the remaining items. This setting affects pages that let you edit the following items: - content - library items - menu items - collection items - membership users - membership users not verified - forums
ek_XliffVersion	Define the XLIFF version to use when exporting files. See Also: "What is XLIFF?" on page 14-14
ek_extensionServiceEnabled	Enable Extensibility Plug-in service. For more information on Plug-ins, see Introduction.
ek_EnableDeveloperSamples	Enable the API developer samples on the Developer demo site shipped with CMS400.NET. - **True** - enable developer samples - **False** - disable developer samples
ek_assetPath	The folder that stores Assets. You would only change this value if you need to move the Assets folder to another location. Note that this value is prefixed by the value set in the ek_appPath variable. By default, ek_appPath is set to `webroot/CMS400Min`. So, by default, this folder is set to `webroot/CMS400Min/assets`.
ek_InvitationFromEmail	The "From" email address the system uses when a user sends an Invitation. Invitations are emails that are sent to non-system users asking them to join your site. See Also: "Invite Server Control" on page 16-208

Setting	Description
ek_EnableMessageBoardEmail	Setting this key to **True** enables the system to send e-mail notifications when a user posts a message to a user or community group's message board. When a user posts a message to another user's message board, the user who owns the board receives a notification stating a message has been posted. When a user posts a message to a community group's message board, all members of the group receive e-mail notifications. It is important to note that when this key is set to True, it activates e-mail notifications for all user and community message boards. However, content message boards are not affected. See Also: "Notifications" on page 16-129
ek_EditControlWin	Select which editor will be used by Microsoft Windows operating system users. Choice are: **ContentDesigner** - Use the eWebEdit400 editor. This editor does not require an ActiveX installation on the user's computer. **eWebEditPro** - Use the eWebEditPro editor. This editor requires an ActiveX install on the user's computer. See Also: "Ektron CMS400.NET Editors" on page 7-20
ek_EditControlMac	Defines the editor that is used Macintosh operating system user. This must be **ContentDesigner**. See Also: "Ektron CMS400.NET Editors" on page 7-20
system.diagnostics	
LogLevel	Enter a numeric value that determines the level of message logging. By default, diagnostic messages are logged in the Event Log. Choices are: 1 = Error: log errors. 2 = Warning: log errors and warnings. 3 = Information: log errors, warnings and informationals. 4 = Verbose: Everything is logged.
ektronCommerce	
ek_ecom_TestMode	When set to true, payments are sent to a test gateway instead of the actual one.
ek_ecom_DefaultCurrencyId	Select the default currency and enter its Numeric ISO code. This should be done before creating your product catalog. **Warning! Important:** Do not change the default currency after your eCommerce site is live. ***** See Also: "The Default Currency" on page 17-55
ek_MeasurementSystem	Select whether to use English or Metric measurements for your packages. See Also: "Packages" on page 17-87

Setting	Description
mediaSettings See Also: See "Managing Multimedia Assets" on page 7-447	
WindowsMedia-CLSID	The class ID for the Windows Media Player.
Quicktime-CLSID	The class ID for the Quicktime player.
Realplayer-CLSID	The class ID for the Real player.
Flash-CLSID	The class ID for the Flash player.
WindowsMedia-Codebase	Location of the code base plug-in for Windows Media Player.
Quicktime-Codebase	Location of the code base plug-in for Quicktime player.
Realplayer-Codebase	Location of the code base plug-in for Real player.
Flash-Codebase	Location of the code base plug-in for Flash player.
application/x-shockwave-flash	Define the relationship between the Shockwave Flash mime type and the Flash player.
audio/x-wav	Define the relationship between the WAV mime type and the Windows Media, Quicktime and Real players.
audio/x-wav-default	Define the relationship between the WAV default mime type and the Windows Media Player.
video/x-avi	Define the relationship between the AVI mime type and the Windows Media, Quicktime and Real players.
video/x-avi-default	Define the relationship between the AVI default mime type and the Quicktime player.
video/x-msvideo	Define the relationship between the msvideo mime type and the Windows Media, Quicktime players.
video/x-msvideo-default	Define the relationship between the msvideo default mime type and the Windows Media Player.
audio/x-ms-wma	Define the relationship between the MS-WMA mime type and the Windows Media Player.
video/mpeg	Define the relationship between the MPEG video mime type and the Windows Media Player.

Setting	Description
audio/mpeg	Define the relationship between the MPEG audio mime type and the Windows Media Player.
video/x-realvideo	Define the relationship between the realvideo mime type and the Real player.
video/x-ms-wmv	Define the relationship between the MS-WMV mime type and the Windows Media Player.
audio/x-realaudio	Define the relationship between the realaudio mime type and the Real player.
video/quicktime	Define the relationship between the quicktime mime type and the Quicktime player.
Miscellaneous	
session state	mode - This setting determines the storage option for session data. CMS400.NET only supports `InProc`. Other session state modes are not supported.
HttpHandlers	This section sets how the URL Aliasing feature handles URLs with certain extensions. If you have any extension you do not want aliased, add it below the following line using the same syntax. add verb="*" path="*.png" type="URLRewrite.StaticFileHandler, Ektron.Cms.URLRewriter" />
maxRequestLength	This setting determines the maximum size of files that can be uploaded to your server. The default setting is 204,800 kilobytes, or 200 MB. Enter the desired value in kilobytes. To convert megabytes to kilobytes, go to http://www.onlineconversion.com/computer.htm.

email Features

email features are explained through the following topics.

Configuring E-Mail for Tasks and Content

An email is sent to notify users when a task (such as approving a content block or submitting a form) was performed or needs to be performed. This section explains the steps needed to use Microsoft's SMTP service to enable this kind of e-mail notification in Ektron CMS400.NET.

To learn about email notification for Web Alerts, see "Web Alert Feature" on page 20-1.

CDOSYS

To process email, Ektron CMS400.NET uses the CDOSYS model. Using the Simple Mail Transport Protocol (SMTP) and the Network News Transfer Protocol (NNTP) standards, CDOSYS enables applications based on Windows XP, Windows 2000 or Windows 2003 to route e-mail and USENET-style news posts across multiple platforms.

CDOSYS, the successor to CDONTS, is as easy to use as CDONTS but is more powerful by letting authors create and view sophisticated emails using html and data sources.

Note: If the SMTP server that is processing email does not find CDOSYS installed, it tries to use CDONTS as a mail server protocol.

Set up SMTP Server

For CDOSYS to work, set up the SMTP server on your local system (to which you installed Ektron CMS400.NET) or a remote system that sends and receives email.

Note: To access an SMTP server on a local or remote system, consult the system administrator who manages email in your organization. This administrator may not be the same as the Ektron CMS400.NET administrator.

- **Local** - Before setting up an SMTP server on your local system, install IIS. The SMTP server settings on a local system would be something like this:

```
"ek_SMTPServer" value="localhost"
"ek_SMTPServer" value="127.0.0.1"
"ek_SMTPServer" value="myname"
```

- **Remote** - Set up an SMTP server on a remote system. The SMTP server on a remote system can be something like this:

```
"ek_SMTPServer" value= "smtp.example.com"
"ek_SMTPServer" value= "example.com"
```

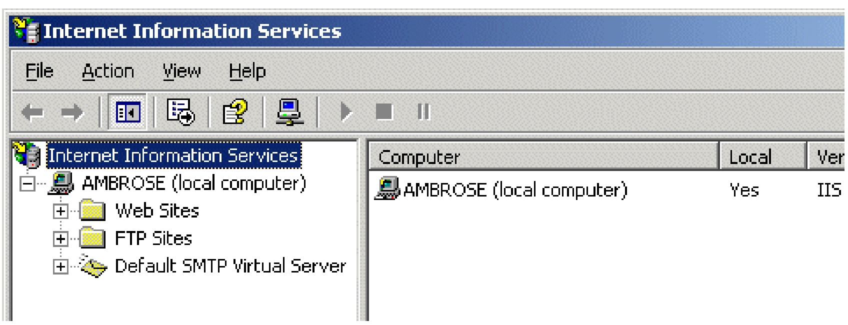
After the SMTP server is set up, configure it as described in "Verification for Relay" on page 1-82.

Verification for Relay

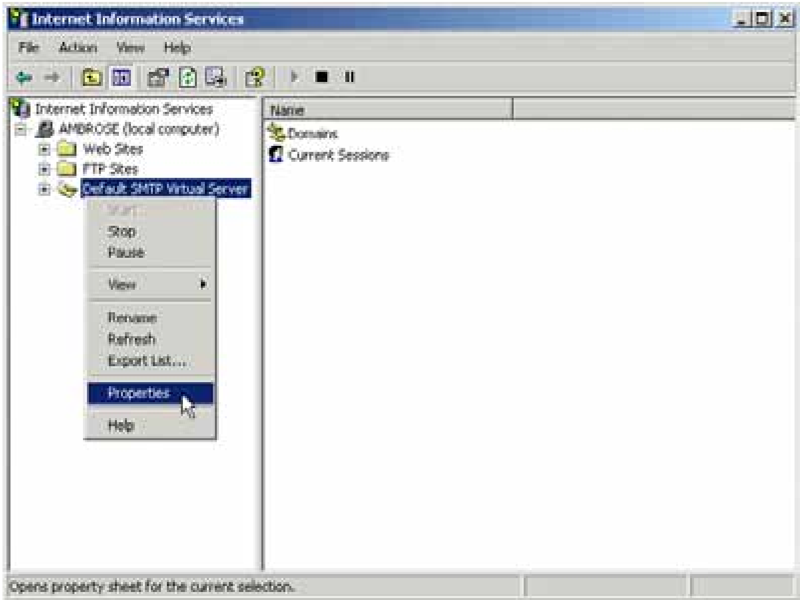
To verify that your Ektron CMS400.NET Web server's IP address supports relay through your SMTP server, follow these steps.

Note: The WWW and SMTP components of IIS must be installed on the Web server to which Ektron CMS400.NET is installed.

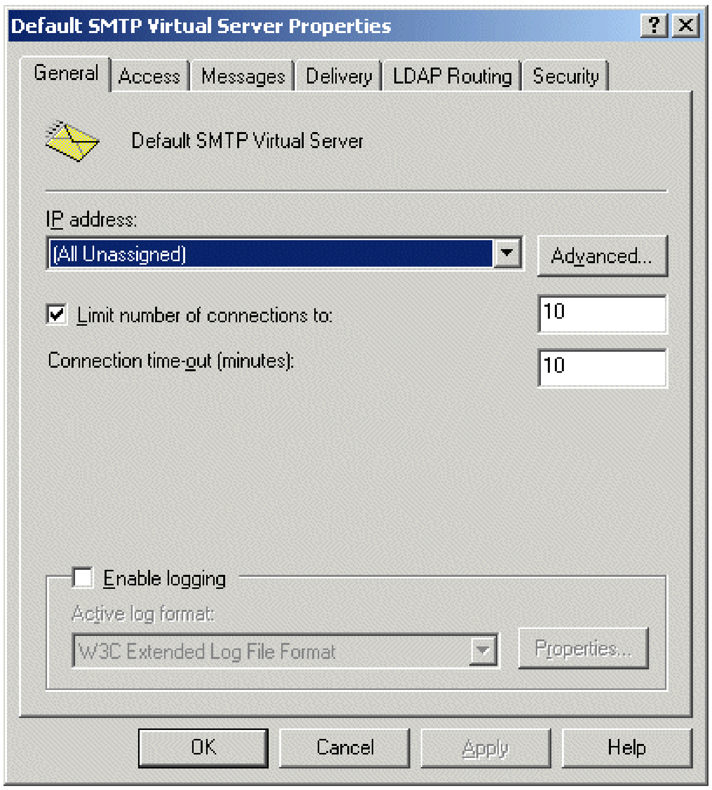
1. On your SMTP server, access your Internet Services Manager in the Administrative Tools.



2. In the IIS Management Console, select the SMTP virtual server.
3. On the Action menu, click **Properties**.

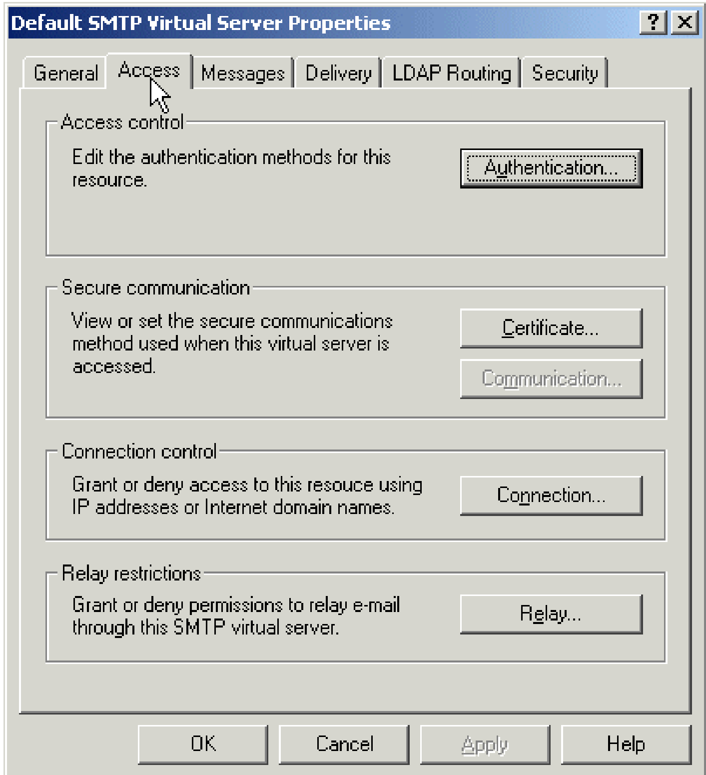


4. The SMTP properties window opens.

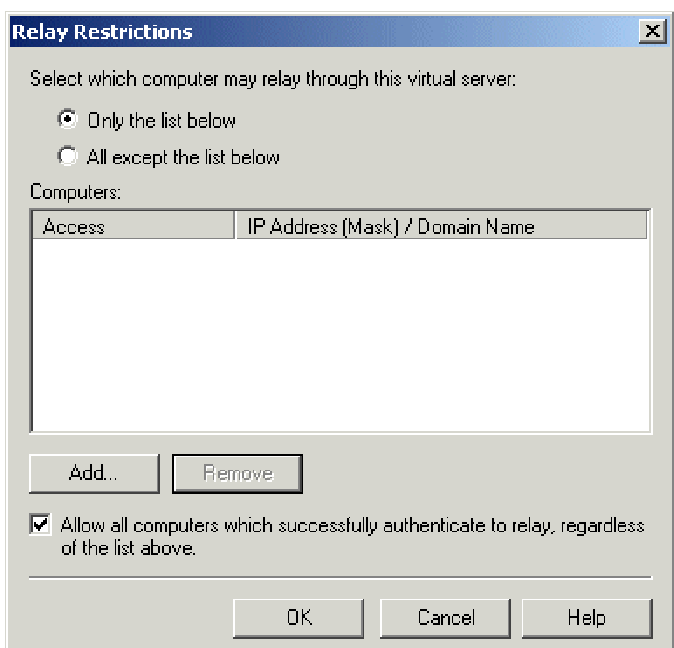


5. Click the **Access** tab.

6. The access properties appear.



7. In the Relay Restrictions section, click the **Relay...** button.
8. The Relay Restrictions window opens. Set or remove relay restrictions.



Note: For more information, see "Setting or Removing Relay Restrictions from a Virtual Server" from this Web page: <http://www.microsoft.com/WINDOWS2000/en/professional/help/moc04_57.htm>

Configuring SMTP Settings

Next, configure Ektron CMS400.NET to use SMTP.

1. Open the web.config file. (See "Managing the web.config File" on page 1-69.)
2. Move to the section of the file that has these settings.

```
<!-- SMTP Server configuration -->
<add key="ek_SMTPServer" value="localhost" />
<add key="ek_SMTPPort" value="25" />
<add key="ek_SMTPUser" value="" />
<add key="ek_SMTPPass" value="" />
```

3. Set the `ek_SMTPServer` value. See "Set up SMTP Server" on page 1-81.
4. Set the `ek_SMTPPort` value to the port your system will access to retrieve email. In most cases, the port is set to 25. If that is not the case, see your System Administrator.
5. Set the `ek_SMTPUser` value to the username that is set up for the SMTP Server to send and receive email. Typically, the username takes the form of an email address, such as "`ek_SMTPUser`" `value=`"`yourname@example.com`".

This retrieval of email is based on how basic authentication is set up for you, though you do not need a username when using a local SMTP server. Check with your System Administrator for details.

If you are using a remote system for accessing email, you must provide an authenticated username before you can send or receive email.

6. Set the `"ek_SMTPPass"` value to the password that is set up for the SMTP server to send and receive email. This password is based on the basic authentication. By default, the Ektron CMS400.NET only accepts passwords in the encrypted form.

   To encrypt the password, Ektron provides a password encrypting tool. See "The Encrypt Password Utility " on page 1-85.

The Encrypt Password Utility

To use the utility tool EncryptEmailPassword.exe, follow these steps.

1. Open `C:\Program Files\Ektron\CMS400\Utilities`
2. Run EncryptEmailPassword.exe.
3. The Encrypt Utility dialog appears.

4. Enter your SMTP password in the Text field.
5. Click the **Encrypt** button.
6. The screen displays an encrypted password in the **Encrypted** field.
7. Copy the encrypted password and paste it into the web.config file after `"ek_SMTPPass" value=`.

Error Messages

When submitting a form or a content block in an approval process, if you get an error message listed below, it is generated by the SMTP server on which you set up the mail system, *not* by Ektron CMS400.NET.

- **The Transport failed to connect to the server. [CBR SendMail R1] [CBR R65] [DIO R 36]**
- **The server rejected one or more recipient addresses. The server response was: 550 5.7.1 Unable to replay for yourname@example.com [CBR SendMail R1] [CBR R1] [DIO R36]**

.

Automatic eMail Notification

Ektron CMS400.NET has an automated email system that sends emails to the proper users when an action has been, or needs to be, performed. Emails are generated when any of the following actions takes place.

email sent to	When content is
Next approver	Submitted to be published
Next approver	Submitted to be deleted
Author	Published to Web site
Author	Declined to be published or deleted

In order for users to be notified of these actions, the following criteria must be met:

- Valid system email address
- Enabled email notification
- User email address
- User email notification enabled

These values are set in the Edit User screen. See Also: "Managing Users" on page 15-3

The Tasks feature also has automatic email notification. For more information, see "Task Email Notification" on page 11-40.

Content of Automatic email

The automatic emails are stored in and received from the database. Each email consists of one string for the subject and one for the body. Ektron CMS400.NET does not currently support HTML emails, but the messages are fully customizable. For more information, see "Customizing Ektron CMS400.NET email" on page 1-87.

Customizing Ektron CMS400.NET email

Ektron CMS400.NET can send email notification to users, informing them that actions have either taken place or are requested of them. For example, a content contributor receives an email that his content has been published to the Web site.

These emails are stored in the resource files. In that file, each email consists of one string for the subject and one for the body. Ektron CMS400.NET does not support HTML email, however the message text is fully customizable.

The procedure for customizing resource files is documented in "Procedure for Translating Workarea Strings" on page 14-41.

The body of an email can include variables, located between @ symbols. Ektron CMS400.NET replaces these variables with the information for that instance of the email. For example, **@appContentTitle@** in the following sentence is replaced with the email's title.

Before	The content "**@appContentTitle@**" has been deleted.
After	The content "Home Page Content" has been deleted.

These emails can be customized. The variables can be taken out or moved around. More text can be added; text can be rewritten or reorganized.

Before	"**@appContentTitle@"** has been deleted from the XYZ Web site.
After	"About Us" has been deleted from the XYZ Web site.

Each message is called in the presentation layer by its message title.

Carriage Return/Line Feeds are represented by the variable **@appCRLF@**. These cause the email to move down one line. For example:

Before	The content was approved.**@appCRLF@**Thank you!
After	The content was approved. Thank you!

Variables

The following table lists variables you can use to customize email messages. When the email is sent, the corresponding description replaces the variable.

Variable	Inserts
@appCRLF@	A carriage return.
@appContentTitle@	The title of the content block.
@appDeletionDateTime@	The date and time the content will be deleted from the Web site.
@appChangeDateTime@	The date and time changes will be updated on the Web site.

Variable	Inserts
@appDeclinerFirstName@	The first name of the user who declined the content block.
@appDeclinerLastName@	The last name of the user who declined the content block.
@appSubmitterFirstName@	The first name of the user who submitted the content block.
@appSubmitterLastName@	The last name of the user who submitted the content block.
@appFolderPath@	The location of the content block in the folder tree in the Ektron CMS400.NET Workarea.
@appContentLink@	The link to the content block on the Web site. Note: You must be logged in to see the changes.
@appSubmitterDateTime@	The date and time the content block was submitted.
@appApprovalList@	The current approval list that the content block must pass through.
@appComment@	Displays the comments for the content block.
@appPassword@	Displays the account password for ResetPassword and RequestResetPassword message types.
@appEmailFrom@	The address of the email sender.
@appEmailTo@	The address of the email receiver.

List of Ektron CMS400.NET Default email

Notify Approval Process Complete

Because of the logic, there are four emails for notifying that the approval process is complete.

Deletion of Content Approved

Message Title: email subject: content deletion approved.

Message Text: Deletion of content has been approved.

Immediate Deletion of Content

Message Title: email subject: content has been deleted.

Message Text: Content has been deleted.

Approved Content Awaiting Go Live Date

Message Title: email subject: content changes approved.

Message Text: Content changes have been approved.

Approved Content Published Immediately

Message Title: email subject: content has been changed.

Message Text: Content changes have been made.

Decline Approval Request

Message Title: email subject: approval request declined.

Message Text: Content approval request declined.

Send Approval Message

Message Title: email subject: request for approval.

Message Text: Request for content approval.

Variables

The following table lists variables you can use to customize email messages. When the email is sent, the corresponding description replaces the variable.

Variable	Inserts
@appCRLF@	A carriage return.
@appContentTitle@	The title of the content block.
@appDeletionDateTime@	The date and time the content will be deleted from the Web site.
@appChangeDateTime@	The date and time changes will be updated on the Web site.
@appDeclinerFirstName@	The first name of the user who declined the content block.

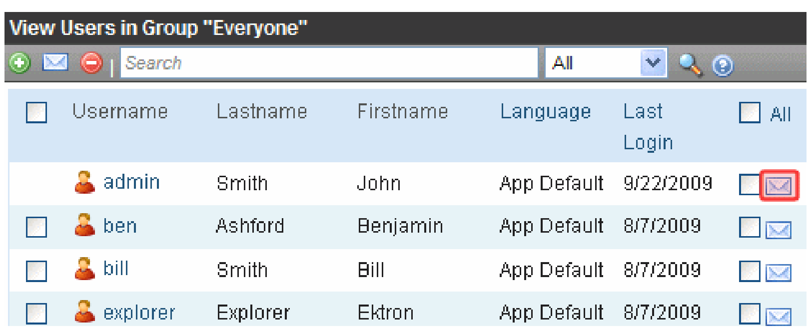
Variable	Inserts
@appDeclinerLastName@	The last name of the user who declined the content block.
@appSubmitterFirstName@	The first name of the user who submitted the content block.
@appSubmitterLastName@	The last name of the user who submitted the content block.
@appFolderPath@	The location of the content block in the folder tree in the Ektron CMS400.NET Workarea.
@appContentLink@	The link to the content block on the Web site. Note: You must be logged in to see the changes.
@appSubmitterDateTime@	The date and time the content block was submitted.
@appApprovalList@	The current approval list that the content block must pass through.
@AppComment@	Displays the comments for the content block.

(continued in List of Default email)

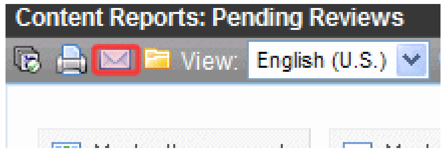
Instant eMail

In addition to automatic email, Ektron CMS400.NET lets you send email instantly to a user or user group from many screens. Your ability to send instant mail is indicated by either

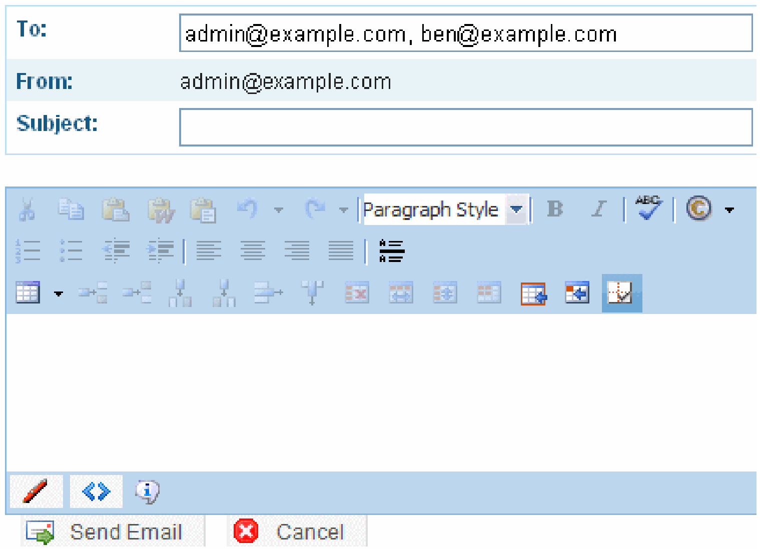
- a small mail icon next to a user or group name, as indicated in red below



- a small mail icon on the toolbar (see second image below)



When you click one or more user/group names then the email icon, the email screen appears, as shown below. Once you complete the screen and click **Send**, an email is sent to designated users.



Condition for Instant eMail

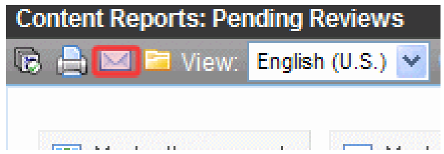
- The email software must be configured for your server. See "Configuring E-Mail for Tasks and Content" on page 1-81

Where Instant email is Available

Instant email is available from several screens that display users and user groups. Typically, you click a user name or the email icon to launch an email. Screens in the following Ektron CMS400.NET features support instant email.

- Smart Desktop
- Tasks
- Approvals
- Reports

Wherever instant email is available, an email icon appears (circled in the illustration below).



Modifying Instant eMail

When the email screen appears, the following information is copied from Ektron CMS400.NET into the email.

Field	Source of Default Information	Editable?
To	User you selected to receive the email. If the user does not have valid email address, an error message appears. If you then insert a valid email address, the email is sent. If you specify a group to receive the message, as long as one group member has a valid email address, all group members with valid addresses receive the email.	Yes. If desired, you can add recipients by typing them into this field.
From	User who signed on to Ektron CMS400.NET.	No
Subject	If the email message is linked to content, its title appears.	Yes
Body of message	If the email message is linked to content, a link to the content appears.	Yes

Configuring SSL

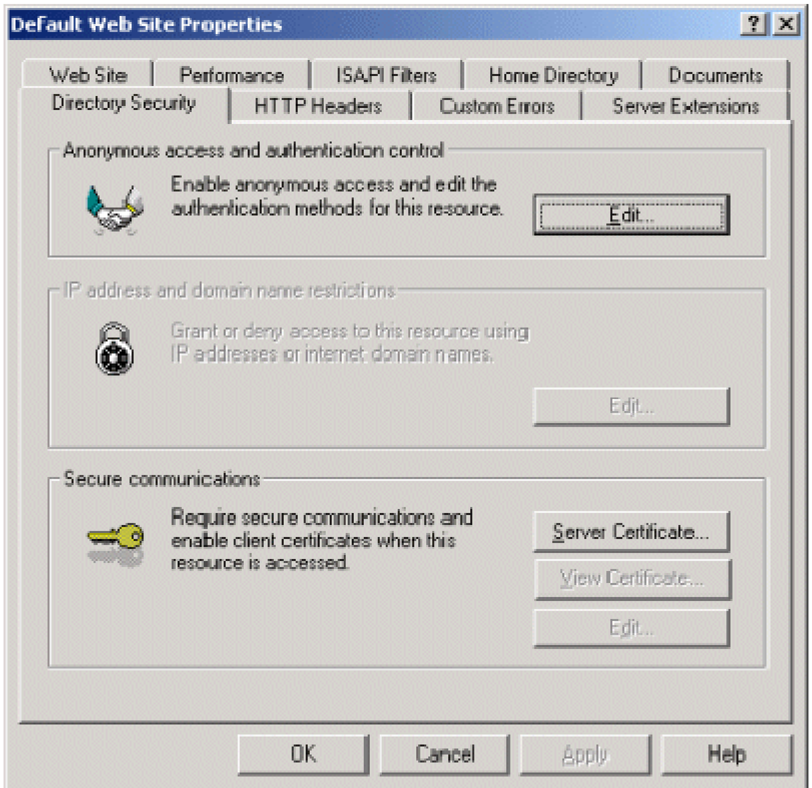
In Ektron CMS400.NET, you can use SSL when users log in to your Web site. SSL encrypts the username and password during transmissions to the server.

When you set up the SSL certificate, and configure Ektron CMS400.NET to use it, the login page is launched in a Secure Socket Layer. This section explains how to set up SSL for Ektron CMS400.NET.

Setting Up the Certificate

If your Web server does not have a certificate installed, you need to install one. To do so, follow these steps.

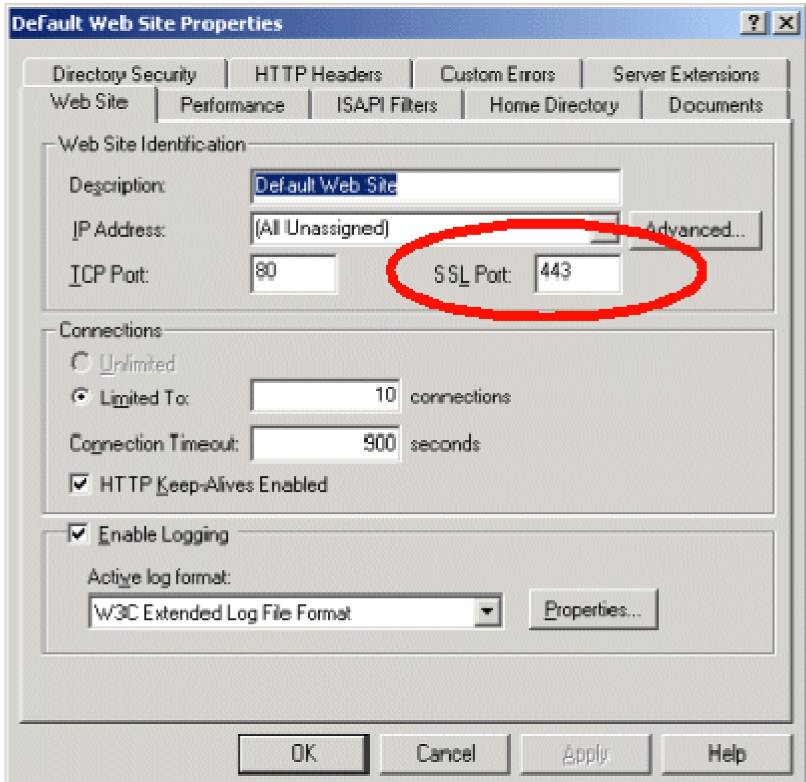
1. Access the Internet Information Server Administrator Console on your Web server.
2. Navigate to the computer and Web site to which Ektron CMS400.NET is installed.
3. Right click on the Web site.
4. Click **Properties**.
5. Click the **Directory Security** tab.



6. In the Secure communications area, click the **Server Certificate** button.

7. Use the wizard to set up a certificate for your Web site.
8. Close the wizard. You return to the Properties window.

9. Click the **Web Site** tab at the top of the Properties window.



10. Set the **SSL Port** that the Web server will use.
11. Click **OK**.

Updating the web.config File

Next, configure Ektron CMS400.NET to use the SSL certificate.

1. Open the web.config file. (See "Managing the web.config File" on page 1-95.)
2. Move to the section of the file that has these settings.***

```
<add key="ek_UseSSL" value="false" />
<add key="ek_SSL_Port" value="443" />
```

3. Set the `ek_UseSSL` value to **true**.

Warning! If the ek_`UseSSL value` is **true**, but you did not install the certificate to the Web Server, you cannot log into Ektron CMS400.NET.

4. Set the `ek_SSL_Port` value to **443** (unless you specified another SSL port).
5. Save and close the file.

You are ready to use the SSL support for Ektron CMS400.NET.

Migrating Your Site to Ektron CMS400.NET

This chapter explains how to migrate your Web site to Ektron CMS400.NET. This chapter explains

- What to copy to your Web site
- Setting up and deploying templates

This chapter assumes you installed Ektron CMS400.NET and have read the *Ektron CMS400.NET* documentation, so that you have an understanding of basic concepts, some of which are mentioned here.

Initial Steps

The following section describes tasks you need to perform before migrating your Web site.

Installation

Ektron CMS400.NET requires a physical installation of the product. If you do not have physical access to the machine, someone with access to the machine must run the install.

Note: For more information, see Installing .

Verify Installation

After you install Ektron CMS400.NET, verify that it is properly installed by using the starter site. By default, the sample Web site is located at the following address on the machine to which Ektron CMS400.NET is installed.

```
http://localhost/siteroot/default.aspx
```

If you can browse the starter site and it works properly, Ektron CMS400.NET is properly installed.

Best Practices

Ektron recommends keeping a working version of the starter site. This can be used to help you debug problems.

For instance, if you encounter errors on your site, you can refer to the starter site to see if the same errors occur. If they do, that may indicate a problem with the installation. If they do not, the installation is probably OK and an external factor is causing the problem.

Setting up Your New Site

Note: You can use the Site Setup utility to perform these tasks. To launch this utility, go to **Start > Programs > Ektron > CMS400 > Utilities > Site Setup**. To read about it, go to "Setting up a Site" on page 1-25.

Copy Application Core Files

Copy the application core files from the `siteroot/workarea` folder into your site's folder. These files operate the workarea, library, and content functions.

Set up the Database

Since the content is stored in a database, you need to create one. To learn how to set up a database, see "Setting up a Database" on page 1-28.

Modify Application Parameters

After you install and create the Ektron CMS400.NET database, modify the web.config file that installed to the directory to which you installed Ektron CMS400.NET.

Edit that file and modify the following settings

Setting	Type in...
ConnectionString	Update the information between the <ConnectionString> tags to point to your: - server - database - user - pwd

Note: If you are using SSL, the settings you need to modify are explained in "Configuring SSL" on page 1-94.

Creating a Login Page

Now that everything is set up, you can create a login page. You can either copy the one from the starter site or create your own.

See Also: "Login Server Control" on page 3-6

Log In

To log into your Ektron CMS400.NET Web site, follow these steps.

1. Browse to the login page you created and click the **Login** button.
2. A login dialog box opens asking for a username and password.
3. Enter the default username (**admin**) and password (**admin**) and click **Login**.
4. You are logged into Ektron CMS400.NET

Note: If you get a message that the application is locked, log in using the username and password **builtin/builtin**. You get the message if your license key is invalid or has not been entered yet.

Modifying Configuration Settings

After you log in, access the Workarea by clicking on the Workarea button. From there, you can modify the configuration settings.

Set up Active Directory

If plan to use Active Directory, configure this now. The settings for Active Directory can be found in the **Settings** > **Configuration** folder. Refer to "Active Directory Feature" on page 15-48.

Modify the Setup Screen

The Ektron CMS400.NET setup section is located under the **Settings** > **Configuration** folder. The setup section allows you to configure items such as your license key, style sheet support, max summary size, and default language.

See "Administering Ektron CMS400.NET" on page 19-1.

Set up Metadata

Ektron CMS400.NET includes extensive metadata support. Settings for metadata definitions can be found under the **Settings** > **Configuration** folder in the Workarea. You can have as many metadata definitions as needed.

See See "Working with Metadata" on page 7-146 for more information.

Set up Smart Forms

You can also set up your Smart Forms. You create XML files externally or via the Data Designer. Next, a Smart Form is assigned to content blocks and folders.

See "Working with Smart Forms" on page 7-288 for additional information.

Creating Ektron CMS400.NET Users

If you are not using Active Directory support, add your users manually. The maximum number of users is determined by your license key. For instance, if you purchase a 10-user license, you can enter 10 users.

Note: If you exceed the licensed number of users, you may get locked out of Ektron CMS400.NET.

Every user must belong to a group. When you first add a user, he or she is automatically added to the Everyone group. You can create more user groups and add users to them as desired.

For more information, see "Managing Users and User Groups" on page 15-1.

Configuring Content and Forms Folders

Next, create folders to organize content blocks and forms. Create as many folders as you want. Each folder level can go as deep as you want.

Best Practices

Keep your folder structure simple so it's easy for your users to navigate. Organize folders in a way that makes sense to the users who will navigate through them. So, you may have 6 or so top level folders, and each folder may go 4 or so deep.

This folder structure is replicated under the Library folder.

As you create folders, you can assign a default template and style sheet. The default template is used when a new content block is created and Ektron CMS400.NET creates a Quicklink that points to the new content block. If you do not provide a default template, it is inherited from the parent folder.

After creating the folders, assign permissions and workflow to them. Permissions can be assigned to a user or a user group. The same is true for the approval process.

Best Practices

Limit permissions for the “Everyone” group, as this gives every user permissions to that content. Similarly, you should limit the “Everyone” group’s inclusion in the approval chain if you want to restrict which users can publish content.

Creating your Templates

Now you can create your templates. Templates contain the look and feel of the site. Masthead, navigation, and footer graphics are all part of the template. Use server controls to insert Ektron CMS400.NET content into a template. For a list of server controls, see "Developer Topics" on page 21-1.

Best Practices

Since dynamic templates include URL parameters, make each main landing page and other important pages static tags. This makes it easier for you to remember if you need to provide that link to someone.

For instance, each main landing page from your home page could use the static tag. Then, as you go deeper into that section, subsequent pages use a dynamic tag.

Migrating/Creating Content

At this point, you can begin to create/migrate your content. If you are migrating content from an existing site, add a new content block, and cut and paste the content into the Ektron CMS400.NET editor.

Note: All images and files must be uploaded and inserted into the content separately.

Deployment

Deployment from development to production is as simple as moving the files over. To properly deploy your new Ektron CMS400.NET Web site, following these steps.

1. Copy all assets (templates, images, files, etc.) from your development box to your production machine.
2. Move the database. You have two choices

- point your data source on the production machine to the database you were using
- copy the database, move it to your production box, and point a data source to that

Advanced Features

The previous information allows you to create a basic Ektron CMS400.NET Web site from scratch. This section explains some advanced features that you may implement, although they are not needed for the Web site to function properly.

Email Notification

For email notification to work in Ektron CMS400.NET, make sure the SMTP service is setup and running in IIS, and that it points to a valid mail server.

Refer to "Configuring E-Mail for Tasks and Content" on page 1-81 for additional information.

Creating a Web Site in IIS

Note: This text is adapted from Microsoft's IIS help.

Adding Web Sites to Your Server

IIS lets you create multiple Web sites on a single server. To create a new Web site, you must

- prepare the server and associated network services
- create a unique identity for the site

See Also:

- "Preparing to Add a Web Site" on page 1-104
- "Adding a Web Site" on page 1-105
- "Related Topics" on page 1-110

Preparing to Add a Web Site

Adding a Web site to a server requires careful preparation before running the Web Site Creation Wizard. Consider these recommendations.

- Review the methods of hosting multiple Web sites, and determine which one is appropriate for your environment.
- Multiple Web sites can use the same IP address. But if you decide to use a unique IP address for the new Web site, obtain a static IP address from your organization or ISP. Then, configure the server's TCP/IP settings.
- If you use a host header name to identify the new Web site, select a unique name. On a private network, the host header can be an intranet site name. But on the Internet, the host header must be a publicly available Domain Name System (DNS) name, such as support.microsoft.com. Register a public DNS name with an authorized Internet name authority.
- Update your name resolution system (typically DNS) with a new record that contains the new IP address and site name. For more information, see Domain Name Resolution in IIS help.
- Standard Internet services use TCP port 80 by default. It is not recommended to use any other port for HTTP services.

If you use a non-standard TCP port number to identify a new Web site for special situations (such as a private Web site for development/testing), select a TCP port number above 1023. In this way, the number does not conflict with well-known port numbers assigned by the Internet Assigned Numbers Authority.

- Use Windows Explorer to create a home directory for the content. Create subdirectories to store HTML pages, image files, and other content as needed.

To organize home directories for multiple Web sites on one server, create a top-level directory for all home directories, then subdirectories for each site.

You can create a home directory

- on the local server
- as a uniform naming convention (UNC) path on a network share
- as a URL that redirects clients to a different Web server

You can also create virtual directories that map to physical directories. For more information, see “Setting Home Directories” and “Using Virtual Directories” in IIS help.

- Determine whether to generate the Web site’s identification number incrementally or from the Web site name. When you create a new site using IIS 6.0, a Web site identification number is randomly generated using the Web site name.

With IIS 5.1 and previous versions, site identification numbers were generated incrementally. For example, because the default Web site is created first, its Web site identification number is 1. The next site created is 2. For more information, see “DisableLazyContentPropagation in Global Registry Entries” in IIS help.

- Create a home page that clearly identifies the new site.

Adding a Web Site

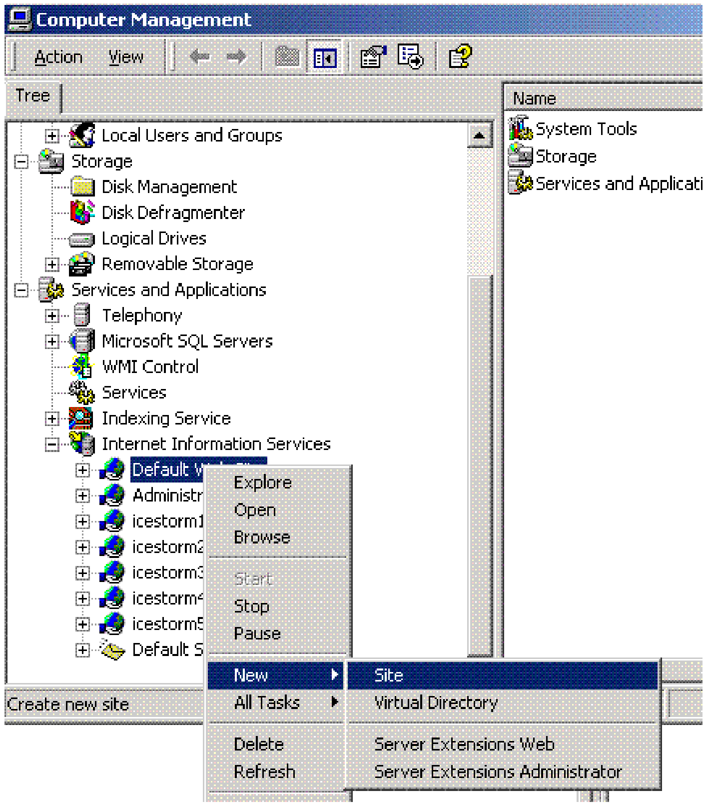
IIS provides two methods for adding a new Web site.

- The Web Site Creation Wizard
- The iisweb.vbs command-line script

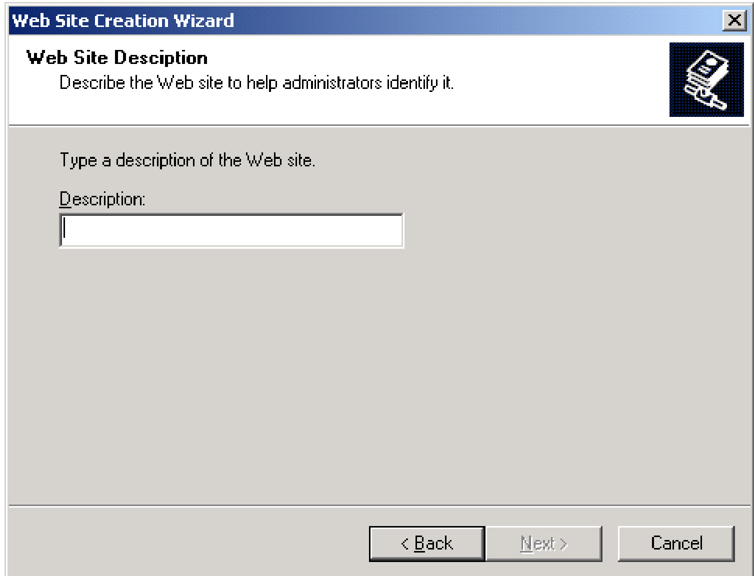
Warning! You must be a member of the Administrators group on the local computer to perform the following procedure (or procedures), or you must have been delegated the appropriate authority. As a security best practice, log on to your computer using an account that is not in the Administrators group, and then use the Run as command to run IIS Manager as an administrator. From the command prompt, type runas /user:administrative_accountname "mmc %systemroot%\system32\inetsrv\iis.msc".

Adding a Web site with the Web Site Creation Wizard

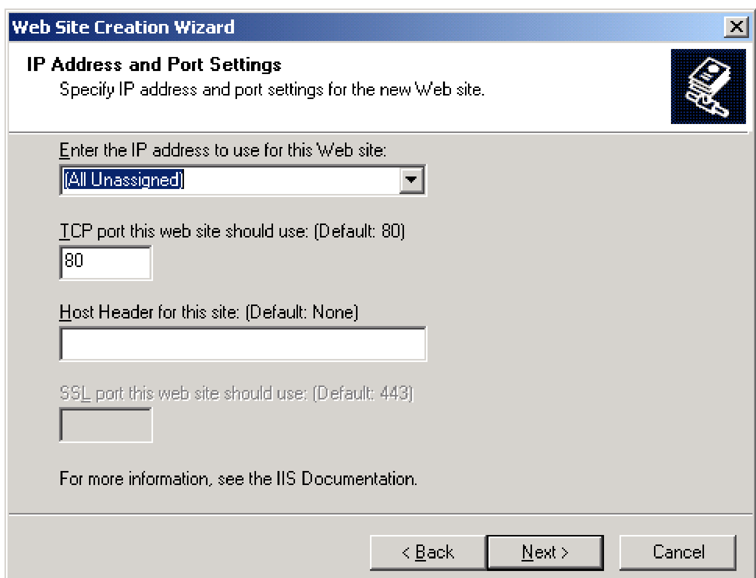
1. In IIS Manager, expand the local computer, right-click the Web Sites directory, point to **New**, and click **Web Site**.



2. Click **Next**.



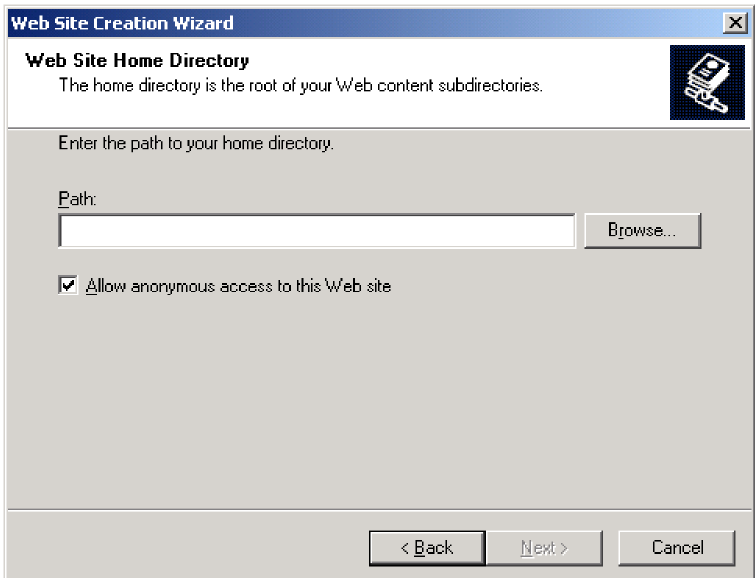
3. In the **Description** box, enter the name of the Web site and click **Next**.



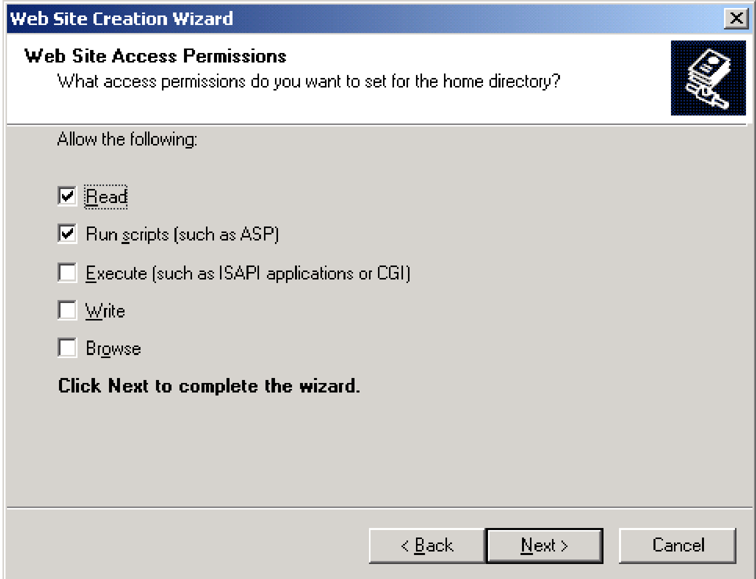
4. In the **Enter the IP address to use for this Web site** box, click **All Unassigned** to allow HTTP to respond to all unassigned IP addresses on the server, or click a specific IP address for the site.

Note: In the Web Site Creation Wizard, **All Unassigned** refers to IP addresses assigned to a computer but not a specific site. The default Web site uses all IP addresses not assigned to other sites. Only one site can be set to use unassigned IP addresses for a given port number. For more information on how sites are identified, see Creating Multiple FTP Sites in IIS help.

5. The TCP port is assigned to port 80 by default. To use a nonstandard port number to create a unique identity for a private Web site, use the **TCP port this Web site should use** box, and type a new port number above 1023.
6. In the **Host Header for this Web site (Default:None)** box, type a host header name to identify a Web site. If you are adding additional sites to a single IP address by using host headers, you must assign a host header name containing the full name of the site, for example, www.ektron.com.
7. If SSL encryption is enabled on the server, the **SSL port** box appears. Type the SSL port number, and then click **Next**.



8. In the **Path** box, type or browse to the path of your Web site home directory.
9. Web sites are configured for anonymous access by default. To create a secure or private Web site, clear the **Allow anonymous** access to this Web site check box, and click **Next**.



10. In the Web Site Access Permissions dialog box, select the permissions for the home directory. Click **Next**, and then click **Finish**.

To add a Web site with the iisweb.vbs command-line script

If the new Web site will be in a new directory, create the new directory. Follow these steps to do that.

1. From the Start menu, and click **Run**.
2. In the Open box, type **cmd**, and click **OK**.
3. From the command prompt, switch to the `systemroot\system32` directory.
4. Type `cscript iisweb.vbs /create` *`Home DirectorySite Description`*`" /i` *`IP Address`* `/b` *`Port`* and click <Enter>.

For example, the following command creates a Web site called MyWebSite on port 80 at IP address 123.456.789 with `c:\inetpub\wwwroot\newdirectory` as its home directory.

cscript iisweb.vbs /create c:\inetpub\wwwroot\newdirectory "MyWebSite" /i 123.456.789 /b 80

Note: The iisweb.vbs script supports additional options for creating a Web site. To see them, search for iisweb.vbs in Windows Help.

Related Topics

The following IIS help topics provide additional information.

To change properties on existing Web or FTP sites, see “Changing Default Web Site Settings.”

To add virtual directories, see “Using Virtual Directories.”

To perform common tasks from command-line scripts, see “Using Command-Line Administration Scripts.”

Chapter 2

Introduction to Ektron CMS400.NET

Using Ektron CMS400.NET to manage Web content is easy once you know the basics of setting up and maintaining your site. This documentation explains how to maintain an Ektron CMS400.NET site. By reading this documentation, you will gain an understanding of how Ektron CMS400.NET works.

This section introduces basic concepts that you should understand when beginning to work with Ektron CMS400.NET through the following subtopics.

About Ektron CMS400.NET

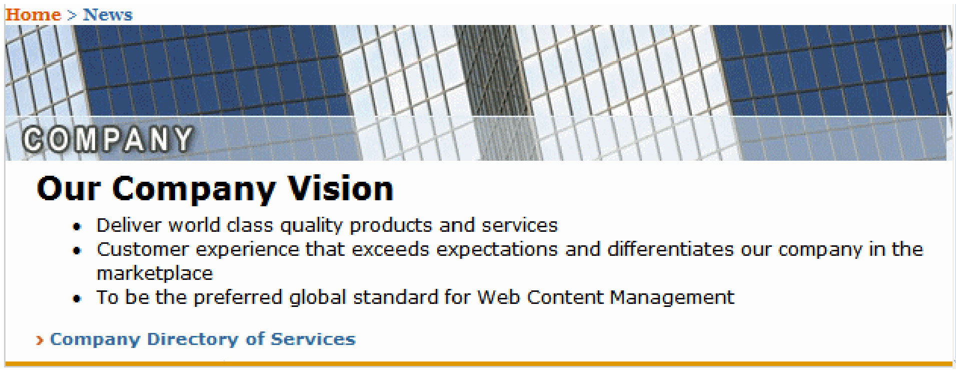
Ektron CMS400.NET is a powerful, easy-to-use, and affordable XML content management solution that empowers anyone to take an active role in managing Web content and optimizing online strategies. It streamlines site management, automates workflow processes, and supports collaboration. Ektron CMS400.NET reduces costs, saves time and makes Web sites, extranets, and intranets more effective – while generating rapid ROI.

Business users, like marketing or PR pros, can author, manage and publish Web content, build and deploy Web forms, and collect and leverage visitor info. Our browser-based editor supports the industry's best in-context editing environment – ensuring user adoption and project success.

Ektron CMS400.NET also helps to move paper-based forms processes to the Web. Our editor lets users create Web forms such as expense reports, health records, and insurance forms, deploy them to internal users, collect data, apply validation and math functions, and run forms through workflow – all within a browser.

What is a Content Block?

A Web site consists of several pages. Each page is made up of one or more *blocks* of content. For example, the home page from one of Ektron CMS400.NET's sample sites is below.



You can work with content from the Web site or after logging into the Ektron CMS400.NET Workarea. See Also:

- "Working with Content From Workarea vs. Web Site" on page 7-3
- "The Workarea and Smart Desktop" on page 4-1

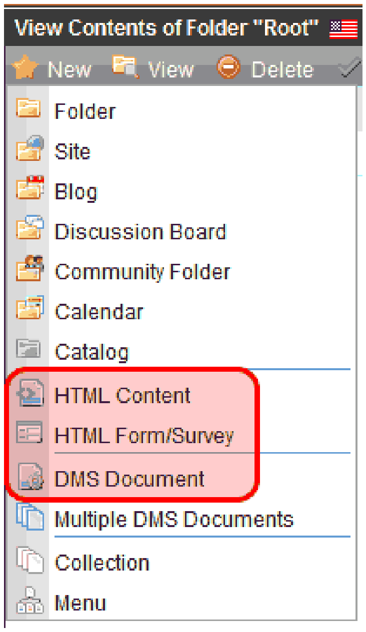
Types of Content

Every piece of content in Ektron CMS400.NET is one of the following types. The table below summarizes all types.

Type	Description	For more information, see
HTML content	Content designed to be published on the World Wide Web	"Ektron CMS400.NET Editors" on page 7-20
XML Smart Forms	Online forms, polls, or surveys designed to collect information from site visitors and save it in an XML format	"Working with Smart Forms" on page 7-288
HTML form/survey	Online forms, polls, or surveys designed to collect information from site visitors and save it in an HTML format	"Working with HTML Forms" on page 7-220
DMS Documents, which consist of Office	See details below	

Type	Description	For more information, see
documents, managed files, and multimedia files		
Office documents	Files normally created and edited using Microsoft Office	"Working with Microsoft Office Documents" on page 7-413
Managed files	Files created outside of Ektron CMS400.NET, such as PDFs and .jpeg files. You cannot create or edit these files within Ektron CMS400.NET - you can only store them.	"Working with Managed Files" on page 7-435
Multimedia	Files that run in a media player, such as sound and movie files	"Managing Multimedia Assets" on page 7-447

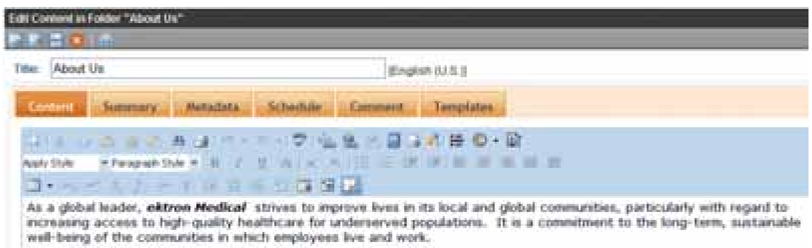
When creating new content, you must assign a type.



As you can see, the **New** menu lists all types of content you can work with.

Editing Content

Click the Edit button ( ) or menu option to open content in an editor. Below is an example of content within the editor.



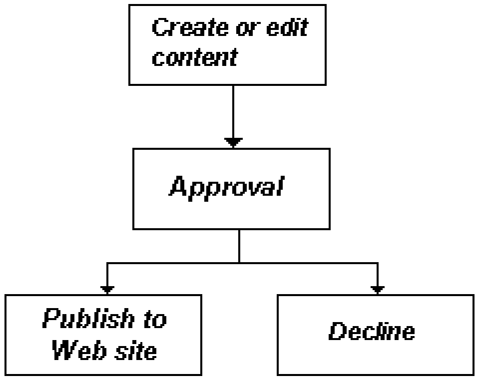
The editor resembles popular word processing software. You can enter text, then select it and click a button to change its display properties. For example, you can make text bold, change the color, or copy and paste it. You can also insert images, tables, links to other Web pages, and check spelling. See Also: "Ektron CMS400.NET Editors" on page 7-20

The Lifecycle of Content

After you edit content, you typically submit it for approval to one or more individuals who oversee changes to your Web site. These people can review, edit and approve the change. When the last approver signs off, the new content becomes available on the Web site.

In some cases, you are one of the content approvers. In this case, you receive an email notifying you that content needs approval. You look it over, change it as needed, then pass it on to the next approver. If you do not agree with the changes, you can *decline* the request. In this case, the user who made the edits is informed that the change is not approved.

The following graphic illustrates the content approval cycle.



To help track content's position in this workflow, Ektron CMS400.NET assigns a status to each content item. The status determines what you can do with it, and indicates what must occur in order for it to get published to the Web site. For more information, see "Content Statuses" on page 7-133.

Chapter 3

Logging In and Out

This section explains how to log in and out of Ektron CMS400.NET, use the Site Preview feature, and password/login management through the following subtopics.

Prerequisites

Once your Webmaster or administrator installs Ektron CMS400.NET, you need the following items before you can use it.

- URL (Web address) of Ektron CMS400.NET Web site
- Username and password

Once you acquire both, you can log into Ektron CMS400.NET and begin managing Web site content.

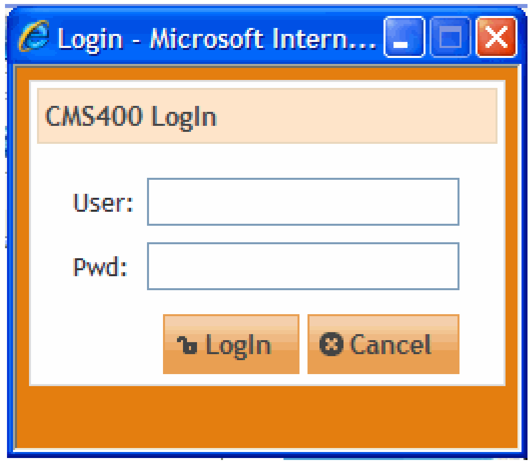
.

Logging into an Ektron CMS400.NET Web Site

To sign on to an Ektron CMS400.NET site, follow these steps.

1. In your Web browser, navigate to the URL of your Ektron CMS400.NET Web site. Your system administrator provides this.
2. Click the **Login** button on the screen.

3. The Login dialog box appears.



4. Enter your username and password.

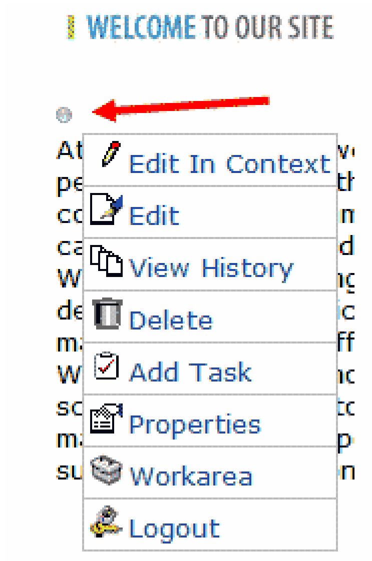
If you are using one of Ektron’s sample sites, you can use any of three standard users that demonstrate Ektron’s flexible user-permissions model. The table below lists the username and password needed to log in as each user type, as well as the permissions assigned to each user.

User Type	Username	Password	Permissions
Administrator	admin	admin	All
Standard user	jedit	jedit	Basic (for example, add/edit content, manage library files, etc.)
Membership user	jmember	jmember	Read-only permission to private content

5. Click the **Login** button.

6. The Web page appears.

You can navigate around your Web site as you could before signing in. But now, the content is either surrounded by a border or has a Silver Access Point in the top left corner (illustrated below).



For more information, see "Web Site Content Menu Options" on page 7-4.

Site Preview

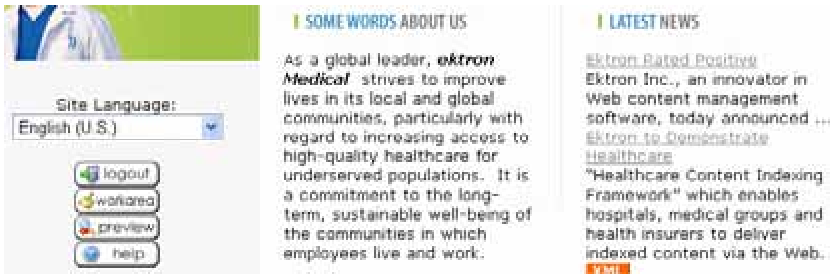
While logged into Ektron CMS400.NET, you can preview the Web site as it would appear to visitors, or view it in regular view.

Button Appearance	Status	Description
	Preview Mode	Content appears as last *edited*. The advantage of this mode is that you can see a Web page as it will appear when published to your site. Continue editing until you are satisfied with its appearance. In Preview mode, click the **Preview** button to switch to regular mode.
	Regular View	The most recently *published* version of content appears. In this mode, colored borders surround content when you move the cursor over it. In regular view, click the **Preview** button to switch to preview mode.

Toggling Site Preview

To toggle site preview on and off, follow these steps.

1. Navigate to a page that includes the login/logout button.
2. Click the **Preview** button: 
3. The Web site is now in preview mode.

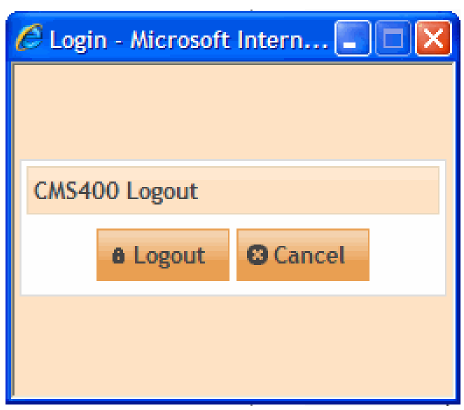


4. To turn preview mode off, click the () button on the login screen.

Logging Out of the Sample Site

To log out of Ektron CMS400.NET, follow these steps.

1. Click the **Logout** option from the content menu, or click the **Logout** button () on the Web page.
2. The Logout confirmation box appears.



3. Click the **Logout** button.
4. You return to the Web page from which you logged out. However, it is in standard view, not Ektron CMS400.NET view.

Login Server Control

The Login server control paints a login button on the template when displayed in a browser. When the Login server control is inserted and the project is built, the control displays the following buttons on a Web page.

Button	Description
login	When user is not logged in, this button appears. Clicking the button opens the login window, where a user can enter a username and password. Upon authentication, the user is logged in to the Ektron CMS400 Web site.
logout	After a user logs in, this button replaces the login button to let the user log out.
workarea	When logged in, this button appears under the logout button, allowing the user to access the Workarea.
preview	Lets the user preview the entire Web site as if all checked-in content were published. For more information, see "Logging In and Out" on page 3-1
preview	Turns off site preview mode.
help	Launches online, context sensitive help for Ektron CMS400.NET.

This subsection contains the following topics:

- "Placing a Login Button" on page 3-6
- "Login Server Control Properties" on page 3-6

Placing a Login Button

You can add any number of login buttons to a template. You can insert a login button on each template, or set up a special Web page, called login.aspx, from which users can log into the CMS400 site without the public being able to access the page.

Login Server Control Properties

The following table explains the properties of the Login server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
AutoAddType	Set this type to define automatically added users as membership users or CMS400.NET content authors. **Author** = CMS400.NET content authors **Member** = site visitor membership users Data Type: Common.EkEnumeration.AutoAddUserType	
AutoLogin	When set to true, users are automatically logged in using Active Directory authentication. They do not need to enter a username or password. The default is False. **True** = Use Active Directory authentication when logging in. **False** = Do not use Active Directory authentication when logging in. **Warning!** For this property to function properly, you must be using Active Directory authentication with your CMS400.NET Site.	Boolean
Hide	Used to hide login button in design time and run time. **True** = Hide login button **False** = Show login button	Boolean
Language	Set a language for the Login server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
OnlyAllowMemberLogin	This changes the Login button so only membership users can log in. This prevents someone from trying to login as an Ektron CMS400.NET user and gain access to the Ektron CMS400.NET Workarea. If a CMS Author tries to log in using this dialog box, a message appears in the box: "Only members are allowed to login here." The default is **False**. **True** = Allow only membership users to login. **False** = Allow Ektron CMS400.NET users and membership users to login.	Boolean

<table>
<tr><th>Property</th><th>Value</th><th>Data Type</th></tr>
<tr><td>PromptLogout</td><td>When set to False, the logout process will not include the Logout Prompt window (shown below).

True = Users must click the Logout button in the Logout prompt window before they are logged out.
False = Users are logged out without having to use the Logout prompt window.</td><td>Boolean</td></tr>
<tr><td>SuppressHelpButton</td><td>Hides the Help button that appears below the Login button when set to true. The default is False.
True = Do not display the Help button.

False = Display Help button.

If you are editing this server control from a text file and want to suppress the Help button, add the following code to the login tag source:
<code><CMS:Login ID="Login1" runat="server" SuppressHelpButton="True" /></code></td><td>Boolean</td></tr>
<tr><td>SuppressWrapperTags</td><td>Suppresses the output of the span/div tags around the control. The default is False.
True - Suppress wrap tags.
False - Allow wrap tags.</td><td>Boolean</td></tr>
<tr><td>WrapTag</td><td>Allows a developer to specify a server control's tag.
The default is Span.
Span - The <span> tag is used to designate an in-line portion of an HTML document as a span element.
Div - The <div> tag is used when you want to apply attributes to a block of code.
Custom - Allows you to use a custom tag.</td><td>String</td></tr>
</table>

Restricting Login Attempts

Ektron CMS400.NET has a login security feature that, by default, locks out a user after five unsuccessful attempts to log in by a user on one computer. This section explains the flexibility you have in controlling this feature.

You can control the following capabilities.

You control login security feature by changing the value of the `ek_loginAttempts` element in the web.config file. The following table summarizes your options.

Warning! If you want your Ektron CMS400.NET eCommerce feature to comply with Payment Application Data Security Standard (PA DSS) certification, the ek_loginAttempts value must be between 1 and 6.

Value	Description
any number between 1 and 254	The number of unsuccessful login attempts after which the user is locked out.
0	Lock out all users
-1	Disable feature; unlock all locked users
-2	Lock out CMS users only; membership users can still log in

Changing the Number of Unsuccessful Login Attempts

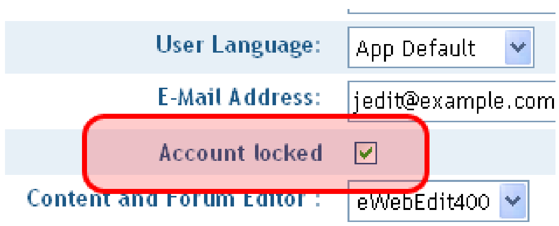
By default, if a user unsuccessfully tries to log in five times, the following error message appears: **The account is locked. Please contact your administrator**. Afterwards, even if the user enters the correct password, he is locked out, and the error message reappears.

Note: You can change the text of the error message in the resource file. To learn about editing the resource file, see "Procedure for Translating Workarea Strings" on page 14-41.

To change the number of unsuccessful login attempts that occur prior to lockout, edit the value of the `ek_loginAttempts` element in the siteroot/web.config file. For example, to allow only three unsuccessful logins, change the `value` to **3**. You cannot enter a value greater than **254**.

Unlocking a Locked Account

Once an account is locked out, the **Account Locked** field is checked in the user settings.



To unlock the account, an administrator user (or a user assigned to the user-admin role) accesses the Edit User screen and unchecks the box. At this point, the user can attempt to sign in again.

Note: If you want to unlock *all* locked users at once, set the value of the `ek_loginAttempts` element in the web.config file to **-1**. For more information about the effects of this setting, see "Disabling the Login Attempts Feature" on page 3-10.

Manually Locking a User from Signon

You can use the **Account Locked** field (described above) to manually lock a user out of Ektron CMS400.NET. To do so, go to the Edit User screen, identify the user, and check the **Account Locked** field.

That user cannot sign in until either you uncheck the box or change the value of the `ek_loginAttempts` element in the web.config file to **-1**.

Disabling the Login Attempts Feature

To disable the Login Attempts feature, set the value of the `ek_loginAttempts` element in the web.config file to **-1**. If you do, any user can try to log in as many times as he wants. The error message never appears, and he is not prevented from entering a password.

Note: Setting the value of the `ek_loginAttempts` element in the web.config file to **-1** automatically unlocks all locked accounts.

Preventing CMS Users from Signing On

If you want to lock all CMS users out, set the `ek_loginAttempts` element in the web.config file to **-2**. If you do, only membership users can sign in.

Note: The builtin user cannot sign in if `ek_loginAttempts` is set to **-2**.

Preventing All Users from Signing On

If you want to lock out all users (including membership users), set the `ek_loginAttempts` element in the web.config file to **0**. If you do, no one can sign in to Ektron CMS400.NET until you change the value.

Note: The builtin user cannot sign in if `ek_loginAttempts` is set to **0**.

Changing Images Used for Logging In and Out

You can change the images used for the login and logout buttons. To do so, follow these steps.

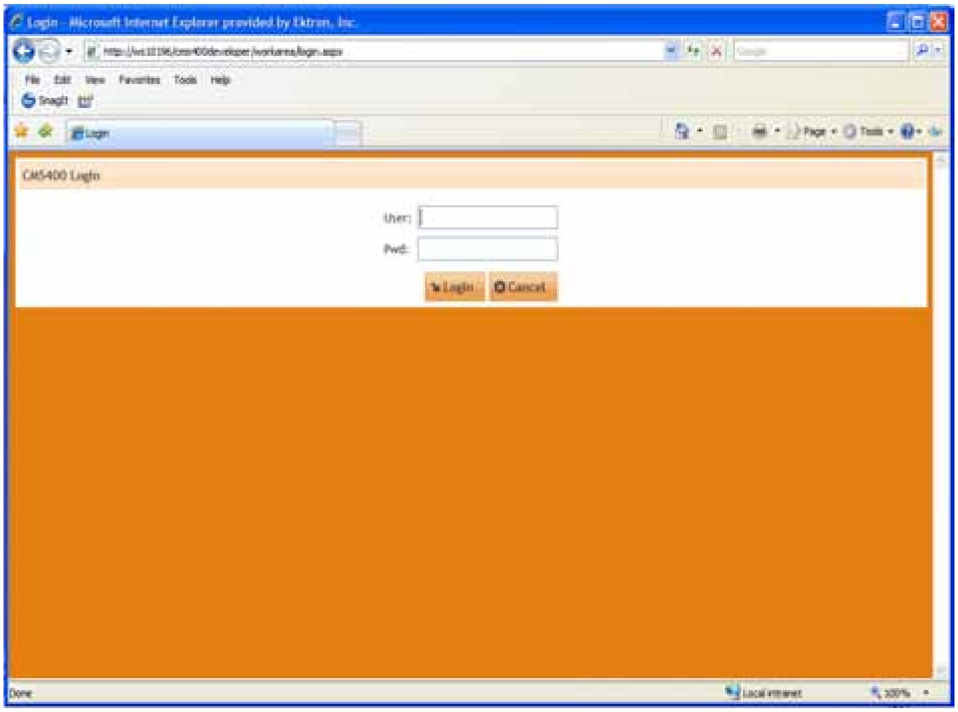
1. Move the new images to the following folder: *webroot\your site's root directory*\Workarea\images\application.
2. Open the web.config file in your Web site's root directory.
3. Change the images referenced in this section of the file:

```
<add key="ek_Image_1" value="btn_close.gif" />
<add key="ek_Image_2" value="btn_login.gif" />
<add key="ek_Image_3" value="btn_login_big.gif" />
```

Note: You must update the images and web.config each time your system is updated.

Resolving Problem with Login Screen

You may find that in certain browsers, the login screen occupies the entire browser window instead of just a small box (see illustration below).



Browsers such as Internet Explorer 8 and Firefox have a feature called tabs. When the login window pops up, it appears as a new tab as shown above.

You can change this behavior by turning off tabs within the browser.

Password Management

This section contains the following topics relating to managing passwords.

- "Making Passwords Case Sensitive" on page 3-12
- "Forcing Password Change Every 90 Days" on page 3-13
- "Passwords Must Be Seven Characters Minimum, Include Alpha and Numeric Characters" on page 3-13
- "New Passwords Cannot Match the Last Four Passwords" on page 3-13
- "After 15 Minutes of Inactivity, User Must Log in Again" on page 3-13

Making Passwords Case Sensitive

By default, passwords are case *insensitive*. So for example, if the password is TOKEN and the user enters **token**, the signon is successful.

If you want to make passwords case *sensitive*, change the value of the `ek_passwordCaseSensitive` element of the siteroot/web.config file from `false` to `true`.

If you do, and the password is TOKEN and the user enters **token**, the signon is unsuccessful. The user would have to enter **TOKEN** to successfully sign on.

Forcing Password Change Every 90 Days

Ektron CMS400.NET has a password security feature that forces an administrator or user with the Commerce Admin role to change his password at least every ninety days. This feature is only enabled when the `ek_ecom_ComplianceMode` key in the site's Web.config file is set to `true`.

Once such a user goes eighty-five days without changing his password, a dialog box appears at next log-in, asking to change the password. If they do not want to do so at that time, they can click the **Skip** button. They are allowed to do this for the next five days. Once ninety days have passed, they *must* change their password before they can log into Ektron CMS400.NET.

Passwords Must Be Seven Characters Minimum, Include Alpha and Numeric Characters

Ektron CMS400.NET has a password security feature that forces an administrator or user with the Commerce Admin role to use at least seven characters in his password. Further, the password must contain at least one alphabetic and one numeric character.

This feature is enabled only when the `ek_ecom_ComplianceMode` key in the site's Web.config file is set to `true`.

New Passwords Cannot Match the Last Four Passwords

Ektron CMS400.NET has a password security feature that forces an administrator or user with the Commerce Admin role to create a password that does not match his last four passwords. This feature is enabled only when site's Web.config file has the `ek_ecom_ComplianceMode` key is set to `true` and the `ek_ecom_PasswordHistory` key is set to at least four.

You can set `ek_ecom_PasswordHistory` to a number higher than four if you want a higher level of security. If you set this key to less than four and the `ek_ecom_ComplianceMode key` is set to `true`, Ektron CMS400.NET enforces at least four.

After 15 Minutes of Inactivity, User Must Log in Again

Ektron CMS400.NET has a password security feature that automatically logs out an administrator or user with the Commerce Admin role after 15 minutes of inactivity. Activity is based on requests made to the server.

This feature is enabled when the site's Web.config file's `ek_ecom_ComplianceMode` key is set to `true`. In addition, if you are using *IIS7*, the line in red below needs to appear between the `<modules>` tags in the Web.config file. This line is a part of the default install. You should make sure it has not been removed.

```
<modules>
<add name="MyDigestAuthenticationModule"
type="Ektron.ASM.EkHttpDavHandler.Security.DigestAuthenticationModule,
Ektron.ASM.EkHttpDavHandler" />
<add name="ScriptModule" type="System.Web.Handlers.ScriptModule, System.Web.Extensions,
Version=1.0.61025.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35"
preCondition="integratedMode" />
<add name="EkUrlAliasModule" type="UrlAliasingModule" preCondition="integratedMode" />
</modules>
```

If you are using *IIS 6*, the line in red below needs to appear between the `<httpModules>` tags in the Web.config file. This line is a part of the default install. You should make sure it has not been removed.

```
<httpModules>
<add name="DigestAuthenticationModule"
type="Ektron.ASM.EkHttpDavHandler.Security.DigestAuthenticationModule,
Ektron.ASM.EkHttpDavHandler " />
<add name="ScriptModule" type="System.Web.Handlers.ScriptModule, System.Web.Extensions,
Version=1.0.61025.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35"/>
<add name="EkUrlAliasModule" type="UrlAliasingModule" />
```

</httpModules>

Chapter 4

The Workarea and Smart Desktop

The Ektron CMS400.NET Workarea contains 6 pages that you use to manage and develop content for your Web Site.

Note: To access the Workarea, you must be logged into your Ektron CMS400.NET Web Site. See also "Logging In and Out" on page 3-1.

Page	For more information see
Smart Desktop	"Personalizing the Smart Desktop" on page 4-4
Content	"Content" on page 7-1
Library	"Library Folder" on page 8-1
Settings	"Settings" on page 4-13
Reports	"Reports" on page 4-14
Help	See Ektron Documentation

The Workarea and Smart Desktop are more fully explained in the following topics:

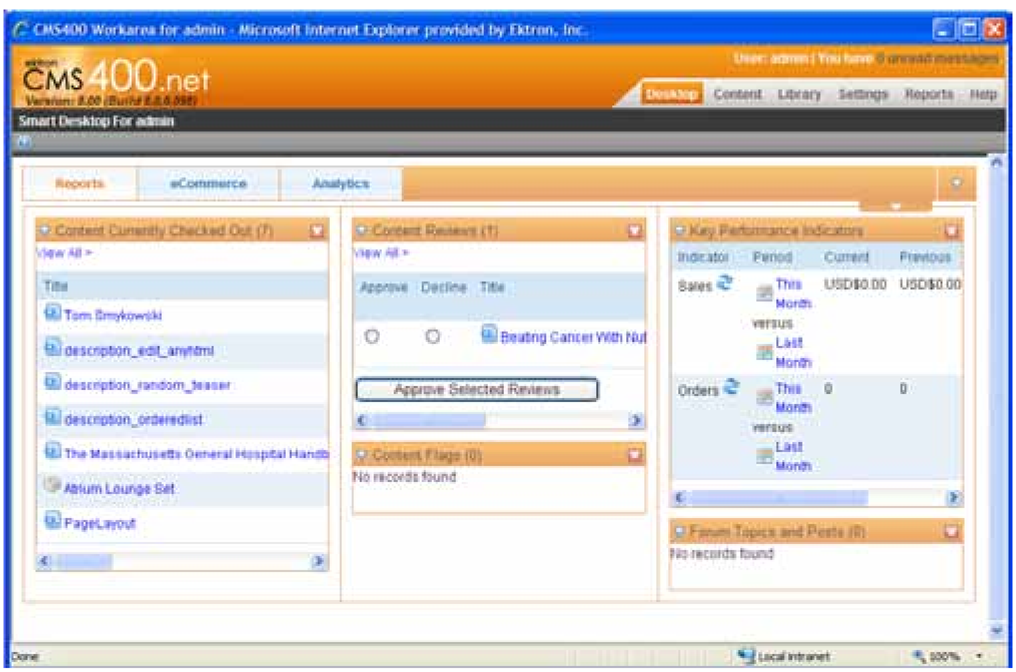
- "Accessing the Workarea" on page 4-3

Accessing the Workarea

To access the Workarea, follow these steps.

1. Log in to your Web site, as described in "Logging into an Ektron CMS400.NET Web Site" on page 3-2.
2. Click the Workarea button (Workarea) on a login page.
3. Your Smart Desktop is displayed.

Note: In the Application Setup screen, you can determine which screen appears when you access the Workarea.
See Also: "Updating Setup Information" on page 19-3



The Smart Desktop contains useful information that pertains to you. You may personalize this page by adding, moving or deleting Workarea Widgets. To learn how, see "Personalizing the Smart Desktop" on page 4-4.

Closing the Workarea

There are two ways to close the workarea.

- Close by logging-out of the Web Site from either a Logout link on the web page or the Logout button ().
- Close by using the Windows Close button () in the upper right corner of the browser. When you do this, you remain logged into the Ektron CMS400.NET Web Site.

The Workarea Menu Tabs

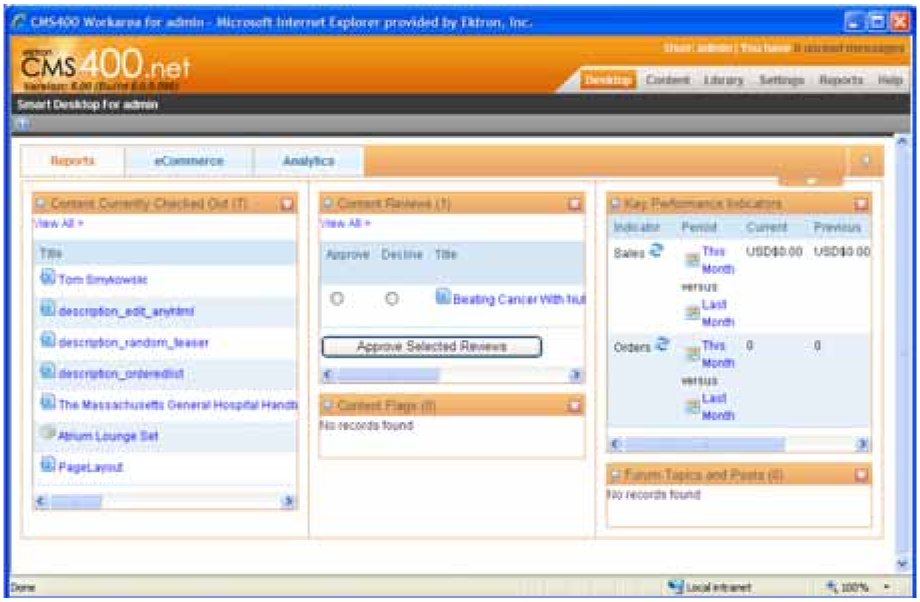
Ektron CMS400.NET's menu tabs appear in the upper right corner of the Smart Desktop. Use this menu to access all other pages.

Personalizing the Smart Desktop

By personalizing your Smart Desktop, you can choose and rearrange items displayed on the desktop that pertain to your work.

To see the Smart Desktop, click the Desktop menu tab () in the Workarea's upper right corner.

The Smart Desktop looks like this.



The default Smart Desktop page contains Widgets that provide information about your Web Site. The page above shows the default widgets for the Ektron Medical starter site.

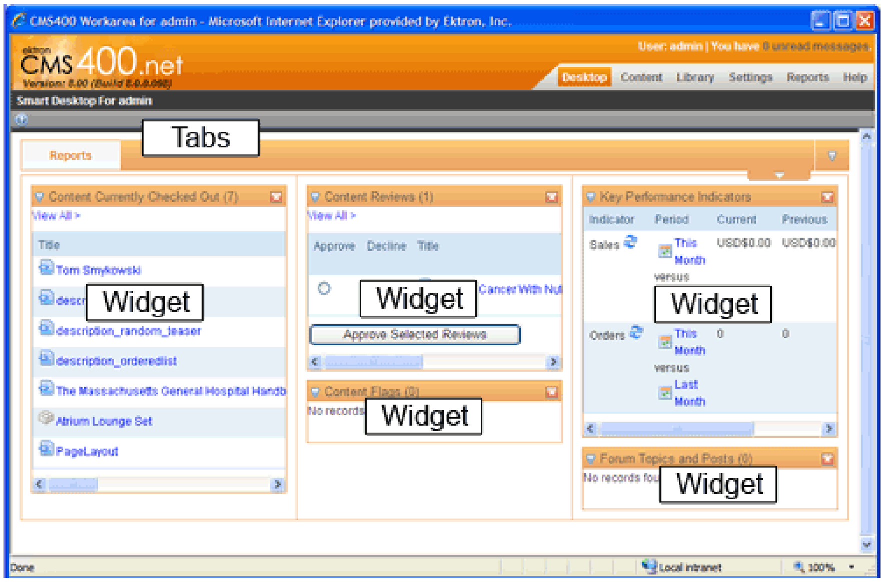
The following topics explain how to customize personalize the Smart Desktop.

- See "How Customizing the Smart Desktop Works" on page 4-5
- See "Adding a Widget into the Smart Desktop" on page 4-6
- See "Adding a Tab to the Smart Desktop" on page 4-7
- See "Adding Columns" on page 4-8
- See "Deleting columns" on page 4-9
- See "Restoring Tabs and Widgets" on page 4-9
- See "Setting the Default Widgets " on page 4-10
- See "Customizing the Widgets Available to the Smart Desktop" on page 4-11

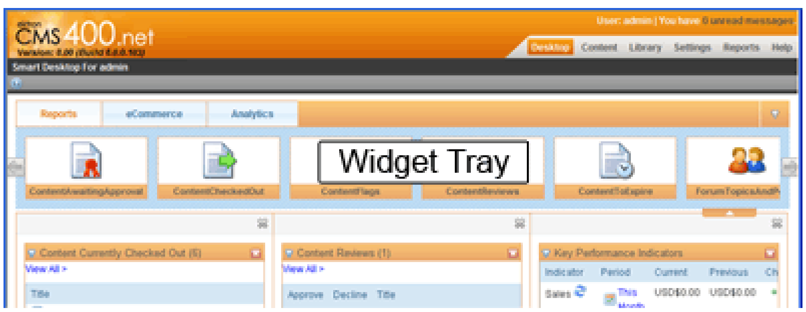
How Customizing the Smart Desktop Works

The Ektron CMS400.NET Workarea can have multiple tabs, letting you organize content by subject – think of tabbed browsing. You can easily add new tabs and switch between them.

Within a tab, you can add, move or delete Widgets for your own personalized Smart Desktop.



Widgets that you use on the Smart Desktop are stored in a widget tray. You can drag and drop widgets from the tray onto the Smart Desktop into any tab and column.

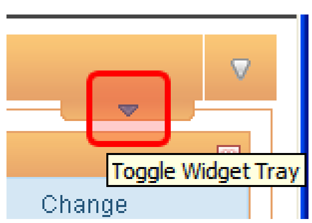


You control the arrangement of the Smart Desktop Widgets for your own profile.

Adding a Widget into the Smart Desktop

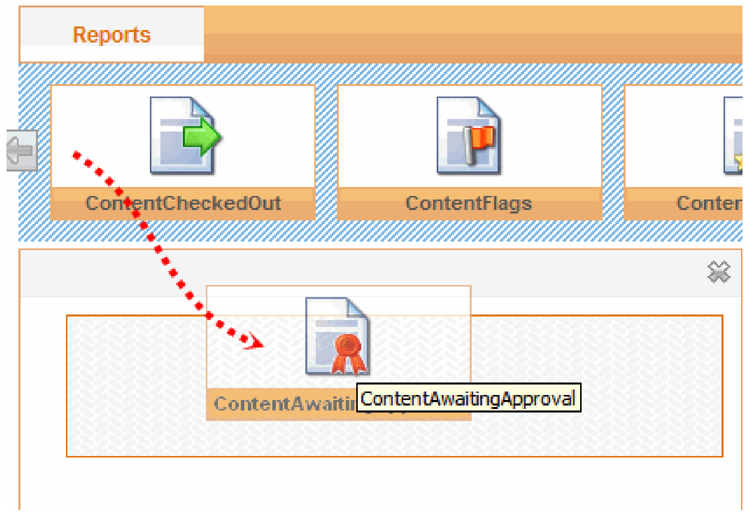
Go to the **Workarea > Desktop** and follow these steps.

1. Click Toggle Widget Tray located in the upper right corner of the Smart Desktop window (circled below).



Next you see the Widget Tray containing widgets that you can drag and drop onto your Smart Desktop. Use the left arrow ( ) or right arrow ( ) buttons to see more widgets.

2. Choose the widget you wish to use by dragging and dropping it from the tray into the Smart Desktop panel.



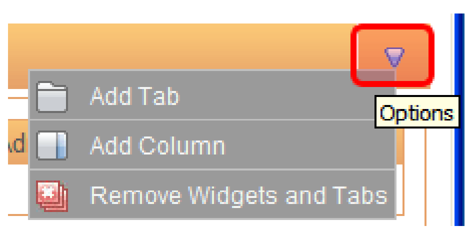
Once you have placed the widget into the Smart Desktop, you may drag it to any location on the desktop.

Adding a Tab to the Smart Desktop

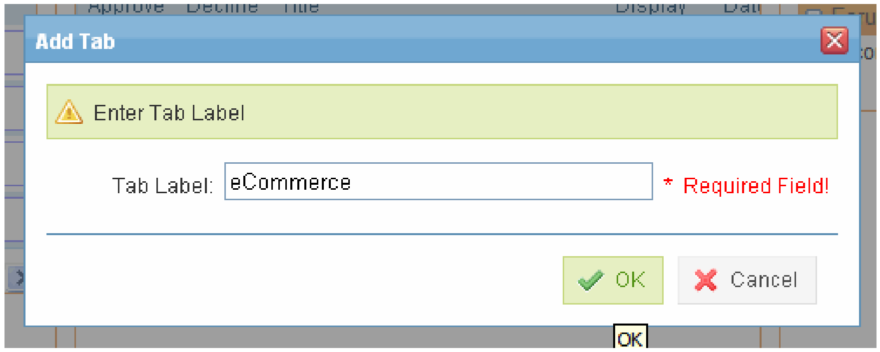
Tabs help you organize your Smart Desktop. By default, there is one tab containing a few standard widgets. You may wish to add other tabs for eCommerce or Analytics type widgets.

To add an eCommerce widget for example, do the following.

1. Click the Options button on the upper right of the Smart Desktop.

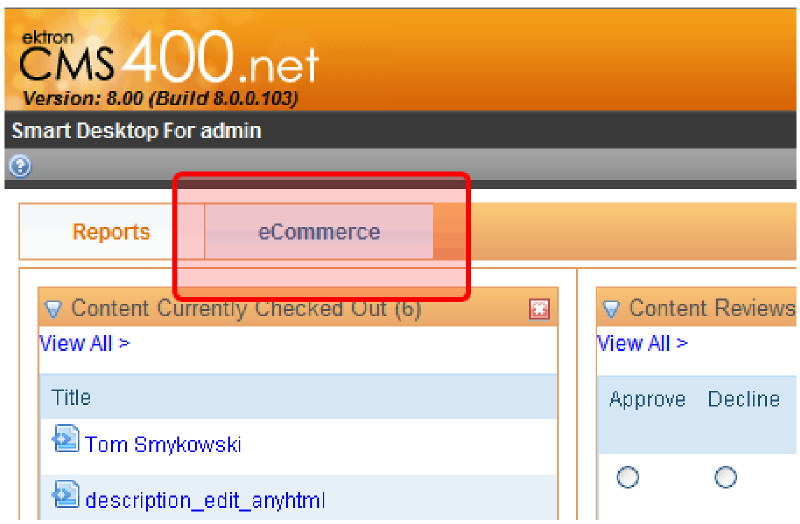


2. Click on Add Tab. You next see the Add Tab dialog window.



3. Enter the Tab Label for the tab. For example, “eCommerce”.
4. Click OK to save the Tab Label.

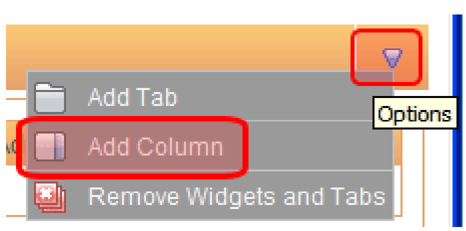
The new tab appears on the top of the Smart Desktop.



Adding Columns

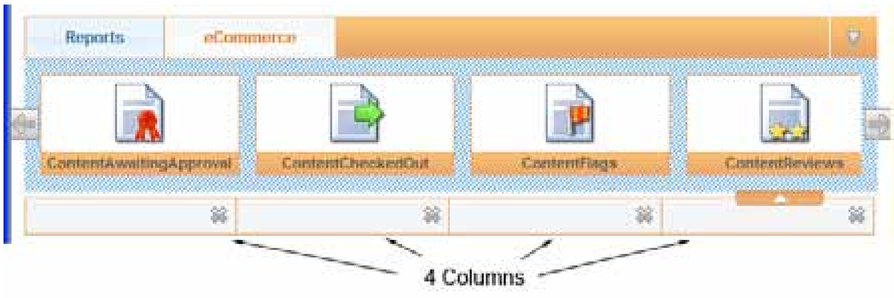
By default, 3 columns are placed on the Smart Desktop. You may add columns by following these steps.

1. Click the Options button on the upper right of the Smart Desktop.



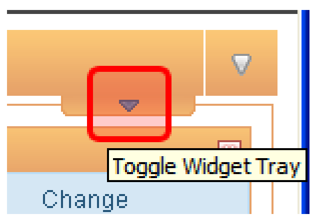
2. Click Add Column.

3. Click the Options button to see the columns below the Widget tray.

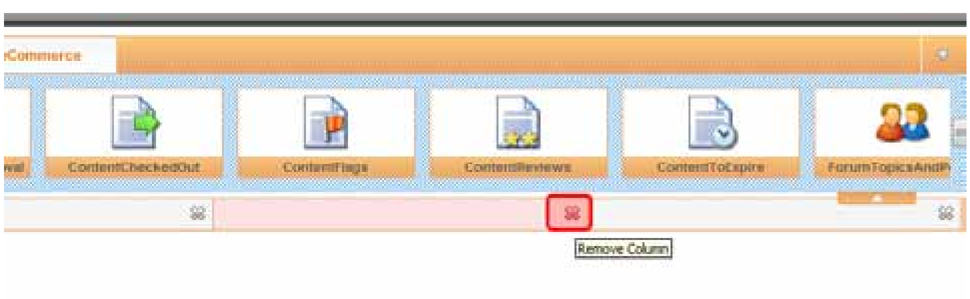


Deleting columns

1. Click the Toggle Widget Tray button (circled below) to show the Widget Tray and Columns.



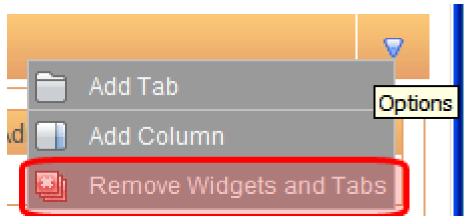
2. Click the Remove Column button (circled below) inside the column you wish to delete.



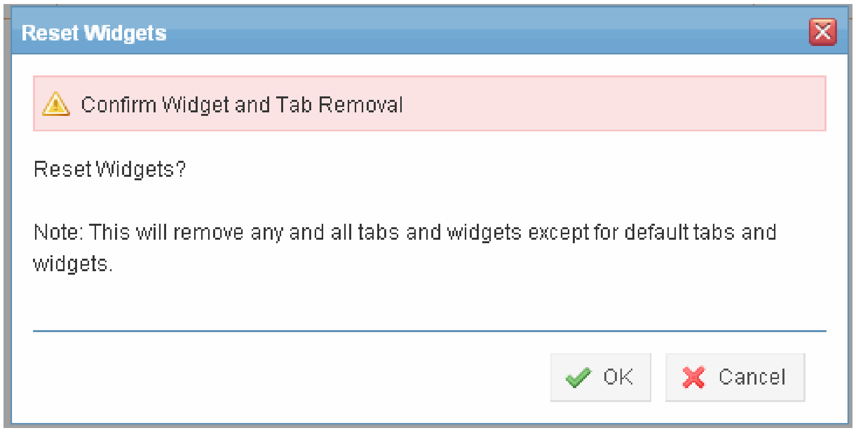
Restoring Tabs and Widgets

All users can restore their Smart Desktops to the Default Widget set. To do this, follow these steps.

1. Click the Options button on the right side of the Smart Desktop.
2. Click Remove Widgets and Tabs.



3. When the dialog box appears that confirms you want to delete all Tabs and Widgets, click OK.



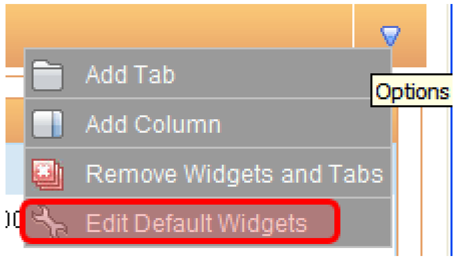
Warning! This action will remove **all** tabs and widgets that you may have modified on your Smart Desktop. Only the default set of tabs and widgets will be shown.

Setting the Default Widgets

Note: To restore Default Widgets, you mst be a member of the Administrators group.

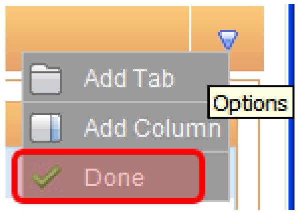
By using the previous procedure "Restoring Tabs and Widgets" on page 4-9, the user restores their Smart Desktop to the Default Widget set. The Default Widget set is defined by users in the Administrators group by doing the following.

1. Click the Options button on the right side of the Smart Desktop.
2. Click Edit Default Widgets.



3. Arrange the Smart Desktop with Tabs and Widgets that you wish to be the default.

4. Click the Options button.
5. Click Done to save the Default Smart Desktop.



Customizing the Widgets Available to the Smart Desktop

The Widgets used in the Smart Desktop are located on the web server in the workarea\widgets folder.

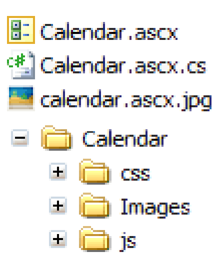
Widgets developed for Personalization and Page Builder can be also used within the Smart Desktop.

In the following example, we demonstrate how to add a Calendar Widget to a Smart Desktop.

Note: Access to the Web Server folders is required to perform the following steps.

1. On the web server, copy the widget files you want to use from the siteroot\widgets folder into the siteroot\workarea\widgets folder. Be sure that all files related to the widget are copied.

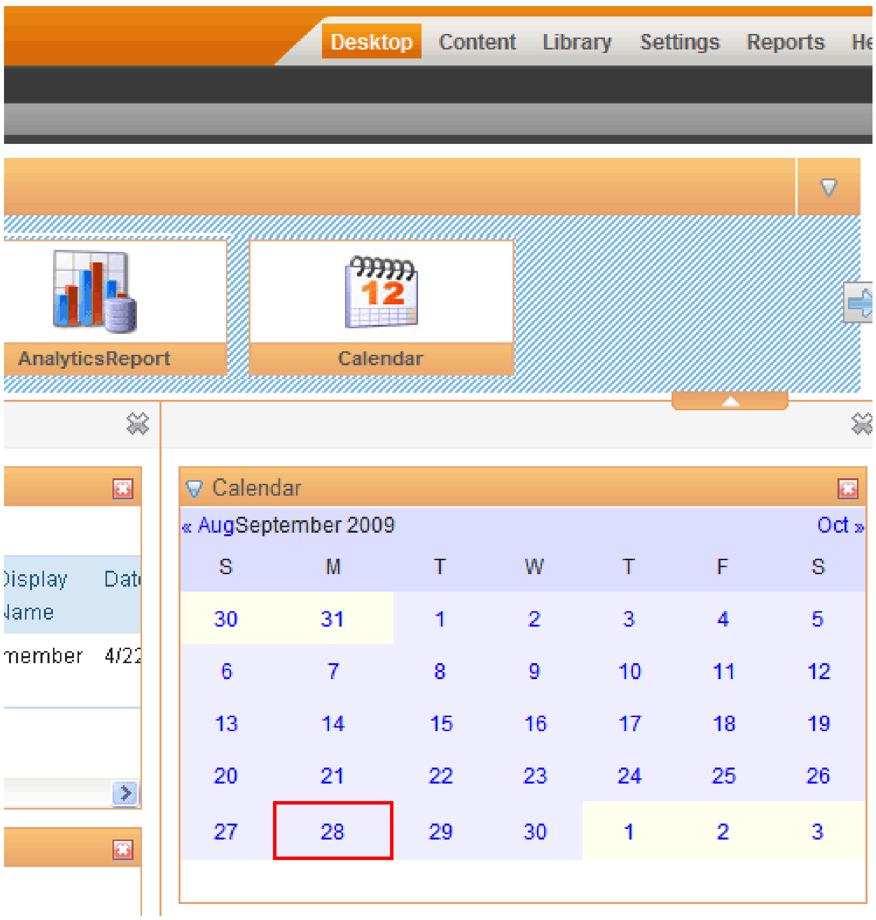
   The example below shows all files related to the Calendar Widget.



2. Click the **Workarea** > **Settings** tab.
3. Choose the **Configuration** > **Personalizations** > **Widgets** folder.
4. Click the Synchronize Widgets button shown below.

5. At the prompt, click **OK**.
6. Add the Widget to the Smart Desktop using the procedure described in "Adding a Widget into the Smart Desktop" on page 4-6.

   For example, the results look like this after you drag and drop the Calendar widget onto the Smart Desktop.



Workarea Style Sheets

Ektron CMS400.NET's Version 8.0 Workarea uses two primary style sheets:

- Ektron.workarea.css - the primary CSS file for the workarea. It replaces the previous CMS version's global.css file.
- Ektron.workarea.ie.css - is used for Internet Explorer browsers, and generally targeted at IE7 or less. It includes overrides for some CSS rules in Ektron.workarea.css that get around IE CSS bugs or deficiencies.

Using widely accepted style sheet classes and class attributes, you can modify the Workarea, including colors, spacing, fonts, etc. Also, if you later upgrade or re-install Ektron CMS400.NET, you can reuse this file and retain your changes.

Language Images

Several language specific Images are used at the top of the Workarea. They reside in the language folders and always start with the word "Workarea" and end with "_top."

These images are 467 pixels wide by 77 pixels high. Their width can change but the height cannot.

There are approximately six images in each language folder. an Adobe Photoshop file, Workarea_top.psd, can be found under `\Workarea\images\English folder`. You can modify these images as needed.

Settings

To view the Settings page, click the Settings menu tab in the upper right corner of the workarea.

Note: You must be logged into the Ektron CMS400.NET in order to see these pages. See also "Logging In and Out" on page 3-1.

The Settings page contains these folders.

Page	For more information see
Commerce	"eCommerce" on page 17-1
Community Management	"Community Management" on page 16-1
Configuration	"Library Folder" on page 8-1
Roles	"Defining Roles" on page 15-32
Business Rules	"Business Rules" on page 12-1
Import XLIFF Files	"Importing Translated Files into Ektron CMS400.NET" on page 14-19
User Groups	"Accessing the Users and User Groups Folders" on page 15-2
Users	"Managing Users" on page 15-3

Reports

To view the Reports page, click the Reports menu tab in the upper right corner of the workarea.

Note: You must be logged into the Ektron CMS400.NET in order to see these pages. See also "Logging In and Out" on page 3-1.

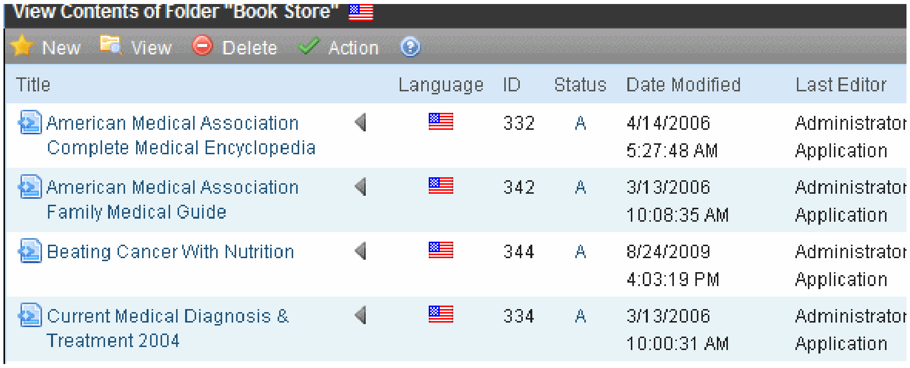
The Reports page contains these folders.

Page	For more information see
eCommerce	"eCommerce Reports and Widgets" on page 17-237
Contents	"Content Reports" on page 7-702
Site Analytics	"Analytics" on page 7-752
Tasks	"Managing Tasks" on page 11-1

Chapter 5

Managing Folders

An administrator can control every aspect of the content and the folders that hold them. The controls include setting permissions, approvals, and adding, editing, publishing, and deleting content. Below is the content folder.



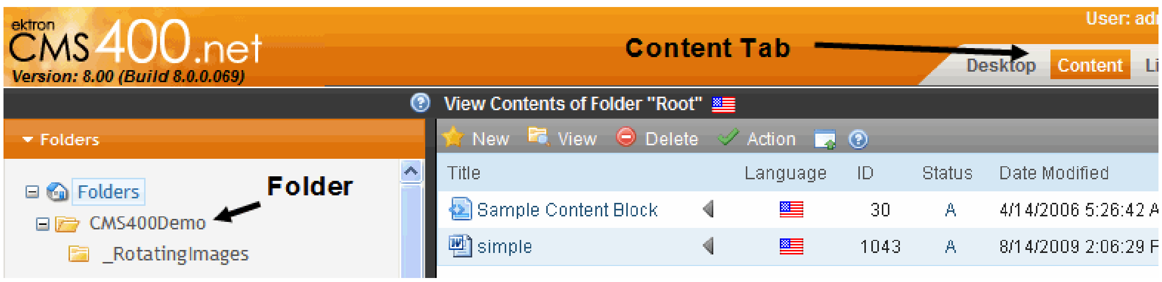
This chapter explains how to add, edit, publish, and delete content. It includes the following information.

- "Viewing a Folder" on page 5-3
- "Workarea Content Menu" on page 5-9
- "Folder Properties" on page 5-13
- "Adding Subfolders" on page 5-19
- "Deleting Folders" on page 5-20
- "Purge History" on page 5-21
- "Community Folders" on page 5-22

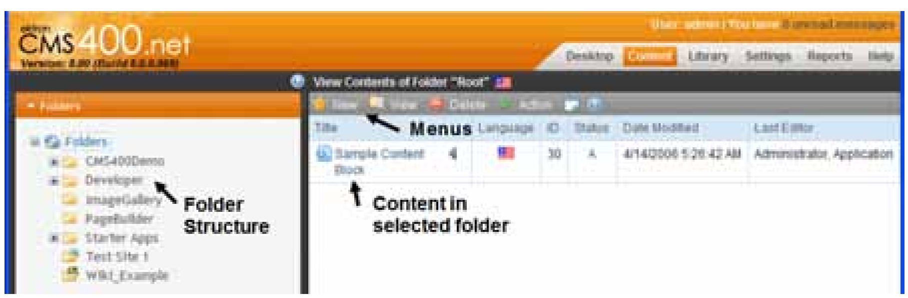
Viewing a Folder

To view any folder under the content folder, follow these steps.

1. Access the Workarea, as described in "Site Preview" on page 3-4.
2. Click **Content** Tab on top menu area.



3. All content in the root folder and the selected language appear in the right frame. Subfolders appear in the left frame.

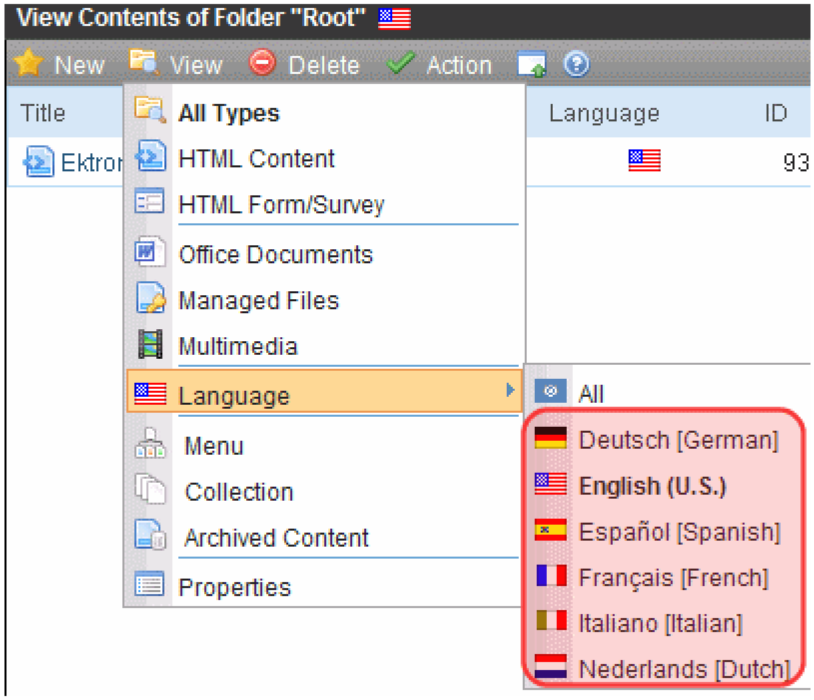


Note: The View menu option lets you filter content by type. For example, you can set it to view only HTML content. Therefore, you may only see content of a selected type in the folder. See Also: "View Menu" on page 5-6

4. To work with any folder or its content, click the folder. When you do, its content appears in the right frame.

Note: You can only view folders for which your system administrator has granted permission.

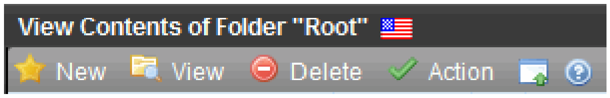
5. If your system supports more than one language, you can select content for a particular language or all languages using the **View** > **Language** menu option (illustrated below).



Each folder lists the following information about its content.

Field	Description
Title	The name of the content.
Language	The language of the content. See Also: "Working with Multi-Language Content" on page 14-1
ID	The number assigned to the content by Ektron CMS400.NET . It is used to retrieve the content from a database.
Status	The status of the content. See Also: "Content Statuses" on page 7-133
Date Modified	The most recent date the content was added, edited, or published.
Last Editor	The last user who accessed the content.

The following menus and button appear across the top of the View Contents of Folder screen.



Note: Depending on your permissions, you may not see all menu options.

- "New Menu" on page 5-5
- "View Menu" on page 5-6
- "Delete Menu" on page 5-7
- "Action Menu" on page 5-8
- Add Asset button ( ) See "Adding Documents Using Drag and Drop" on page 7-419
- "Workarea Content Menu" on page 5-9

New Menu

Menu Option	Lets you create or upload this new item into folder	For more information, see
Folder	Folder	
Blog	Blog	"Blogs" on page 7-492
Discussion Board	Discussion Board	"Discussion Boards" on page 7-596
Community Folder	Folder whose content can be updated by membership as well as regular users	"Community Folders" on page 5-22
HTML Content	HTML content	"Adding HTML Content" on page 7-15
HTML Form/Survey	HTML Form, Poll, or Survey	"Working with HTML Forms" on page 7-220
Smart Form	Smart Form	"Working with Smart Forms" on page 7-288
DMS Document	■ Office Document ■ Managed file, any supported type	■ "Working with Microsoft Office Documents" on page 7-413

Menu Option	Lets you create or upload this new item into folder	For more information, see
	■ Multimedia file, any supported type	■ "Working with Managed Files" on page 7-435
Multiple DMS Documents	Several Office documents, managed files, multimedia files	"Adding Documents Using the Multiple DMS Documents Option" on page 7-418
Collection	Collection	"Working with Collections" on page 9-99
Menu	Menu	"Working with Menus" on page 9-129

View Menu

The View Menu provides the following functions.

Menu Option	Function	For more information, see
All types	Displays *all* content types of selected language.	
■ HTML content ■ HTML Form/Survey ■ DMS Document, which includes Office Documents, Managed Files, Multimedia, Open Office	Limits folder display to *selected content type*. For example, choose **View > DMS Document** and see only managed assets in the folder -- other content types are suppressed. This is especially helpful if the folder has a lot of items, and you are looking for only one type of content. Note that the icon for the selected type appears to the left of **View**, as illustrated below. 	■ "Adding HTML Content" on page 7-15 ■ "Working with HTML Forms" on page 7-220 ■ "Working with Microsoft Office Documents" on page 7-413 ■ "Working with Managed Files" on page 7-435 ■ "Managing Multimedia

Menu Option	Function	For more information, see
		Assets" on page 7-447
Language	Limits display of content within folder to one language. Also, sets language of new items you create or upload into the folder.	
Menus	Lets user view and work with menus assigned to this folder	"Adding a Menu Item via Content Folder" on page 9-138
Collections	Lets user view and work with Collections assigned to this folder	"Working with Collections" on page 9-99
Archived Content	Lets user view and work with content that passed its scheduled End Date and whose archive option is either **Archive and remove from site** or **Archive and remain on Site**.	"Setting Archive Options" on page 7-198
Folder Properties	Only system administrators see this option. It lets you assign folder properties, such as which users can edit a folder's content.	"Folder Properties" on page 5-13

Delete Menu

This menu lets you perform the following functions.

Menu option	Lets you	For more information, see
Delete this folder	Delete current folder and all of its content Note: You cannot delete the Root folder.	"Deleting Folders" on page 5-20
Delete content	Delete one or more content items in folder	"Deleting Content" on page 7-130

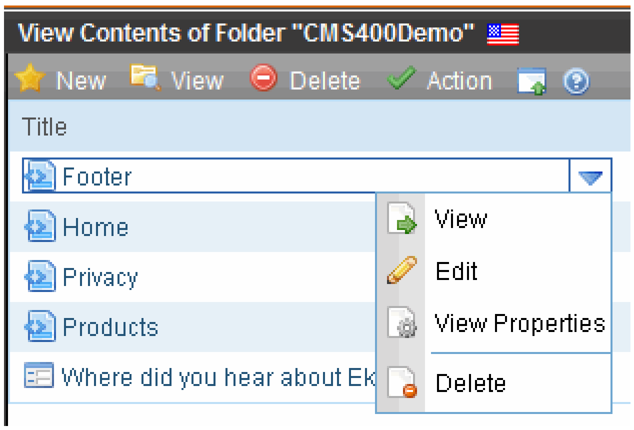
Action Menu

This menu lets you perform the following functions.

Menu option	Lets you	More Information
Export for translation	Prepare content for translation by a translation agency	"Using the Language Export Feature" on page 14-13
Move/Copy Content	Move or copy content to another folder.	"Moving or Copying Content" on page 7-113
Search	Search content in the Workarea	"Searching the Workarea" on page 9-87

Workarea Content Menu

The View Contents of Folder screen features a context-sensitive, dropdown menu of options you can perform for a content item.

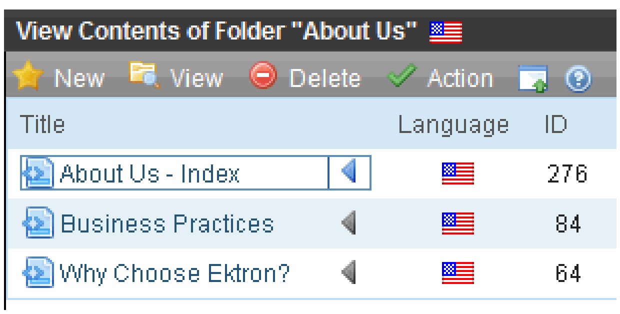


The options depend on several factors, such as

- your folder permissions
- your position in the approval chain (if any)
- the content's status
- whether the item is a Microsoft Office document

To see the dropdown menu options for any content item, follow these steps.

1. After signing in, navigate to a Web page or the folder that contains the content.
2. Hover the cursor over the content item. It is surrounded by a blue rectangle, and a triangle appears to the right of the title.



3. Hover the cursor over the triangle ( ) and click.
4. A menu of options available for that content item appears. For example, if you have permission to edit it, **Edit** appears on the dropdown menu.

Dropdown Menu Options

Option	Allows you to...	For more information, see
Approve	Approve content that has been submitted for publishing	"Approve/Decline One Content Item" on page 5-35
Check in	Change status of selected content to checked in. Might use if you checked out and saved a document then it became lost or corrupted. This option changes original document's status to checked in. However, it does not replace the version of the file in Ektron CMS400.NET. To replace content that was checked out and edited, drag and drop it into Ektron CMS400.NET. See Also: "Checking Out, Saving, and Replacing an Office Document" on page 7-430 Note: Previous Ektron CMS400.NET releases included a Work Offline option, whose **Check In** function *replaced* the version of the file in Ektron CMS400.NET. In contrast, this release's Check In function only changes the content's status.	"Checked-In Content" on page 7-135
Check out and Save As	Change a content item's status to checked out and save it to your local computer. When you finish editing the item, drag and drop it into Ektron CMS400.NET.	"Checking Out, Saving, and Replacing an Office Document" on page 7-430
Decline	Decline an approval request submitted to you. This option reject the changes and keeps the current version live on Web site. You are prompted to enter a reason for the decline. After you decline - The author who made the change is notified by email - The content is removed from the Approval Chain If the author updated content then submitted it for approval, the updated content remains in the file. If you do not want it to remain, choose the	"Approve/Decline One Content Item" on page 5-35

Option	Allows you to...	For more information, see
	Edit option. You may be asked to decline both a content change and a request to delete content.	
Delete	Submit content for deletion.	■ "Deleting Content" on page 7-130 ■ "Deleting an Office Document" on page 7-429 ■ "Deleting a Managed File" on page 7-438
Edit	■ HTML, HTML form, or XML Smart Form content - edit content within an Ektron CMS400.NET editor ■ Asset - First, use **Check out and Save As** or **Save As** to save asset to your computer and edit it. Then, use Edit to replace version in Ektron CMS400.NET.	■ "Editing HTML Content" on page 7-105 ■ "Editing Smart Forms" on page 7-383 ■ "Editing a Managed File" on page 7-437
Edit in Microsoft Office	Edit Office document within Ektron CMS400.NET, which launches Office	"Editing an Office Document" on page 7-427

Option	Allows you to...	For more information, see
Edit Properties	Edit item's Ektron CMS400.NET information, such as Summary, Metadata, Schedule, and Taxonomy. After you complete the edit screen, you proceed to the View Content screen. From here, you can perform additional content activities, such as move/copy, delete, and view history.	■ See "Content Properties" on page 7-141 ■ See "Working with Metadata" on page 7-146 ■ See "Scheduling Content to Begin and End" on page 7-195 ■ See "Taxonomy" on page 9-200
Force Check In	Only appears if user is a member of the Administrator group or assigned the folder admin role and content is checked out. Allows an admin to check in content even though he is not the one who checked it out.	
Publish	Accept changes to content and publish it to the site.	
Request Check In	Allows either admin user or non-admin user with edit permission for the content's folder to email the user who checked out content. The email asks the check-out user to check it in.	
Save As	Save Office document or asset to your computer.	"Saving an Office Document" on page 7-432
Submit	Submit current version of content for publishing. When you do this, the next person in the Approval Chain is notified that your content is ready for review.	"Asset Workflow" on page 7-439
Synchronize	Synchronize content or folders between two servers	See "Synchronizing Servers Using eSync" on page 18-1
View	View item's Ektron CMS400.NET information, such as Summary, Metadata, Schedule, and Taxonomy. After viewing, you can also edit that information if you have permission.	

Option	Allows you to...	For more information, see
	Next, you proceed to the View Content screen. From here, you can perform additional content activities, such as move/copy, delete, and view its history.	
View in Microsoft Office	View Office document within Office application. Cannot change.	
View Properties	View Office document's Ektron CMS400.NET information, such as Summary, Metadata, Schedule, and Taxonomy. After viewing, you can also edit that information if you have permission. After you complete the edit screen, you proceed to the View Content screen. From here, you can perform additional content activities, such as move/copy, delete, and view its history.	

Folder Properties

The folder properties screen lets you set permissions and approvals for a folder. You can also assign or modify the folder's metadata, Web Alerts, and Smart Forms.

Note: Only members of the Administrator User Group and those defined in the Manage Members for Role: Folder User Admin screen can view, add, or edit folder properties. (See Also: "Defining Roles" on page 15-32) In addition, if a user is not a member of the Administrators group, he must be given permission for individual folders on the Folder Properties > View Permissions for Folder screen. (See Also: "Folder Permissions" on page 5-43)

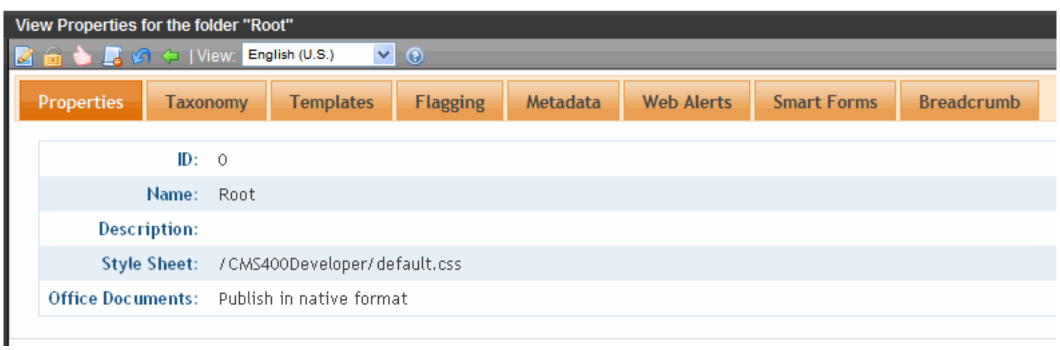
Note: If you are using an eCommerce catalog, see See "Product Types" on page 17-106 for a description of the Product Types screen.

Note: If you are using a Web Calendar folder, see "Viewing System Calendar Folder Properties" on page 7-554.

Accessing the Folder Properties Screen

To access the folder properties screen, follow these steps.

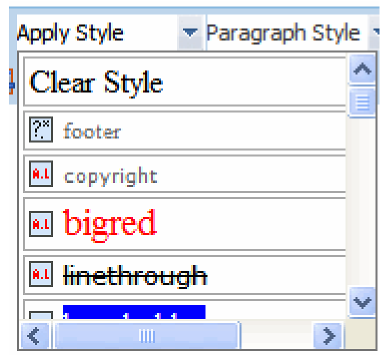
1. Click **View** > **Properties**.
2. The folder's View Properties screen appears.



If you want to change any properties, click the Edit button ( ) to proceed to the edit screen.

The table below describes the fields on the Folder Properties screen.

Fields on the Folder Properties Screen

Field	Description
Foldername	Edit the name of the content folder. Note: You cannot change the root folder name.
Description	Edit the description of the content folder.
Style Sheet filename for this folder: (leave blank to inherit)	Specify a style sheet that defines styles that may be applied to content in this folder. The style sheet that you identify must reside in the site root folder. Or, leave this field blank to inherit the parent folder's style sheet. The style sheet populates the style dropdown list (see below) within the editor.  Note: This style sheet affects content being edited. It does not necessarily affect the content's appearance on your Web site. To set or edit the style sheet that determines your Web pages' appearance, open the page's Web form and place a `<link rel="stylesheet"...` tag within its `<HEAD>` tags. If desired, you can identify the same style sheet in both locations. To include user-selectable styles, they must be generic classes. **Caption and Visible Properties** eWebEdit400 ignores the CSS custom properties `caption` and `visible`. To address this problem for the Internet Explorer browser, replace them with the custom CSS properties `localeRef, caption` and `visible`. For other browsers, use the custom CSS selectors `localeRef` and `unselectable` (same as `visible: false`). To achieve cross-browser compatibility, use both approaches. Note: Non-IE browsers have no equivalent for `caption`.
Page Templates	Lets you specify one or more templates for content in this folder. This folder's content uses the specified template when appearing on your Web site. See Also: "Inheritance of Folder Templates" on page 7-187
Inherit Parent Template Configuration	Check this box to inherit the template from the parent content folder. Or, do not check this box and specify one or more templates below. See Also:

Field	Description
	"Inheritance of Folder Templates" on page 7-187
Taxonomy	If you want this folder to inherit taxonomy configurations from the parent folder, check **Inherit Parent Taxonomy Configuration**. If you uncheck **Inherit Parent Taxonomy Configuration**, you can then select taxonomies that can be applied to content in this folder. If you want all content in this folder to be assigned at least one taxonomy category, check **Required at least one category selection**. See Also: "Inheriting Taxonomies from a Parent Folder" on page 9-215; "Taxonomy" on page 9-200
Flagging	Check this box if content in this folder inherits a flagging definition from its parent folder. If you do not check the box, use the dropdown list to apply a flagging definition to content in this folder. See Also: "Flagging" on page 16-193, "Assigning a Flagging Definition to a Folder" on page 16-197
Multi-site Domain Configuration Note: Only appears for Site folders.	Lets you set up and manage several Web sites under one CMS. See Also: "Multi-Site Support" on page 19-21.
Should Office documents added to this folder be published in other format? Note: This field only appears if the **Enable Office documents to be published in other format** property is checked in the Settings > Configuration > Setup screen. *See Also:* "Modifying the Application Setup Screen" on page 19-2	**Publish Office documents as PDF** Check this option if Office documents in this folder are published as PDF files. See Also: "PDF Generation" on page 7-454 Note: This property is not inherited from a parent folder, nor is it inherited by any subfolders below this folder.

Tabs on the Folder Properties Screen

Tab	For more information, see
Metadata	"Assigning Metadata to a Folder" on page 7-165
Web Alerts	"Assigning Web Alert Information to Folders and Content" on page 20-21
Smart Forms	"Working with Smart Forms" on page 7-288
Breadcrumb	"Creating SiteMap Breadcrumbs" on page 9-278
Product Types (only appears with eCommerce folder)	"Product Types" on page 17-106

Folder Properties Toolbar

The Folder Properties screen contains these toolbar buttons.

Button	Name	Description	More Information
	Edit Properties	Access the Edit Folder Properties screen	"Editing Folder Properties" on page 5-17
	Permissions	Access the folder's Permissions Table	"Folder Permissions" on page 5-43
	Modify Preapproval Group	Set or update preapproval group assigned to folder	"Automatic Creation of Tasks Associated with Content" on page 11-34
	Approvals	Access the folder's approvals table	"Approval Chains" on page 5-28
	Purge History	Access the folder's purge history table	"Purge History" on page 5-21

Button	Name	Description	More Information
	Restore Web Alert Inheritance	Assigns the folder's Web Alert properties to all content in folder	"Inheriting Content-Level Web Alert Information from Its Folder" on page 20-28
	Back	Go to previous screen	

Editing Folder Properties

A content folder's properties consist of

- name
- description
- style sheet
- template (see "Creating/Updating Templates" on page 7-184)
- Metadata (see "Assigning Metadata to a Folder" on page 7-165)
- Web Alerts (see "Assigning Web Alert Information to Folders and Content" on page 20-21)
- "Working with Smart Forms" on page 7-288
- "Creating SiteMap Breadcrumbs" on page 9-278

To edit any properties for a folder, follow these steps.

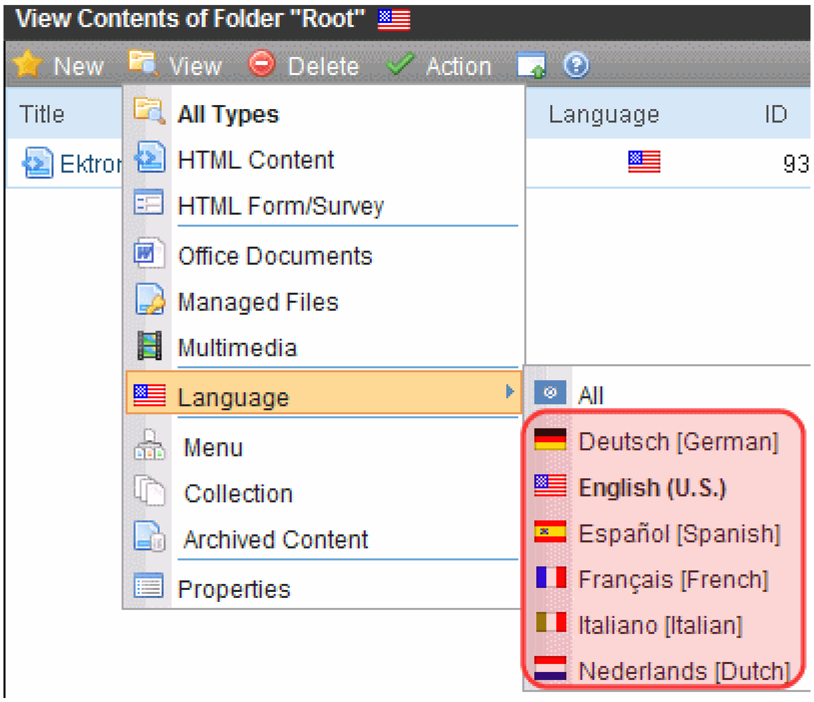
1. Access the View Properties screen for the folder you want to edit, as described in "Accessing the Folder Properties Screen" on page 5-13.
2. Click the Edit button ( ).
3. The folder's Edit Properties screen appears.

4. Make the necessary changes to the content folder's properties. See "Fields on the Folder Properties Screen" on page 5-14.
5. Click the Update button ( ).

Adding Subfolders

To further organize content on your Web site, create subfolders to store related content. To add a sub folder, follow these steps.

1. Navigate to and click the folder within which you want to create a subfolder (that is, the parent folder).
2. Each folder has a default language. By default, it is inherited from its parent folder. To change a folder's default language, use the parent folder's **View** > **Language** selection (shown below).



Effect of a Folder's Default Language

By default, when a user adds content to a folder, the default language is applied to the content unless the user explicitly changes the language. So, you should select a default language in which you expect the majority of folder's content to be created.

1. Click **New** > **Folder**.
2. The Add a Subfolder screen appears.
3. Complete the fields. See "Fields on the Folder Properties Screen" on page 5-14.
4. Click the Save button ().

You can modify the subfolder's properties, permissions, approval chain, etc. For a list of options, see "Folder Properties Toolbar" on page 5-16.

If this is a Community Folder, see "Community Folders" on page 5-22.

If this is a Site Folder, see "Multi-Site Support" on page 19-21.

Deleting Folders

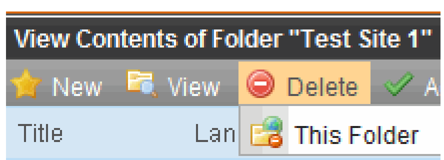
You can delete obsolete folders from the Ektron CMS400.NET Web site.

Note: The top-level folder, **Root**, cannot be deleted nor renamed.

Warning! Deleting a content folder permanently deletes the content and Quicklinks that belong to the content folder, as well as its subfolders.

To delete a content folder, follow these steps.

1. In the Workarea, navigate to the content folder you want to delete.
2. From the options across the top of the screen, click **Delete** > **This Folder**.



3. A confirmation message is displayed.
4. Click **OK**.

Purge History

The Purge History option lets you delete historical versions of content in a folder. When purging, your options are

- specify a date before which historical versions are purged
- indicate whether the purge includes a folder's subfolders
- purge published as well as checked-in versions of content

Note: Only Ektron CMS400.NET administrators and users identified on the Manage Members for Role: Folder User Admin screen can purge history.

To purge the history for a content folder, follow these steps.

1. Access the View Folder Properties screen for the content folder you want to purge the history for, as described in "Accessing the Folder Properties Screen" on page 5-13.
2. Click the Purge History button ( ).
3. The Purge History screen appears.
4. Use the following table to customize the Purge History options.

Field	Description	Required?
Only purge historical versions before	Specify a date to limit the number of historical versions to purge. When specified, only historical versions with a date before this date are purged.	Yes
Recursive Purge	Purges historical records for content in this folder's subfolders.	No
Purge versions marked as Published	Purges published versions of content as well as checked-in versions.	No

5. Click the Purge History button ( ).
6. A confirmation message is displayed.
7. Click **OK** to continue.
8. Ektron CMS400.NET executes the purge and displays a confirmation when complete.

Community Folders

Community folders resemble regular folders in most ways. The only difference is that membership users can add and edit content in these folders only. Community folders have a unique icon, which looks like two people ( ).

Membership users add and edit Community folder content after signing in to the Web site. They do not use the Workarea to add or edit content.

Note: Authorized CMS users can also create and update Community folder content.

See Also:

- "Creating a Community Folder" on page 5-22
- "Assigning Permissions for a Community Folder" on page 5-23
- "How a User Views and Edits Community Folder Content" on page 5-24
- "How a Membership User Adds Community Folder Content" on page 5-26
- "How a Membership User Adds an Asset" on page 5-26
- "How a Membership User Updates an Asset " on page 5-27

Creating a Community Folder

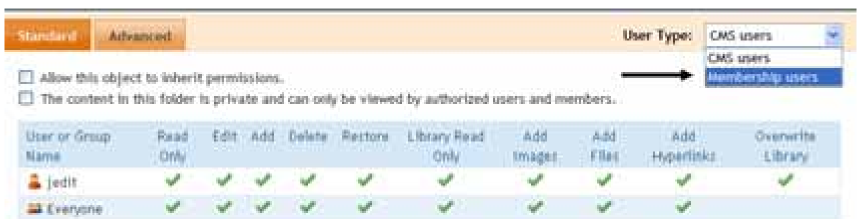
1. In **Workarea > Content**, go to the folder in which you want to create the community folder.
2. Select **New** > **Community Folder**.
3. Assign properties as you would any other folder. See "Adding Subfolders" on page 5-19

Note: The folder properties screen lets you require metadata for any content item. However, membership users cannot enter metadata. Therefore, this requirement is ignored when membership users edit community folder content. If an Ektron CMS400.NET user tries to edit that content, he is required to enter a metadata value.

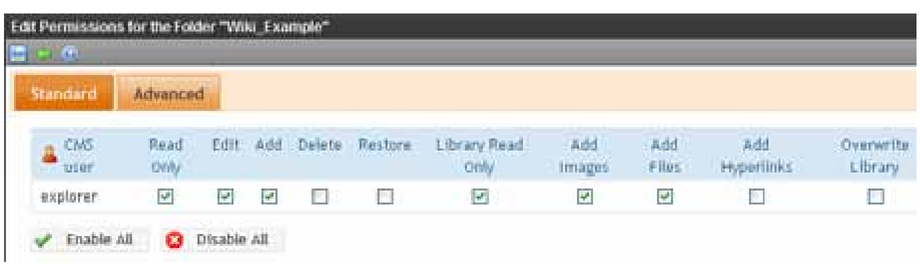
Assigning Permissions for a Community Folder

Since Community folders are intended for membership users, this section explains how to assign permissions for them. To assign folder permissions for regular users, see "Folder Permissions" on page 5-43.

1. Navigate to the folder.
2. Click **View** > **Properties**.
3. Click the View Permissions button ( ).
4. If necessary, uncheck the **Allow this object to inherit permissions** checkbox.
5. Click **User Type: Membership Users**.

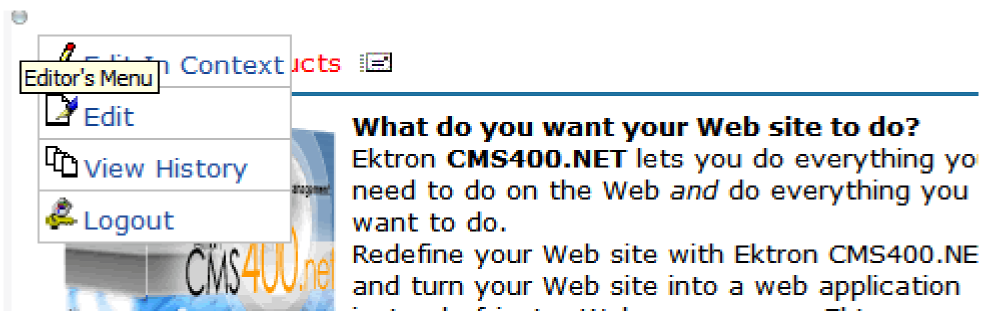


6. Click the Add button ( ).
7. Select the membership user or group to which you want to assign permission for this folder.
8. Check the permission boxes as appropriate.



How a User Views and Edits Community Folder Content

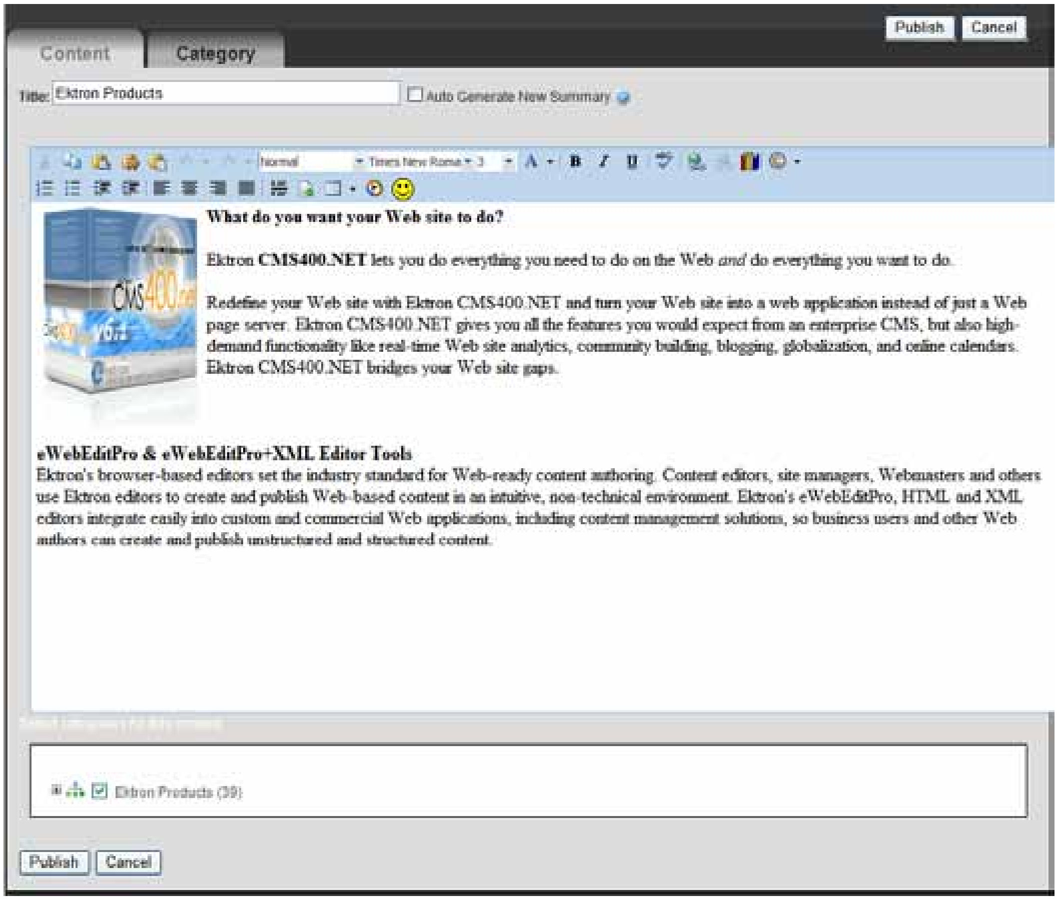
When a user with Read-only or higher permission navigates to a page whose content is in a community folder, he can view it. If he has edit permission, a menu appears.



Warning! Important: Membership users can edit only HTML content and assets. They cannot edit other content types (HTML forms, Smart Forms, etc.).

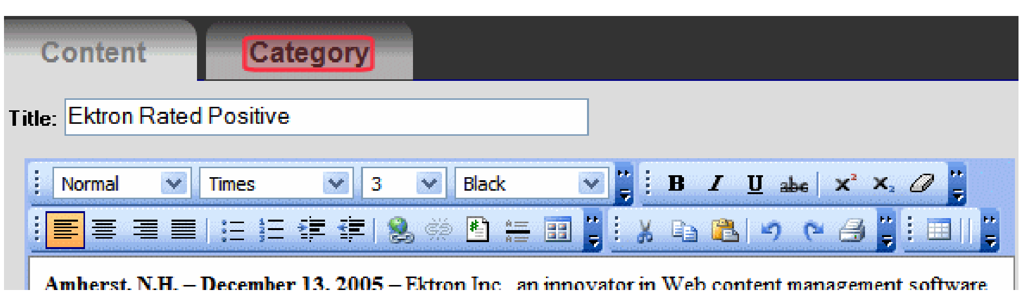
When a membership user clicks the Edit button ( ), a new window displays the content within an editor.

Other membership buttons are View History ( ) and Log out ( ).



This editor has fewer capabilities than Ektron CMS400.NET's editor. However, a membership user can

- add images and files via the library button () if the membership user has **Add Images** and **Add Files** permission. See Also: "Library Folders and Permissions" on page 8-4
- add a wiki using the page link button ().
- assign a taxonomy category to the content by clicking the **Category** tab. See Also: "Taxonomy" on page 9-200



Note: The **Category** tab only appears if a Taxonomy is applied to the content's folder.

- replace the content summary with the first 40 words of the content, using the **Auto Generate New Summary** check box. See Also: "Automatic Creation of a Summary" on page 7-143

When a membership user finishes editing, he clicks **Publish**. If the content's folder has an approval chain, the content's status changes to submitted, and the border color changes to yellow. If there is no approval chain, the content is published immediately.

How a Membership User Adds Community Folder Content

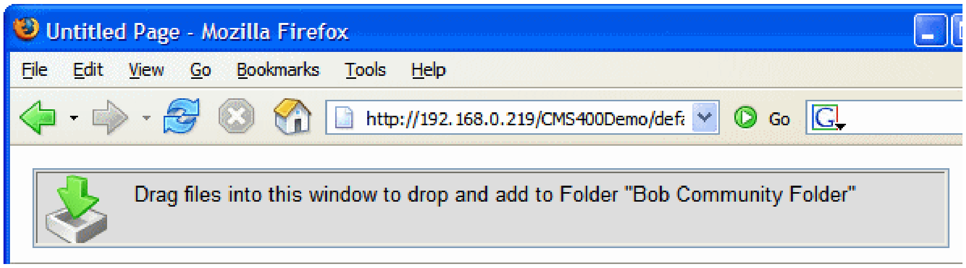
You will need the assistance of your developer to enable this feature. Instructions for doing so are in the developer sample site. To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`. After you install it, go to `siteroot/developer/ContentBlock/AddContentMembershipUser.aspx`.

Or, from the developer home page (`siteroot/developer/default.aspx`), go to **Memberships > Membership Add Content**.

How a Membership User Adds an Asset

First, your developer must create a template, then drop an Asset Server Control onto it. While adding the Asset Server Control, the developer specifies **Add** at the **Upload Type** property, and a community folder to which the asset will be saved at the **DefaultFolderID** property.

When a membership user authorized to add content navigates to the page with the server control, he sees an Asset control area like the one that appears when CMS users add assets. He can then drag and drop assets into Ektron CMS400.NET.

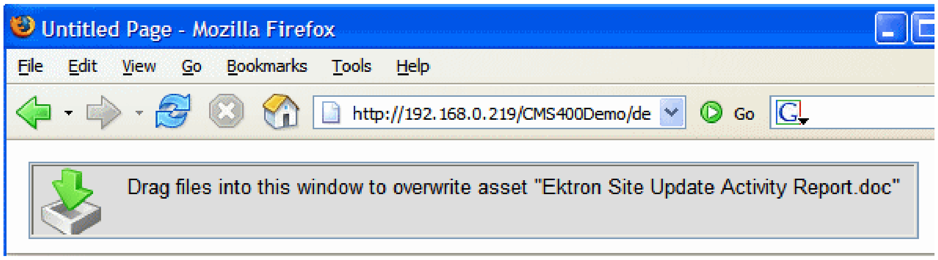


Additional information about administering assets is found in "Using the Document Management System" on page 7-408.

How a Membership User Updates an Asset

Your developer adds the Asset Server Control, as described in "How a Membership User Adds an Asset" on page 5-26. The only difference is that the developer specifies **Update** at the **Upload Type** property, and a community folder to which the asset will be saved at the **DefaultFolderID** property.

Then, the developer specifies an asset ID number at the **DefaultAsset ID** property. Using that control, the membership user can update the identified asset only.



WorkFlow

Approval Chains

What is an Approval Chain?

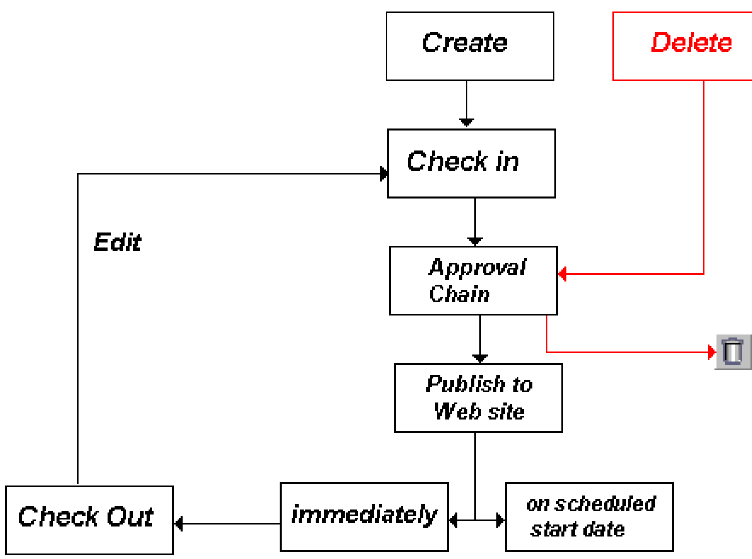
An approval chain is a series of users or user groups who must approve content before it can be published on your Web site. When the last person in the chain approves content, it goes live.

Also, if a user deletes content, before it is removed from Ektron CMS400.NET, it must pass through the approval chain.

When a new, edited, or deleted content is submitted to the approval chain, it is reviewed by users who may

- change it
- approve or decline it
- publish it (it's published when the last user in the chain approves it)

The chart below illustrates the approval process.



You can approve, edit, or decline all content submitted to you from the approval folder.

Ektron CMS400.NET can automatically send email notification, informing users that content workflow events have either taken place or are requested of them. As examples

- as soon as one member of the approval chain approves content, the next user or group is notified that the content is ready for their approval
- a content contributor receives an email that his content has been published to the Web site.

The list of automatic emails and directions for customizing their content are described in "Customizing Ektron CMS400.NET email" on page 1-87.

Conditions for Membership in Approval Chain

An approval chain can include any number of users or user groups. However, only users or user groups with read-only or higher permission to the folder or content item can be added to the approval chain. See Also: "Folder Permissions" on page 5-43

Note: If you assign a user group to an approval chain, only *one member* of the group needs to approve the content, not all members.

Note: Also, if a user appears in an approval chain twice (both as a user and part of a user group), the approval chain skips the second approval because the user has already approved the content.

You can set up an approval chain for a content folder or a content item as well as a language. See Also: "Multi-Language Approval Chains" on page 14-23

Finally, the *Approval Method* determines if content must be approved by all users in the chain, or only users higher up the chain than the one making the edits.

This chapter explains how to manage approval chains through the following subtopics.

Note: Only Ektron CMS400.NET administrators and users identified on the Manage Members for Role: Folder User Admin screen can modify the approval chain.

Approval Chain Scenarios

An approval chain lets you control how and when your Web site is updated. For example, if your Webmaster needs to approve every new content item or update of an existing item, he would be last user in every approval chain and exert total control over the site.

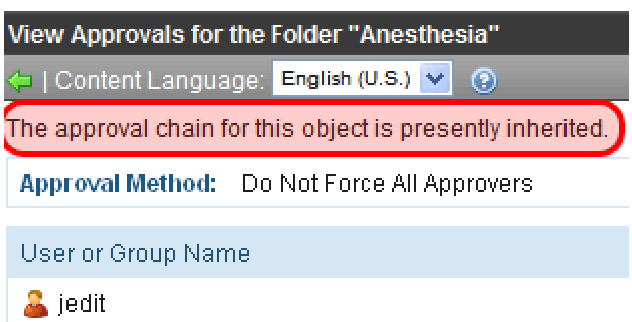
Alternatively, you could set up a less centralized organization, where each department head controls his section. To accommodate this, set up an approval chain for each department, and assign the department head as the last person in the chain.

On the opposite extreme, you can delete the approval chain for a content item or folder. In this case, every item in that folder is published as soon as a user submits it for publication.

Inheritance and the Approval Chain

An approval chain's inheritance is determined by the corresponding permission table. So, if a folder's permission table inherits settings from its parent folder, that folder's approval chain also inherits. To learn about enabling and disabling permission table inheritance, see "Inheritance" on page 5-44.

The Approval Chain screen only displays its inheritance status; it does not let you set it.



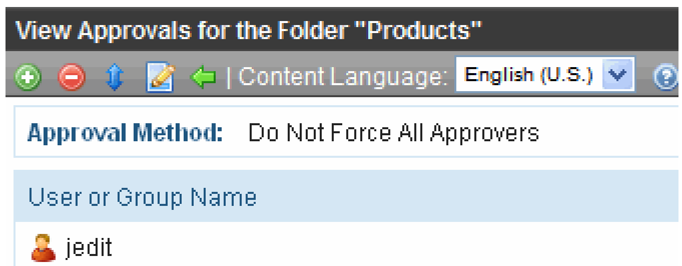
Creating an Approval Chain for a Content Folder

Before you can create or edit an approval chain, you must access the View screen.

Viewing a Folder’s Approval Chain

To view a folder’s approval chain, follow these steps.

1. Select a folder from the left frame of the Workarea.
2. Click **View** > **Language**.
3. Select the language of the approval chain you want to view.
4. Click **View** > **Properties**.
5. Click the Approvals button ( ).
6. The approval chain appears in the lower section of the screen.



This screen shows the following information about the approval chain.

- its language
- every user and user group in the approval chain
- the approval order
- the approval method (See Also: "The Approval Method" on page 5-41)
- toolbar buttons for modifying the approval chain and method

See Also: "Creating an Approval Chain for a Content Folder" on page 5-30

Actions You can Perform from the Approvals Screen

From this screen, you can perform these actions.

Action	Button	See this section for details
Add approvers		"Adding Approvers" on page 5-32

Action	Button	See this section for details
Remove approvers		"Deleting Approvers" on page 5-34
Change the order of users in the approval chain		"Editing the Approval Order" on page 5-33
Change the approval method		See "The Approval Method" on page 5-41
Change the language of the approval chain	**Content Language**	"Multi-Language Approval Chains" on page 14-23

Adding Approvers

To add a user or user group to the approval chain, follow these steps.

1. Access the approval table, as described in "Viewing a Folder's Approval Chain" on page 5-31.
2. Select the language of the approval chain. The chain only applies to content in this language.
3. Click the Add button ( ).
4. The Add Approvals screen appears.

Note: Only users and user groups with permissions to the folder appear. See "Adding a User or User Group to the Permissions Table" on page 5-49 for more information.

Best Practice

Ektron suggests assigning user groups to the approval chain, as opposed to individual users. In this way, if someone is out of the office for a day, another group member can approve the content.

5. Click the user or user group to add to the approval chain.
6. A confirmation message appears.
7. Click **OK**.

See Also: "Creating an Approval Chain for a Content Folder" on page 5-30

Note: If you assign a user group to an approval chain, any member of the group can approve the content, not all members.

Editing the Approval Order

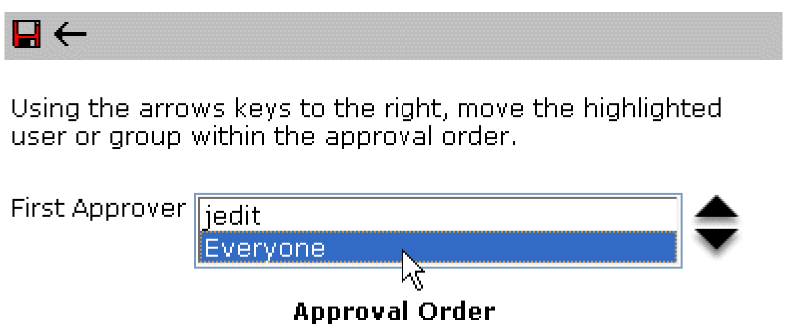
After you assign approvers to a folder, you may want to adjust the approval order. Place the user or group with final review at the end of the approval chain (that is, *the highest number*).

For example, if you have a content contributor whose edits must be approved by a department head, and the Webmaster has final review of all content, the approval order would look like this.

User or Group Name	Approval Order
Content contributor	1
Department Head	2
Webmaster	3

To edit the approval order, follow these steps.

1. Access the approval table as described in "Viewing a Folder's Approval Chain" on page 5-31.
2. Select the language.
3. Click the Reorder button ( ).
4. The Edit Approval Order screen appears.
5. Click the user or group whose approval order you want to change.



6. Click the Up ( ) or Down ( ) arrow to move the user or group to the desired order.
7. Click the Save button ( ).

See Also: "Creating an Approval Chain for a Content Folder" on page 5-30

Deleting Approvers

Note: If a user in an approval chain is deleted from the permissions table, he or she is automatically deleted from the approval chain.

To delete a user or user group from an approval chain, follow these steps.

1. Access the approval table as described in "Viewing a Folder's Approval Chain" on page 5-31.
2. Select the language.
3. Click the Remove button ( ).
4. The Remove Approval screen appears.
5. Click the user or group that you want to remove from the approval chain.
6. A confirmation message appears.
7. Click **OK**.

See Also: "Creating an Approval Chain for a Content Folder" on page 5-30

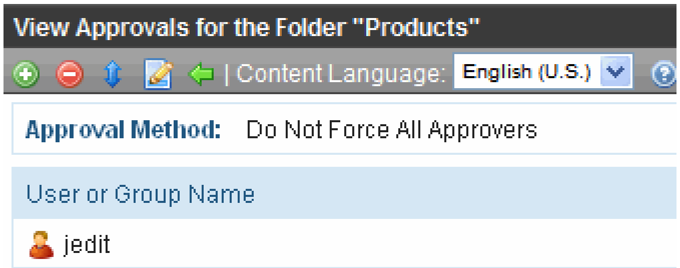
Editing an Approval Chain For Content

At times, you may need to change the approval chain for a specific content item. Use the Approvals button ( ) on the View Content screen to change a content item's approval chain.

Viewing an Approval Chain for Content

To view the approval chain for content, follow these steps.

1. Navigate to the folder that contains the content.
2. Click the content.
3. Click the View Approvals button ( ).
4. Uncheck the checkbox next to **Allow this object to inherit permissions**.
5. Return to the View Content screen.
6. Click the Approvals button ( ).
7. The content's approvals table appears.



After viewing the content's approval chain, you can perform the same actions on it as you can perform on a folder. This list of actions is available from .

Approve/Decline One Content Item

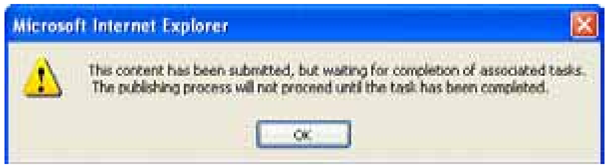
1. Click the Smart Desktop button.

2. Click **Reports**.
3. Click **Approvals**.
4. Click the content you want to approve or decline.

   To select all displayed content, click **Select All** at the top of the screen.

5. The content appears. You can view the content, summary, metadata, etc.

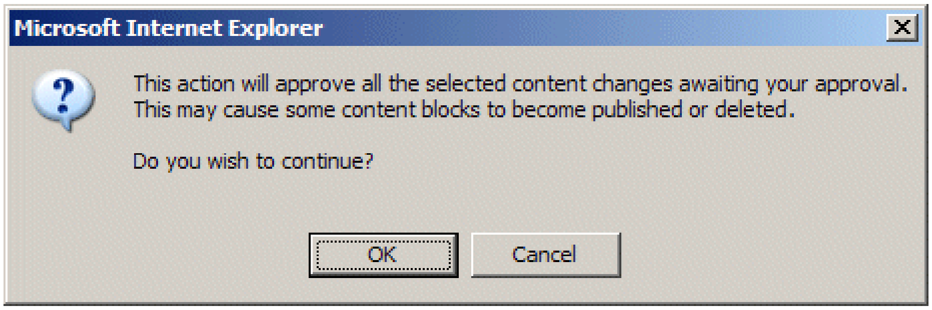
   A toolbar at the top of the screen lists tasks you can perform on the content.

Button	Name	Result of Clicking
	Publish	Accept changes to the content and publish it to the site. Note: If there is another approver in the content's approval chain, this is replaced by a **SUBMIT** button. If you click Publish but the content item has an incomplete task assigned to another user, the content cannot be published. Instead, the following error message appears.  The user to whom the task is assigned must complete it before you can publish the content.
	Decline	Reject changes and keep current version of content live on Web site. You are prompted to enter a comment that provides a reason for the decline. The author who made the change is notified by email of the decline. The content inserted by the last editor remains in the file. If you do not want it to remain, choose the **Edit** option.
	Edit	Check out content and change it if desired.
	View Published/Staged	Toggle between published and submitted versions of content. This can help you compare versions. See Also: "Staged Content" on page 7-139
	View Diff	View differences between the version awaiting approval and the published content. See Also: "Comparing Versions of Content" on page 7-120
	Back	Return to previous screen.

Approve/Decline Several Content Items

To approve several submitted content items without reviewing them, follow these steps.

1. Select the submitted content you want to approve, as described in .
2. Click the Approve All button ( ).
3. The following message appears.



4. To continue, click **OK**.
5. The approved content is either submitted to the next publisher, published immediately to the Web site, or deleted, depending on the approval chain set for the content.

Example of an Approval Chain

The approval chain begins when a content contributor submits a new or edited content. If email is enabled, an email is sent to the next approver in the approval chain.

The following example follows a typical content block from creation to publication. Three users make up this approval chain.

- Sports Writer - creates sports content
- Sports Editor - edits and publishes all sports articles
- Editor In Chief - edits and publishes all articles

Each user has different permissions that correspond to their roles.

The example uses the following topics to explain a typical approval chain.

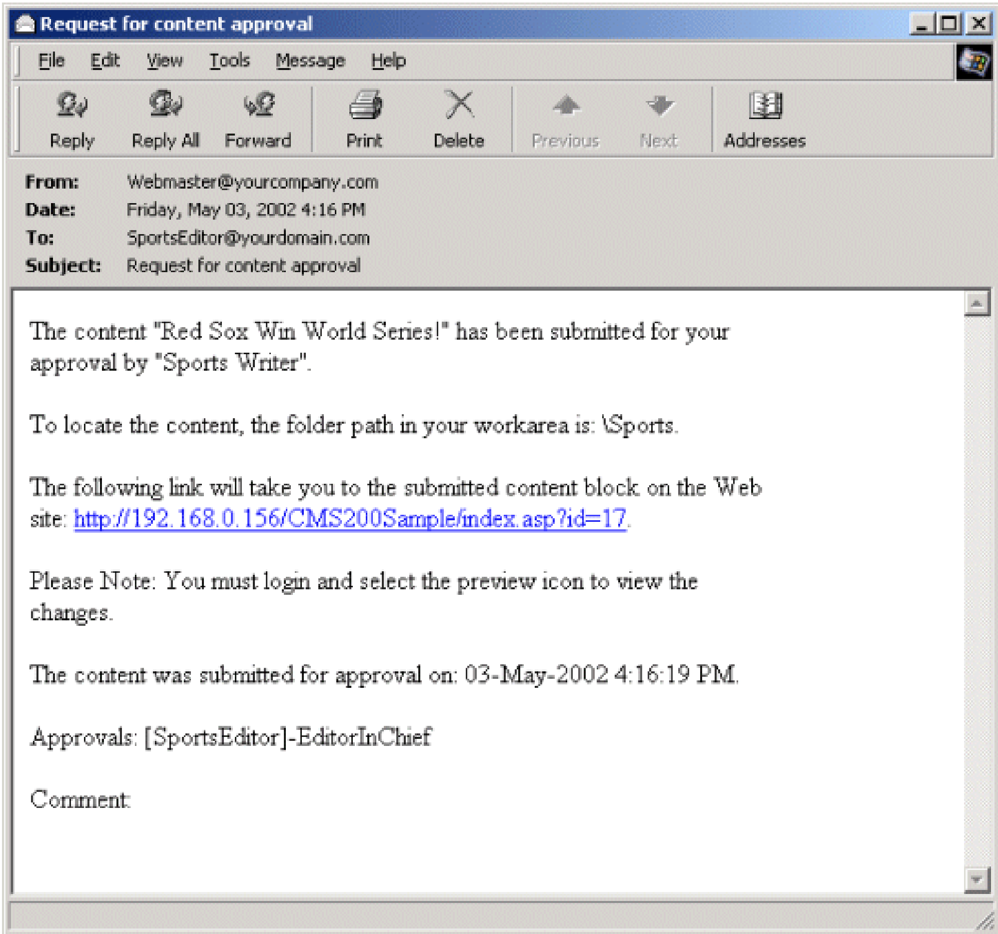
- "Creating Content" on page 5-37
- "First Approver" on page 5-38
- "Second Approver" on page 5-40

Creating Content

The first step is to create content. To create new content, follow these steps.

1. Log in to Ektron CMS400.NET as a SportsWriter.
2. Create content, as described in "Adding HTML Content" on page 7-15.
3. Click the Submit button ( ).

4. The content is placed into the approval chain. The next user in the chain receives an email saying the content is ready for approval.



Note: Emails are only sent if your administrator enables them.

The content contributor, Sports Writer, has completed his role in the approval chain but continues to receive emails notifying him of changes in the content's status.

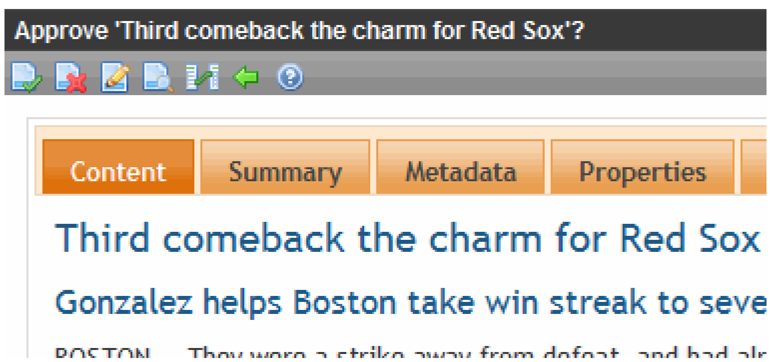
First Approver

After Sports Writer submits the content, the first user in the approval chain, Sports Editor, receives an email stating content needs his approval. He can change and approve the content or decline it.

Sports Editor logs into Ektron CMS400.NET, navigates to his desktop, where he sees the **Content Awaiting Approval** panel.

He clicks the **View All** link and sees all content awaiting his approval.

The approvals folder window displays information such as title, who submitted it, go live date, etc. The Sports editor clicks the submitted content.



The View Content Awaiting Approvals window appears listing all information necessary to decide whether to approve or decline the content.

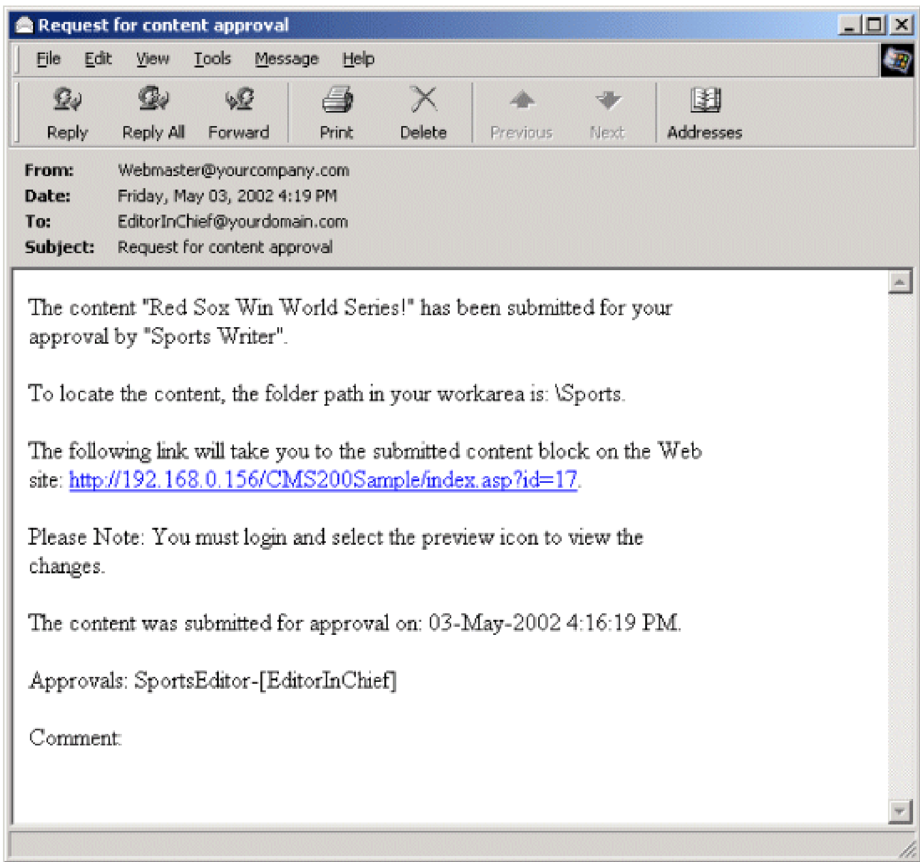
At the approval window, the Sports Editor has these options.

Button	Result
Approve	Send content to next approver in approval chain.
Decline	1. Send email to creator, notifying him/her that content was declined. 2. Remove content from approval chain.
Edit	Invokes the editor. From here, the approver can change the content.

For demonstration purposes, we'll choose **Approve**.

Second Approver

After the content is approved, the next approver in the approval chain receives an email saying that the content is ready for approval.



EditorInChief logs in to Ektron CMS400.NET and accesses his Workarea. The Workarea has an Approval folder with the content awaiting his approval. EditorInChief navigates through the Approval folder until he finds the content **Red Sox win World Series**.

From this window, EditorInChief can view information about the content, including title, go live date, user who created it, etc. He then clicks the content he wants to approve.

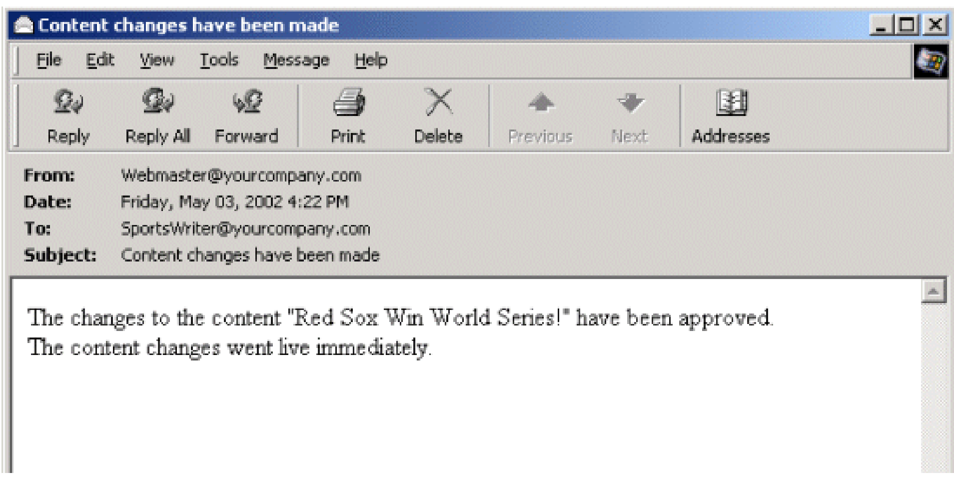
This window is similar to the previous approver's but includes a Publish button at the top of the screen. The EditorInChief has a publish button (instead of a submit button) because he is the last approver in the approval chain. When he approves the content, it is published to the Web site.

Like the Sports editor, the EditorInChief has the following options.

Button	Description
Publish	Publish the content.
Decline	1. Sends an email to the creator, notifying him/her that content was declined. 2. Removes content from the approval chain.
Edit	Invokes the editor. The approver changes the content.

After reviewing the content, the EditorInChief decides it is great and publishes it. At this point, the content becomes live on the Web site, and the approval chain is complete.

The user who created the content receives an email notifying him that it was published.



The Approval Method

The Approval Method determines if content must be approved by all users in the chain, or only users higher up in the chain than the user making the edits. The approval method only affects the approval process if the person submitting content for publishing is a member of the approval chain.

Two approval methods are available.

Approval Method	Description
Force All Approvers	*All* users in approval chain must approve the content, beginning with the first
Do Not Force All Approvers	Approvers *after the user submitting content* in the approval chain must approve the content

For example, assume the approval chain is set as below.

User or Group Name	Approval Order
Content contributor	1
Department Head	2
Webmaster	3

If the Approval Method is **Force All Approvers**, and the Department Head submits content, the content must be approved by the content contributor, then the department head, and the Webmaster before it is published.

If the Approval Method is **Do Not Force All Approvers**, and the Department Head submits content, the content must only be approved the Webmaster before it is published.

Changing the Approval Method

By default, the approval method is set to **Do Not Force All Approvers**. To change the approval method for a content folder or item, follow these steps.

1. Access the approval table, as described in .
2. Click the Edit button ().
3. The Edit Approval Method screen appears.
4. Select an approval method by clicking the radio button.
5. Click the Save button ().

Folder Permissions

Permissions determine which actions users and members of user groups can perform on content, library items, and content folders. For example, you allow your Webmaster to perform the most advanced actions, such as adding folders, editing folder properties, and deleting folders. At the same time, you could restrict content contributors to viewing, editing, and adding new content.

You can set permissions for a content folder or content item. When you assign permissions to a content folder, it affects all of its subfolders unless you break inheritance for a subfolder.

Permissions are more fully explained through the following topics:

- "Who Is Authorized to Set Permissions" on page 5-43
- "Setting Permissions through the Permissions Table" on page 5-43
- "Inheritance" on page 5-44
- "Standard & Advanced Permissions" on page 5-45
- "Setting Permissions for a Content Folder" on page 5-47
- "Setting Permissions for Content" on page 5-51

Who Is Authorized to Set Permissions

Only Ektron CMS400.NET administrators and users identified on the Manage Members for Role: Folder User Admin screen can set permissions. See Also: "Using the Roles Screens" on page 15-33

Setting Permissions through the Permissions Table

Warning! All members of the Administrators group are automatically granted all permissions to all Ektron CMS400.NET folders. Although these users do not appear when you view a folder's permission settings, they have full permissions.

You manage the following permissions through the Permission Table (illustrated below).

- Content management: view, add, edit, delete, restore
- Library File Management: view, add images, add other types of files, add hyperlinks, overwrite files

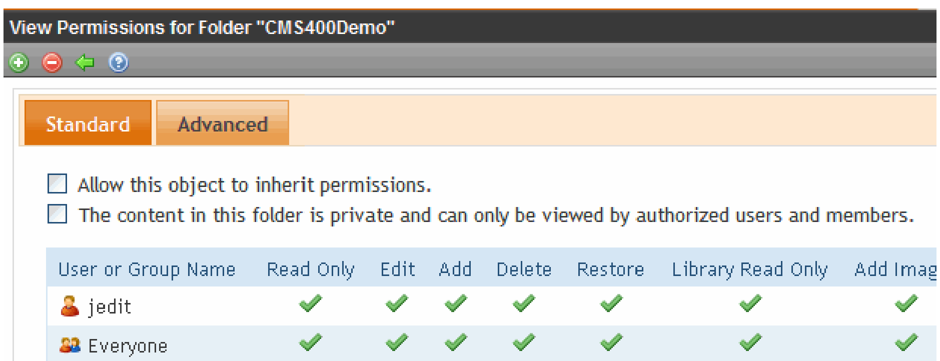
- Folder management: add, edit, delete, traverse
- Work with Collections and Menus

Note: You can use the Roles screens to assign additional permissions that are not defined in the Permission Table, such as the ability to create tasks. See Also: "Defining Roles" on page 15-32

The Permission Table appears when you click the Permission button ( ) from a folder's or content item's Properties window.

Best Practice

If you need to assign multiple users the same permission, Ektron recommends placing them in a user group and assigning the group to the Permission Table. If you assign too many users in the Permission Table, your system's response time may degrade.



Inheritance

By default, all content folders and items inherit permissions from their parent folder. You have two options for modifying permissions.

- Modify the permissions of the parent folder - see "Setting Permissions for a Content Folder" on page 5-47
- Break inheritance and add permissions to a folder

Breaking Inheritance

To break inheritance from a parent folder, follow these steps.

1. Access the Permissions Table for a content folder or content in your Workarea, as described in "Accessing the Permissions Table" on page 5-47.
2. Remove the check mark from the box that says **Allow this object to inherit permissions**.
3. A confirmation message appears.
4. Click **OK**.

Restoring Inheritance

To restore inheritance for a content folder or content, follow these steps.

1. Access the Permissions Table as described in "Accessing the Permissions Table" on page 5-47.
2. Place a check in the box that says **Allow this object to inherit permissions**.
3. A confirmation message appears.
4. Click **OK**.

Standard & Advanced Permissions

There are two categories of permissions. You assign permissions in each category from a different screen.

- Standard Permissions - basic functions
- Advanced Permissions - administrator level functions

The following table explains the permissions in Ektron CMS400.NET.

Category	Permission	Allows user/user group to perform this action on content in selected folder
Standard	Read Only	View content
	Edit	Edit content
	Add	Add content
	Delete	Delete content
	Restore	Restore old versions of content
	Library Read Only	View items in the corresponding library folder See Also: "Library Folder" on page 8-1
	Add Images	Upload images to the corresponding library folder
	Add Files	Upload files to the corresponding library folder
	Add Hyperlinks	Add hyperlinks to the corresponding library folder
	Overwrite Library	Overwrite images and files to the corresponding library folder
Advanced	Collections	Manage collections See Also: "Working with Collections" on page 9-99
	Add Folders	Add sub folders See Also: "Adding Subfolders" on page 5-19
	Edit Folders	Edit folder properties See Also: "Folder Properties" on page 5-13
	Delete Folders	Delete the current folder or its subfolders
	Traverse Folders	Access folders under the root folder. By default, the **Everyone** user group has permission to view all subfolders. If you disable or modify the Everyone user group, and you want to grant users/groups permission to a folder other than the root folder, you must also assign Traverse permission. If you do not, the user cannot access the folder. In that case, the user cannot perform any other granted permissions.
	Modify Preapproval	Set or update a folder’s preapproval group. See Also: "Automatic Creation of Tasks Associated with Content" on page 11-34

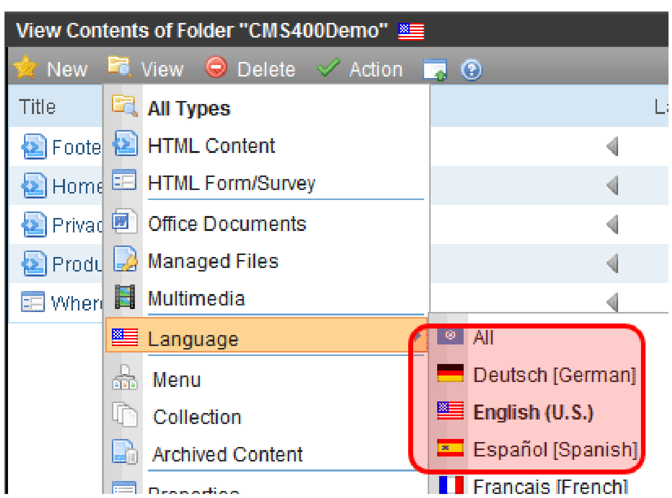
Setting Permissions for a Content Folder

You can set permissions for any content folder and language from the Folder Properties screen. Circled below is the Permissions button on the Folder Properties screen.

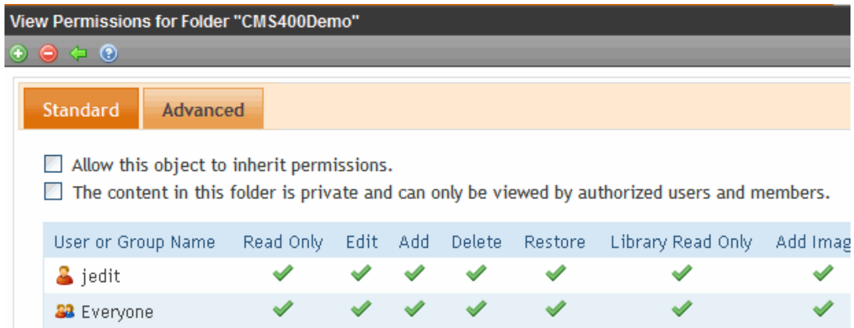
Accessing the Permissions Table

To access the Permissions Table, follow these steps.

1. Select a content folder from the left frame of the Workarea.
2. Click **View**.
3. From the language dropdown, select the language whose folder properties you want to update.



4. Click **View** > **Properties**. The Folder Properties screen appears.
5. Click the Permissions button ( ).
6. The Permissions Table appears.



The Permissions Table displays each user's abilities to perform actions on content within the selected folder. Since all permissions cannot fit on one screen, you can click **View Advanced Permissions** to see the other group.

After viewing the permissions, you can change them. Below is a list of actions you can perform from this screen.

Actions You Can Perform from the Permissions Table

The following table summarizes actions you can perform from the Permission Table screen.

Action	How to perform it	For more information, see
View advanced permissions	Click **View Advanced Permissions**	"Setting Permissions for a Content Folder" on page 5-47
Add user or group to permission table	Click	"Adding a User or User Group to the Permissions Table" on page 5-49
Remove user or group from permission table	Click	"Deleting Users or User Groups from the Permissions Table" on page 5-50
View membership users	Click **View MemberShip users**	"Community Folders" on page 5-22
Have this folder inherit permissions from parent folder	Check box next to **Allow this object to inherit permissions**	"Setting Permissions for a Content Folder" on page 5-47

Action	How to perform it	For more information, see
Make content in this folder private	Check box next to **The content in this folder is private and can only be viewed by authorized users and members** Note: If **Allow this object to inherit permissions** is checked, you cannot check this box. In that case, this folder is inheriting this setting from its parent folder.	"Private Content" on page 7-191

See Also:

- "Adding a User or User Group to the Permissions Table" on page 5-49
- "Editing User or User Group Permissions" on page 5-50
- "Deleting Users or User Groups from the Permissions Table" on page 5-50

Adding a User or User Group to the Permissions Table

To add a user or user group to the Permissions Table, follow these steps.

Note: Before adding users or groups, you must break inheritance. See "Setting Permissions for a Content Folder" on page 5-47.

Note: If a user and the user group to which that user belongs are both given permission to a folder, the user has all permissions to which he/she is assigned as well as permissions assigned to the user group.

Note: You can only assign Read Only permission to a Membership user or user group. See Also: "Membership Users and Groups" on page 16-4

1. Access the Permissions Table for the content folder or content, as described in "Accessing the Permissions Table" on page 5-47.
2. Click the Add button ( ).
3. The Add Permissions screen appears. Only users and groups not assigned to the Permissions Table appear.
4. Click a user or group to add to the Permissions Table.
5. The Add Permissions screen appears.
6. Check the standard and advanced permissions for the user or group. Refer to "Setting Permissions for a Content Folder" on page 5-47 for a description of permission options.

Note: Check **Enable All** to assign all standard permissions. If you do, you still must assign advanced permissions by hand.

7. Click the Save button ( ).

Editing User or User Group Permissions

To add or remove permissions for a user or group, editing the user or group in the Permissions Table. To do so, follow these steps.

1. Access the Permissions Table for the content folder or content, as described in "Accessing the Permissions Table" on page 5-47.
2. Click the user or group for which you want to edit permissions.
3. The Edit Permissions screen appears.
4. To assign any permission, check the box. To remove any permission, uncheck the box.

Note: Remember to toggle between standard and advanced permissions.

5. Click the Update button ( ).

Deleting Users or User Groups from the Permissions Table

To remove permissions from a user or user group, use the Delete button on the View Permissions window. To do so, follow these steps.

1. Access the Permissions Table for the content folder or content, as described in "Accessing the Permissions Table" on page 5-47.
2. Click the Delete button ( ).
3. The Remove Permissions screen appears.
4. Click the user or group to remove from the Permissions Table.
5. A confirmation message appears.
6. Click the **OK** button.

Note: When you delete the permissions of a user or user group, that change is propagated to all subfolders and content. Also, if the user or group was part of an approval chain, they are removed from it.

See Also: "Folder Permissions" on page 5-43

Setting Permissions for Content

You can assign permissions to a single content item, overriding the default permissions inherited from the folder. To do so, follow these steps.

1. Access the content by navigating to its folder, selecting a language, and clicking on it.
2. Click the View Permissions button ( ).
3. Uncheck the box next to **Allow this object to inherit permissions**.
4. A confirmation message appears. Press **OK**.
5. You can perform any action on the content that you can perform on a folder. These options are described in "Actions You Can Perform from the Permissions Table" on page 5-48.

Chapter 6

Building PageBuilder Pages

Overview

As the name suggests, PageBuilder is a tool that enables you to build Web pages in the Ektron CMS400.NET. What makes PageBuilder unique as a Web page creation tool is two-fold:

- Firstly, it allows non-technical users a simple way to build rich and fully-featured Web pages.
- Secondly, the Ektron development community can leverage PageBuilder as a simple way to reuse and share common functionality from one Ektron-powered site to another.

PageBuilder leverages the versatility of Ektron Portal Framework to streamline the process of building new pages on your Web site. Members of an organizations' Web team can now more efficiently make changes to pages and content, without relying on the availability of developers. Ultimately, PageBuilder helps not only redefine roles within an organization, but also maximizes efficiency and productivity.

In a typical PageBuilder scenario, the initial layout is managed by developers, while the final content, design, and placement of functionality is managed by non-technical users who have a need for creating specific Web pages. These non-technical, content authors would typically be marketing departments or similar organizations.

PageBuilder for Developers

To someone new to PageBuilder, it might seem as though PageBuilder takes the work of building and maintaining a Web site out of the IT department's hands. However, this is not the case. Web page developers still create page templates, building *wireframes* into which content authors place functional *widgets* that will make the Web page a success. PageBuilder allows the IT department to concentrate on what they do best: develop the back end of a system and address the technical nuances that today's Web sites generate. Content and messaging is out of their hands and squarely where it belongs: in Marketing.

Wireframes, Dropzones, and Widgets

Page Builder requires developers to create a *wireframe* template. This wireframe is the basic architecture for a Web page. As developers build wireframes, they add *dropzone* user controls where non-technical users need to insert the content, design, and messaging of the site. These zones are literally the areas into which someone can "drop" a *widget*.

Widgets are mini-applications that can provide either specific functionality (calculators, search, and social bars, etc) or areas into which you can add Ektron CMS400.NET content (content blocks, list summaries, collections, etc.). It is simple for developers to apply classes to these pages. Developers can also manage the level of control non-technical users have. For example, a developer can configure hard limits for the width of dropzones.

After a wireframe is created, an administrator assigns it to a folder, creates a page, and selects the widgets that will be available to place on that page.

PageBuilder for Everyday Users

Marketing teams (technical and non-technical alike) can build out entire pages on the wireframe templates by dragging-and-dropping widgets. This creates the user experience on the page while maintaining a consistent "look and feel." With PageBuilder, they can launch campaigns as needed and respond to market conditions rapidly with unique Web pages that have targeted and effective content.

PageBuilder pages have the same business-level controls as content blocks. Like other Ektron CMS400.NET content, PageBuilder pages maintain permissions, approval chains, enable SEO (through metadata), Taxonomy, Aliasing, and allow users to view histories and restore past versions.

Approvers can preview PageBuilder pages before they go live, and pages can be cloned and then modified to maintain look and feel across campaigns or to support A/B split testing.

Streamline Process and Improve Efficiency

PageBuilder adds a level of agility to key processes that overlap marketing and IT departments. By using it to streamline the workflow of launching new pages, time and expenses can be minimized. Moreover, your IT infrastructure remains secure because non-IT resources do not need to access mission-critical servers — all needed assets are accessible through the Workarea.

The CMS400.NET PageBuilder is the logical evolution of the WYSIWYG editor, extending the concept of content management beyond single elements of content. Now, that philosophy can be applied to whole pages and even entire sites, boosting productivity and giving you the tools you need to make your Web site do exactly what you want it to do.

PageBuilder Video

You can see a video explaining PageBuilder in more detail by visiting this URL: http://ektron.vo.llnwd.net/o28/flashvideos/pagebuilder/FinalPageBuilder.html.

See Also:

- "Building Pages" on page 6-5
- "PageBuilder Code Samples" on page 6-30
- "Advanced PageBuilder Topics " on page 6-32

Building Pages

Use Case: AcmeBooks.com

AcmeBooks.com is a fast growing company that specializes in foreign and hard-to-find books. Recognizing it needed a stronger presence on the Web, it recently installed and deployed Ektron CMS400.NET.

The Chief Information Officer of Acme Books is especially excited about the company's recent move to CMS400.NET. She is particularly interested in PageBuilder, feeling it will enable the Marketing team to respond to changing market conditions and quickly launch and communicate promotions on the AcmeBooks.com Web site. She is also pleased that PageBuilder promises to appease the company's Web site developers. No longer will they have to deal with numerous daily requests for content changes from Marketing.

So, she wonders, "How does it all work? How will the Web team work together to use PageBuilder?" Right now, the team is composed of herself and:

Pete. He runs the Web Development team (including designers).

Grace. She is the CMS/Web site administrator.

Pierre. Acme Books' Marketing guru. He is also in charge Marketing and Acme Books' content authors.

See Also:

- "PageBuilder Workflow" on page 6-6
- "Steps to Creating a "PageBuilder" Page" on page 6-7
- "Create a PageBuilder Wireframe" on page 6-8
- "Enable Manual Aliasing" on page 6-13
- "Identify the PageBuilder Wireframe in the CMS" on page 6-14
- "Assign the PageBuilder Wireframe to a Folder" on page 6-15
- "Assign the PageBuilder Wireframe to a Folder" on page 6-15
- "Create the New Page" on page 6-18
- "Place Widgets on the Page" on page 6-20
- "Part 1: Add New Column and Set Column Widths" on page 6-22
- "Part 2: Insert New Content Block Widget into Right Column" on page 6-24
- "Part 3: Insert a List Summary Widget into Left Column" on page 6-27
- "Final Assessment" on page 6-29

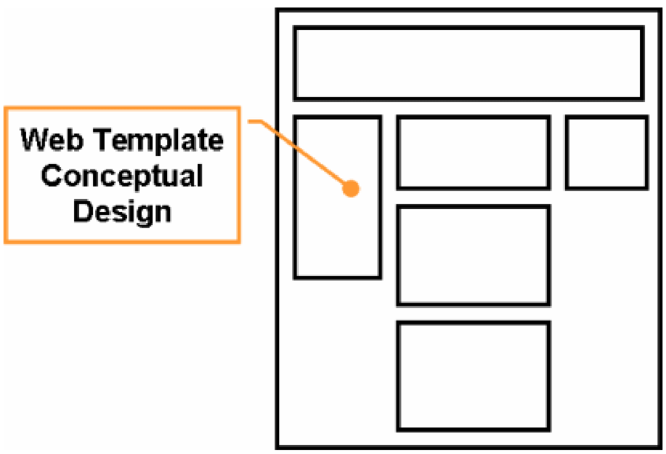
PageBuilder Workflow

Let's start with the general PageBuilder workflow. Basically, there are three stages:

Envisioning the "Big Picture"

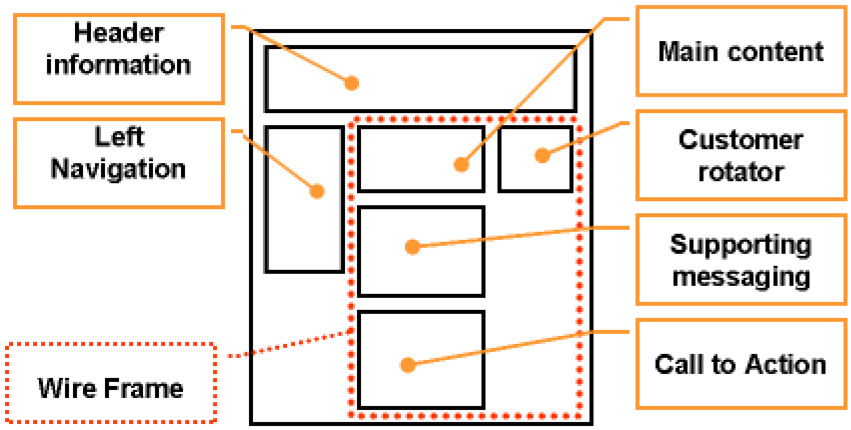
In the beginning, stakeholders define functionality and "look" needed on Web pages. At Acme Books, this includes the CIO, the Marketing team, the CMS400.NET Administrators, and the Web designers and developers in the IT department.

When a consensus is reached, Pete's designers and developers define the page layout and present it to the whole team for review and approval.



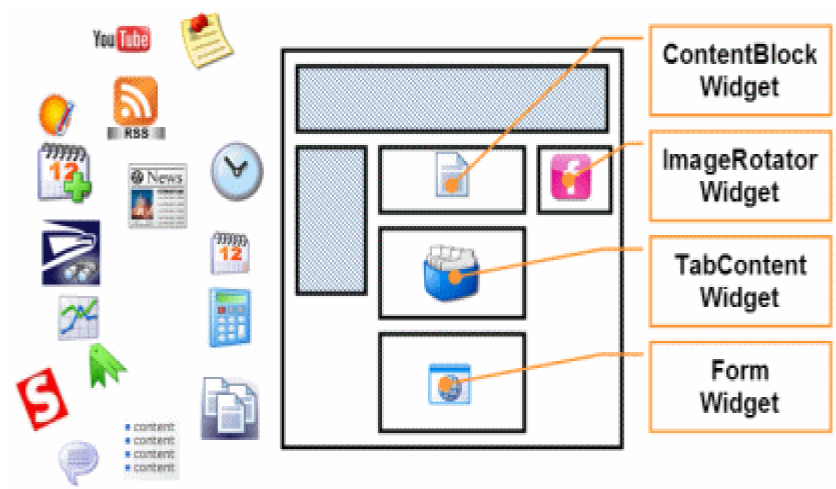
Designing and Development

Here, Pete's developers identify page areas and build wireframes based on design specifications. At this point, they should understand the functionality needed and use, modify or build widgets based on the requirements.



Implementation and Maintenance

When complete, a PageBuilder page is active and in use by Pierre and his team on a daily basis. Pierre can create pages, drag-and-drop widgets, and edit properties as necessary. Subject matter experts create and maintain content.



Steps to Creating a “PageBuilder” Page

Creating a Web page with PageBuilder functionality at Acme Books consists of the following tasks:

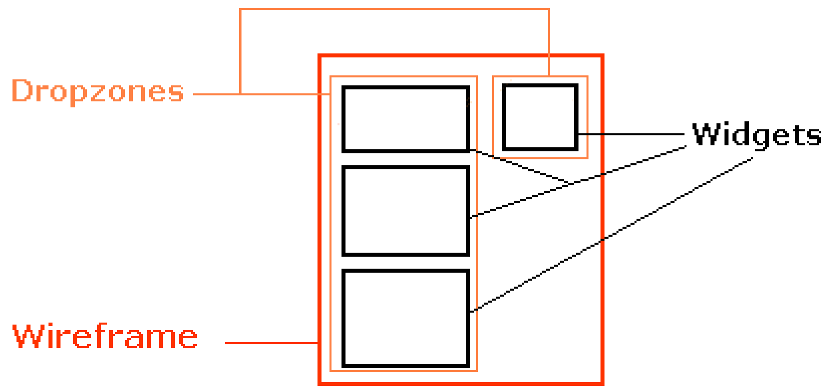
- "Create a PageBuilder Wireframe" on page 6-8. This is performed by Pete and his developers.

- "Enable Manual Aliasing" on page 6-13. This is performed by Grace, the Web site administrator.
- "Identify the PageBuilder Wireframe in the CMS" on page 6-14. This is performed by Grace, the Web site administrator.
- "Assign the PageBuilder Wireframe to a Folder" on page 6-15. This is performed by Grace, the Web site administrator.
- "Create the New Page" on page 6-18. This is performed by Pierre and his team.
- "Place Widgets on the Page" on page 6-20. This is performed by Pierre and his team.

Create a PageBuilder Wireframe

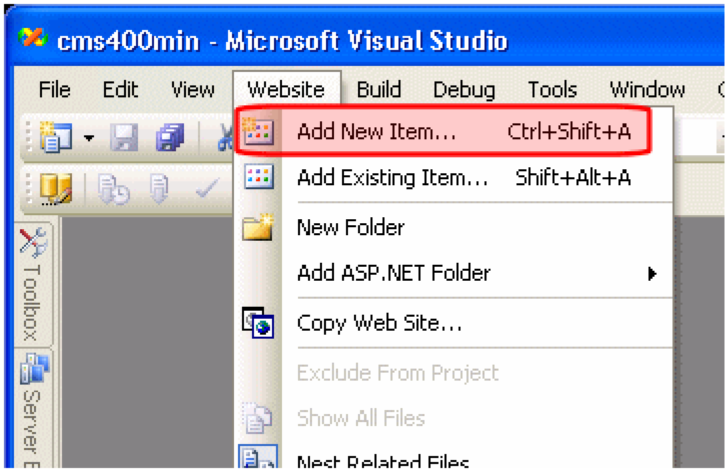
As explained earlier, Pete first creates a *wireframe*. Next, he defines *dropzones*, areas of the page on which a content creator drags and drops *widgets*.

The relationship between a wireframe, a dropzone, and a widget is illustrated below.



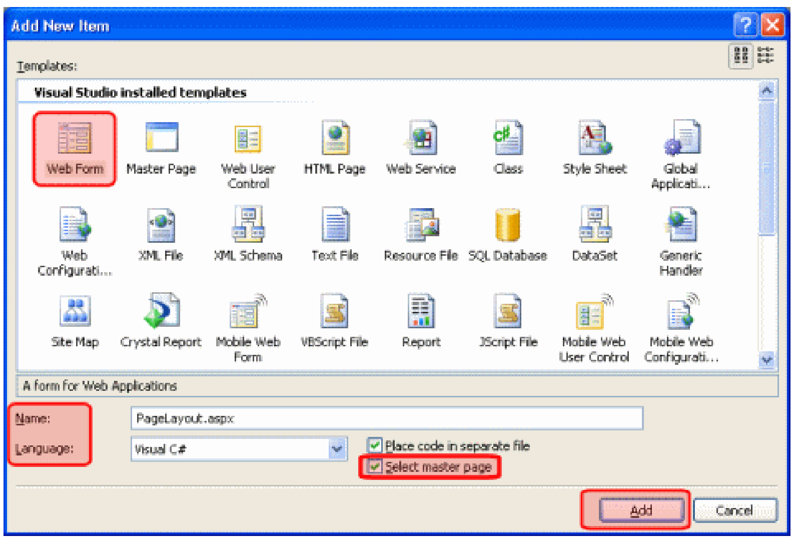
Here is how Pete creates a wireframe that contains one dropzone.

1. He opens the Web site in Visual Studio.
2. He adds a new Web form to the site by clicking Web Site > Add New Item.



3. He selects Web Form.

4. Pete sets the Name to PageLayout.aspx, the Language to Visual C#, and checks Select master page.



5. He clicks Add, then changes to Source view.

6. He registers the following assemblies directly below the @ Page directive (at the top of the file).

```
<%@ Register Assembly="Ektron.Cms.Widget" Namespace="Ektron.Cms.PageBuilder"
TagPrefix="PB" %>
```

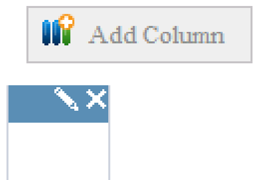
```
<%@ Register Assembly="Ektron.Cms.Controls" Namespace="Ektron.Cms.Controls"
TagPrefix="CMS" %>
```

7. Next, he'll drop a PageBuilder Menu and DropZone user control onto the page. When rendered, a PageBuilder menu and control look like this.

.

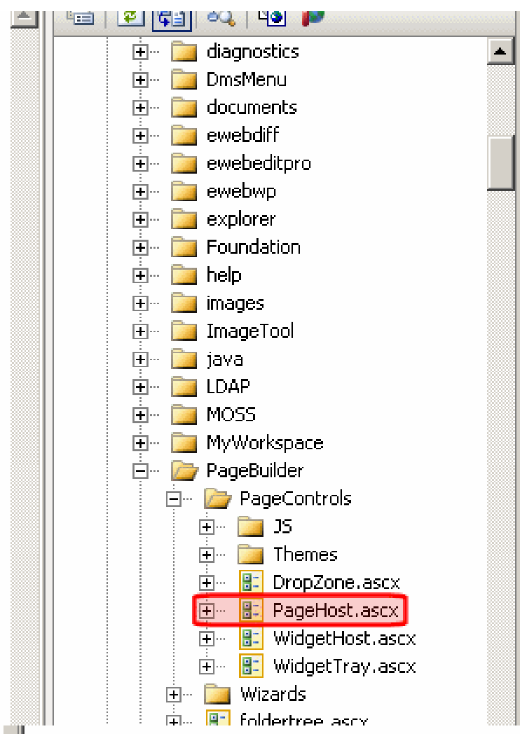
This control lets a content author drop widgets on the page. It also provides the save/check in/publish functions, and lets the author preview how the page will look when it's published.

When rendered on a page, a DropZone user control looks like this.

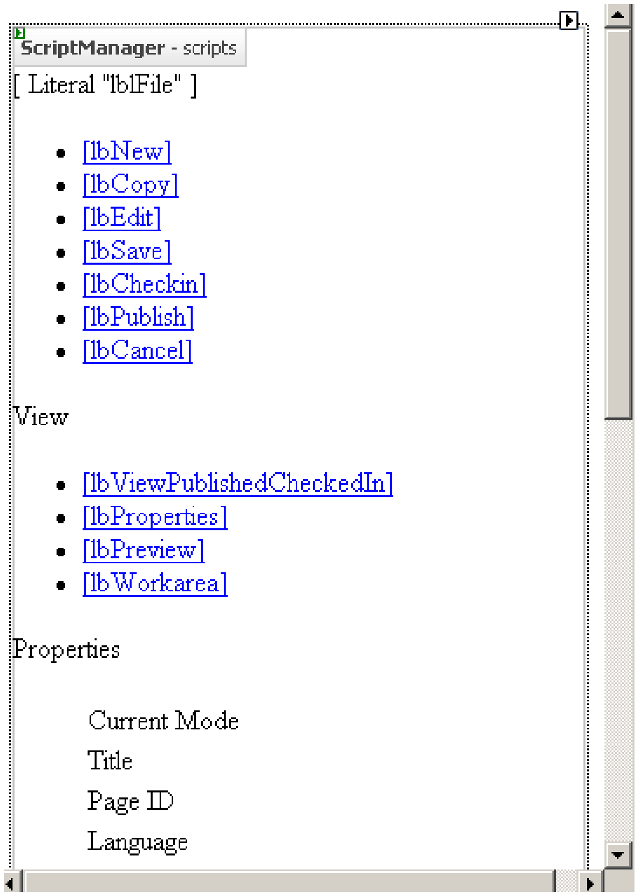


The content author uses a DropZone control as a placeholder, into which he will insert widgets. He can also use it to insert additional placeholders as needed.

8. He switches Visual Studio from Source to Design view.
9. In the Visual Studio explorer, he finds the `/Workarea/PageBuilder/PageControls` folder.
10. He drags and drops the PageHost.ascx user control onto the page.



11. The left panel now looks like this.



12. Below the PageHost control (below Pullchain), he drags and drops the Dropzone.ascx user control onto the page.
13. He switches to source view.

Note: See "Advanced PageBuilder Topics" on page 6-32 for information on customizing user controls.

14. The screen now looks like this.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs" Inherits="Default2" %>

<%@ Register Assembly="Ektron.Cms.Widget" Namespace="Ektron.Cms.PageBuilder" TagPrefix="PB" %>
<%@ Register Assembly="Ektron.Cms.Controls" Namespace="Ektron.Cms.Controls" TagPrefix="CMS" %>

<%@ Register Src="Workarea/PageBuilder/PageControls/PageHost.ascx" TagName="PageHost"
    TagPrefix="uc1" %>
<%@ Register Src="Workarea/PageBuilder/PageControls/DropZone.ascx" TagName="DropZone"
    TagPrefix="uc2" %>


<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/x

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Untitled Page</title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        <uc1:PageHost id="PageHost1" runat="server">
        </uc1:PageHost>
        <uc2:DropZone id="DropZone1" runat="server">
        </uc2:DropZone></div>
    </form>
</body>
</html>
```

Note: Ektron Best Practice is to set values for the `FolderID` and `SelTaxonomyID` properties. See "How a Page's Default Folder is Set" on page 6-33 and "Assigning a Default Taxonomy to a Wireframe" on page 6-37

Note that Pete adds only one dropzone now. He plans to add more later.

15. Pete is finished with the user control file and is ready to begin working on his codebehind file.
16. Pete opens the codebehind page, PageLayout.aspx.cs.
17. He adds a reference to the PageBuilder namespace by adding the following line after the last using statement.

```
using Ektron.Cms.PageBuilder;
```

18. Inherit the PageBuilder class instead of System.Web.UI.Page. To do this, change:

```
public partial class PageLayout : System.Web.UI.Page
```

To:

```
public partial class PageLayout : PageBuilder
```

19. Pete adds the following code, which handles errors and notifications, after the Page_Load event.

Note: You can copy the following code from **`siteroot/developer/pagebuilder/pagelayout.aspx.cs`.**

```
public override void Error(string message)

{
jsAlert(message);
}
public override void Notify(string message)
{
jsAlert(message);
}

public void jsAlert(string message)
{
Literal lit = new Literal();
lit.Text = "<script type=\"\" language=\"\">{0}</script>";
```

```
lit.Text = string.Format(lit.Text, "alert('" + message + "');");
Form.Controls.Add(lit);
}
```

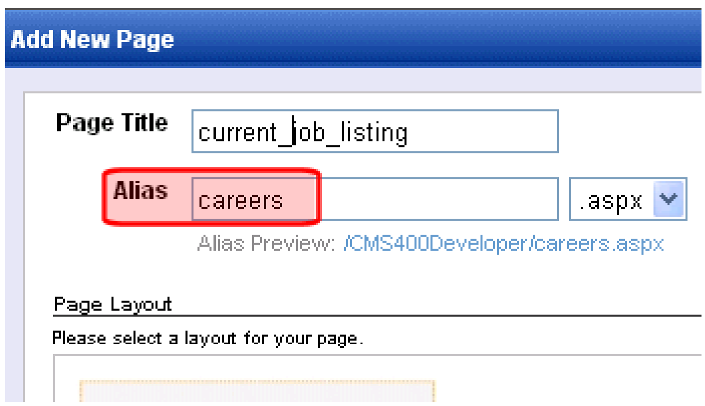
He does not need to use the jsAlert system defined here. If he doesn't, Pete must somehow add overrides to handle errors and notifications to the codebehind.

20. Save the PageLayout.aspx and PageLayout.aspx.cs files.

Enable Manual Aliasing

Note: The Ektron "best practice" is to enable Manual and Auto aliasing.

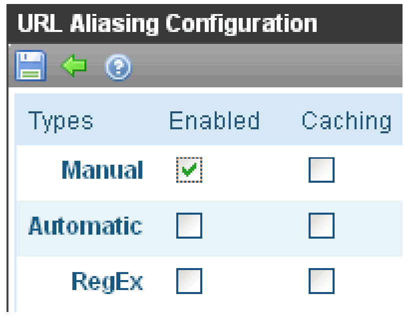
Pete's development team needs to make sure that manual aliasing is enabled within Ektron CMS400.NET. Doing this allows you to apply a user-friendly URL when you're creating a PageBuilder page, as shown below.



Note: See ""URL Aliasing" on page 10-1 for more information.

To enable manual aliasing, the development team does these steps.

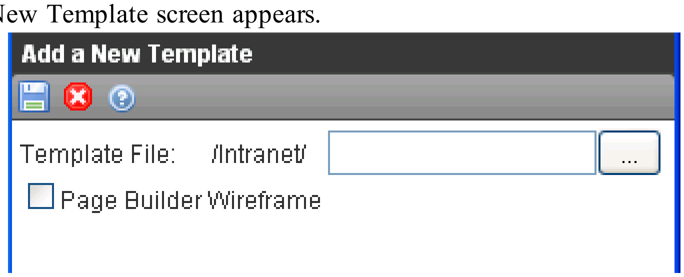
1. In the Ektron CMS400.NET Workarea, they go to Settings > Configuration > URL Aliasing > Settings.
2. They select Manual, then click Save ().



Identify the PageBuilder Wireframe in the CMS

In this step Grace, the CMS administrator, makes the wireframe that Pete created available within the Ektron CMS400.NET Workarea.

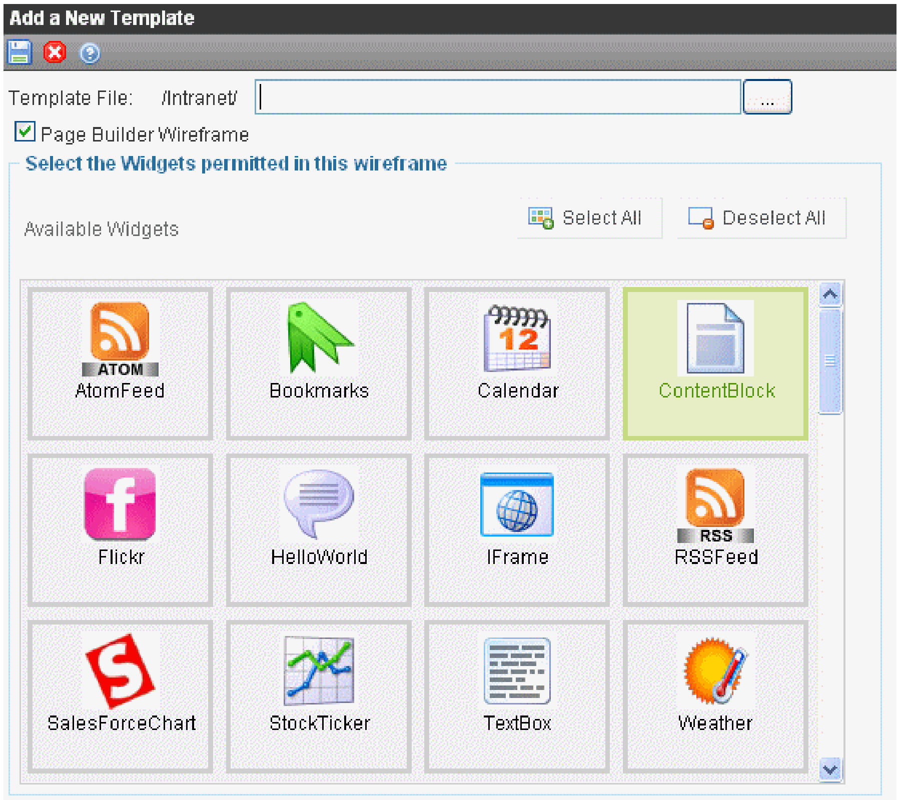
1. In the Ektron CMS400.NET Workarea, she goes to Settings > Configuration > Template Configuration.
2. She clicks the Add button ().
3. The Add a New Template screen appears.



4. Grace clicks the browse button and navigates to PageLayout.aspx, the wireframe Pete created earlier in "Create a PageBuilder Wireframe" on page 6-8.
5. She clicks the PageBuilder Wireframe check box. This box tells Ektron CMS400.NET that this template can be used to create a PageBuilder page.

All widgets that can be applied to the template appear. Ektron CMS400.NET provides over 30 standard widgets. See "Standard Widgets" on page 21-404.

Note: "Creating Your Own Widgets" on page 21-386 explains how to create a custom widget.



6. Grace clicks the ContentBlock and List Summary widgets. When she does, their background color changes.
7. She clicks Save ().

Assign the PageBuilder Wireframe to a Folder

Here, Grace creates a folder for the content that will appear on the new page. To accomplish this, she does the following.

1. Grace clicks the Content tab in the Ektron CMS400.NET Workarea. All folders appear in the left panel.
2. She clicks the Root folder (highlighted below).

Note: For more information about folder permissions and approval chains, see "WorkFlow" on page 5-28.

3. She clicks New > Folder.

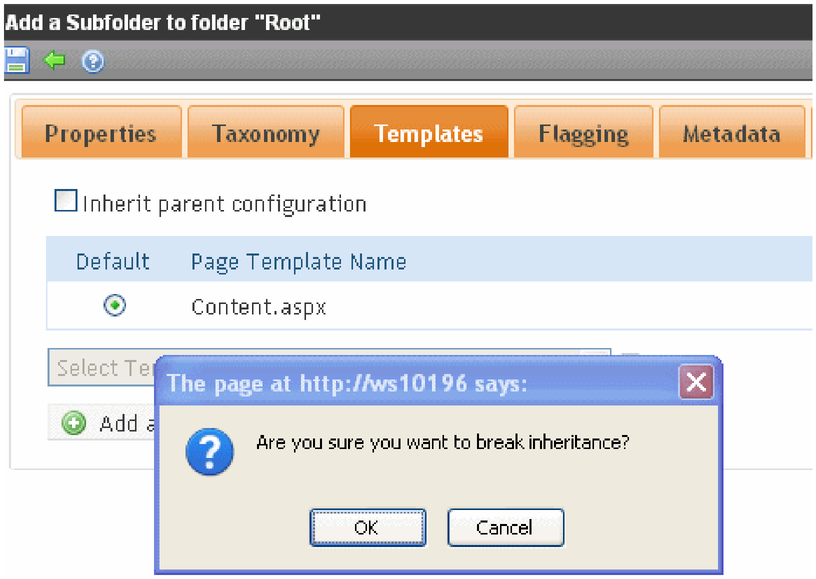
Grace knows that it is an Ektron best practice to keep content and PageBuilder pages in separate folders, so she will later create and configure a folder called “Content”. The content folder will simply contain content blocks and other assets, as well as sub-folders.

4. She accesses the folder properties for the new folder.
5. In the **Name** field, she types **Pages**.

Next, Grace assigns the template created earlier as the default (and only) template for this folder. This will ensure that only PageBuilder pages can be created in this folder.

6. Grace clicks the **Templates** tab.
7. Grace clears the Inherit Parent Template Configuration option and clicks **OK** at the prompt.

Note: For more information about folder inheritance, see "Folder Permissions" on page 5-43.

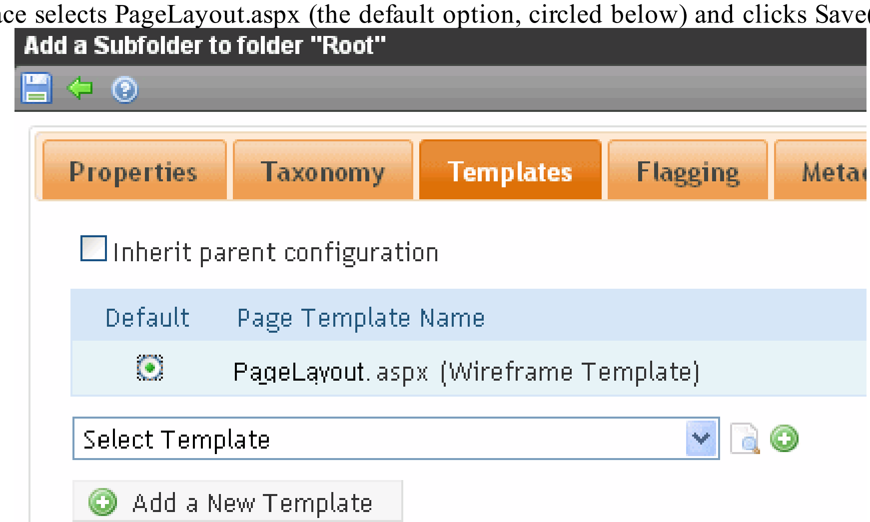


8. She selects PageLayout.aspx from the template list. This is the wireframe Pete created earlier.

9. She clicks the Add button ( ) to the right of the pull-down menu. PageLayout.aspx is now added to the list of page templates.

10. She deletes CMSlogin.aspx from the list to ensure that no content is placed in the folder.

11. Grace selects PageLayout.aspx (the default option, circled below) and clicks Save( ).



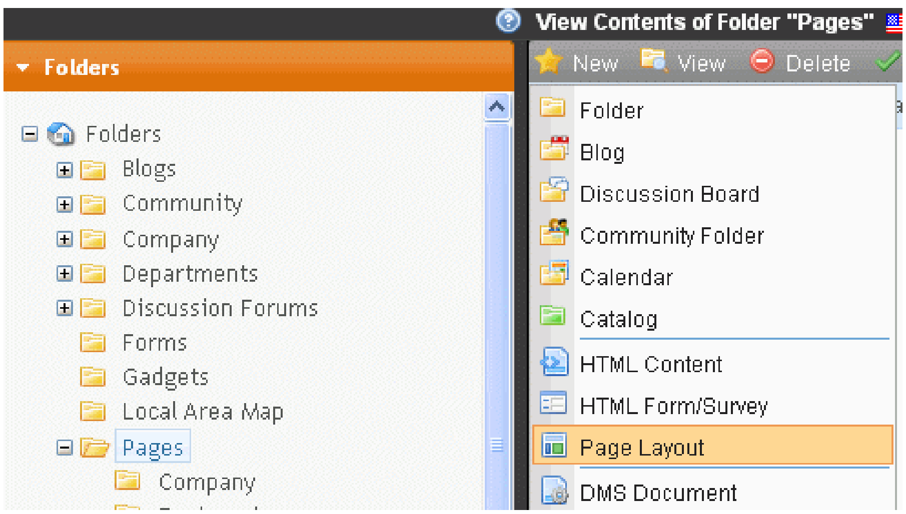
12. Grace will follow steps 3 through 6 to create a folder for content. However, this time, instead of assigning pagelayout.aspx as the template, she will assign a template used to create Ektron CMS400.NET content.

Create the New Page

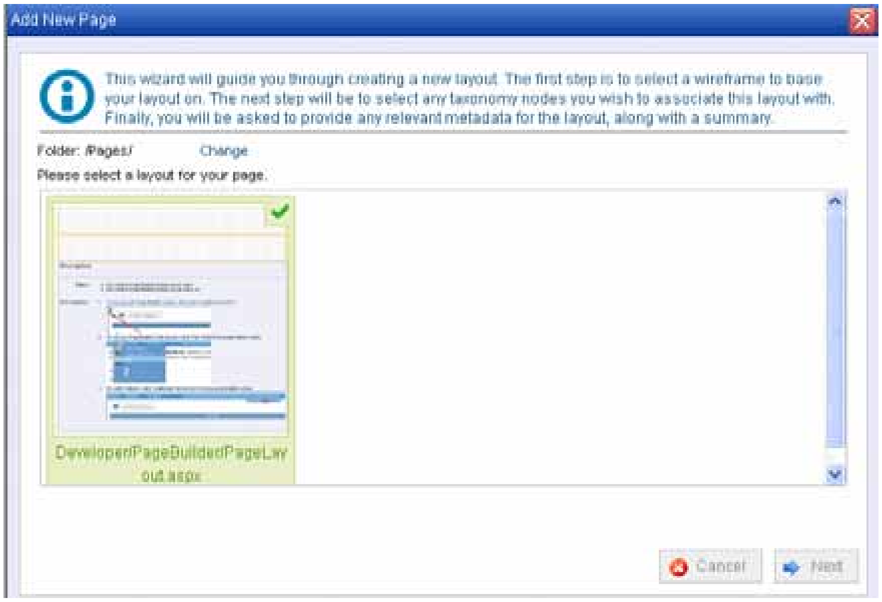
It's time for Pierre and his team to create a PageBuilder page. Currently, at AcmeBooks.com, there is a pressing need to market a new series of mystery novels from an up-and-coming Australian novelist. So, the Marketing team needs to quickly create a Web page to announce the new series. Here's how they build the page with PageBuilder.

Warning! When you edit Pagebuilder pages in the Ektron CMS400.NET Workarea via Internet Explorer, IE version 7 or higher is required.

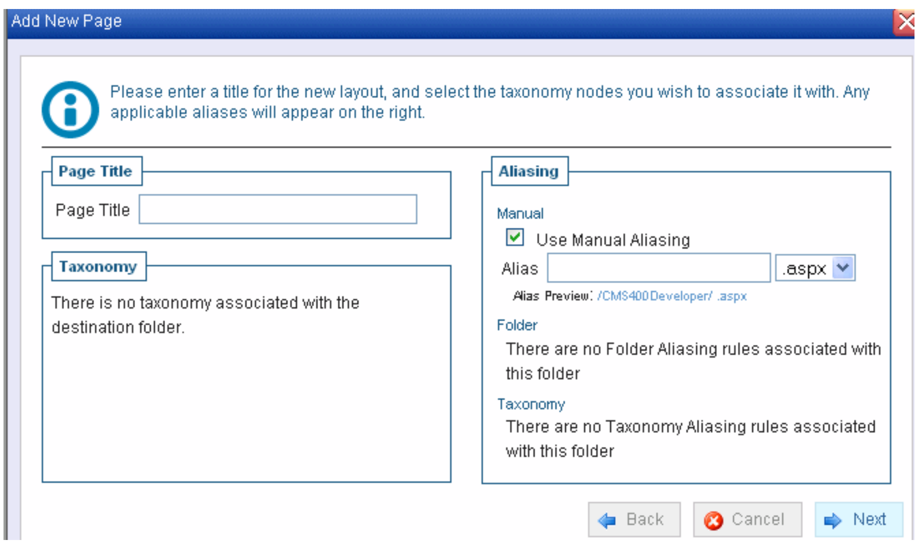
1. They click the Pages folder, which was created in "Assign the PageBuilder Wireframe to a Folder" on page 6-15.
2. They click New > Page Layout.



3. The Add New Page screen appears.



4. Since only one template is assigned to the folder, it appears as the default. Click **Next**.
5. A new screen appears.



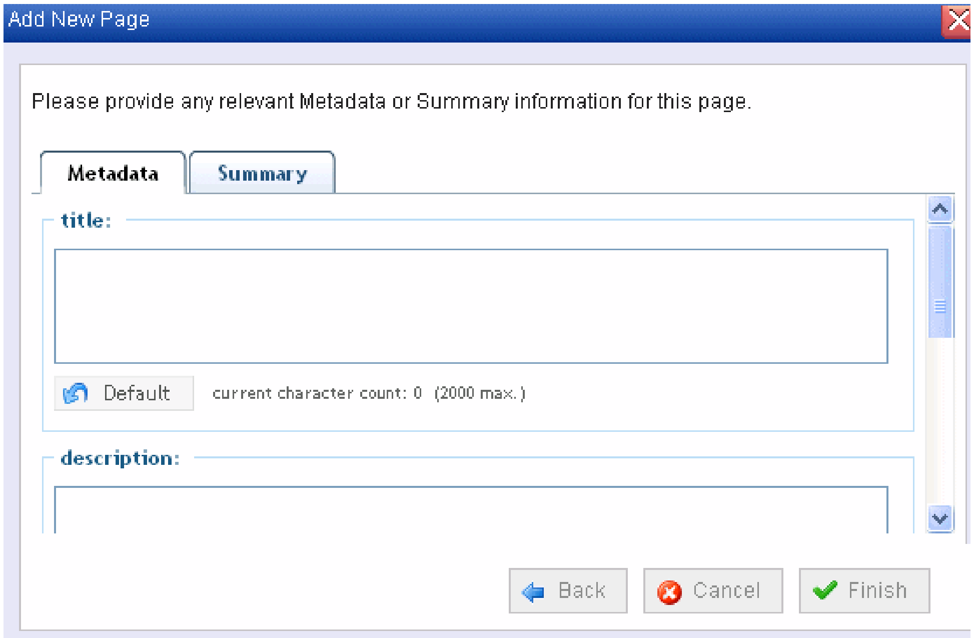
This allows the team to assign a title, taxonomy, and aliasing information to the page.

6. The team enters New Australian Mystery Series in the **Page Title** field.
7. By default, the Manual Alias matches the Page Title. The Marketing team changes it to **Australian_Mystery**.

They do this in the Alias field so the new page has a user-friendly name. For example, by default, the page's name is `www.acmebooks.com/new_mystery_series.aspx`. The alias Australian_Mystery lets the page display as `www.acmebooks.com/Australian_Mystery`.

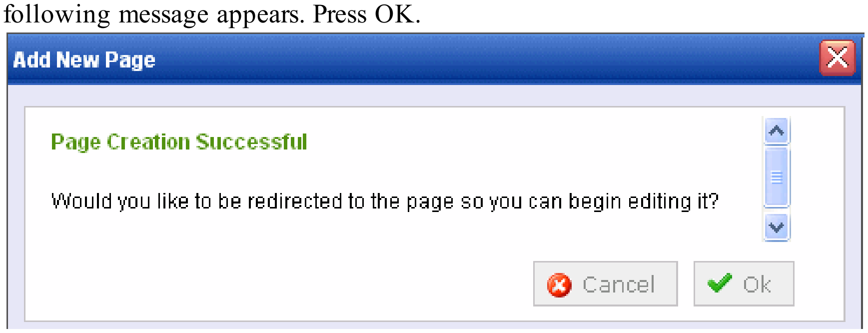
8. Click **Next**.

9. The following screen appears.



This allows the team to assign metadata and a summary to the page. See Also: "Working with Content Summary" on page 7-142; "Working with Metadata" on page 7-146

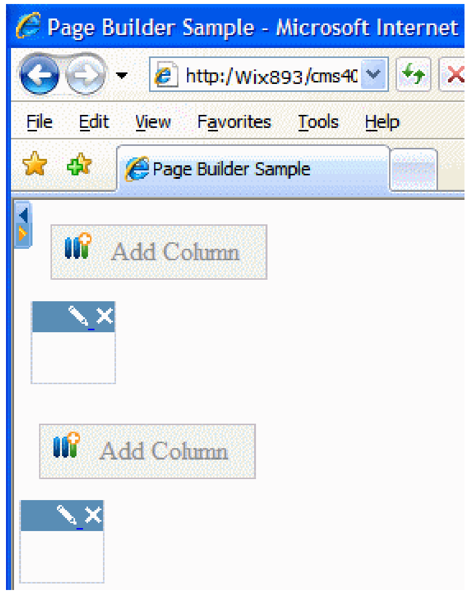
10. Click **Finish**.
11. The following message appears. Press OK.



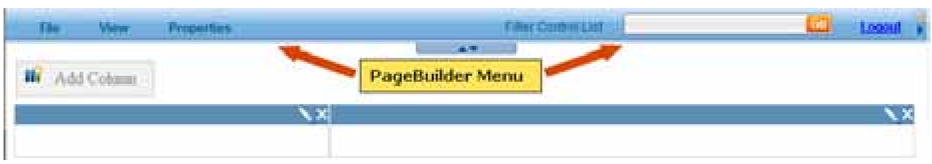
Place Widgets on the Page

Note: For information about how to create a widget, see "Creating Your Own Widgets" on page 21-386.

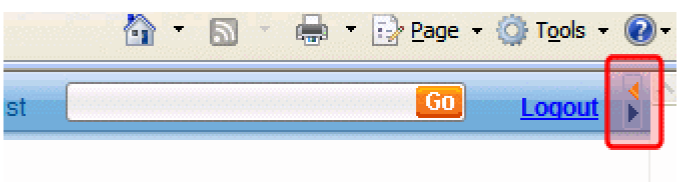
After Pierre and the Marketing team create the page, a new page opens. It contains one dropzone, which consists of two Add Column buttons and two columns (shown below).



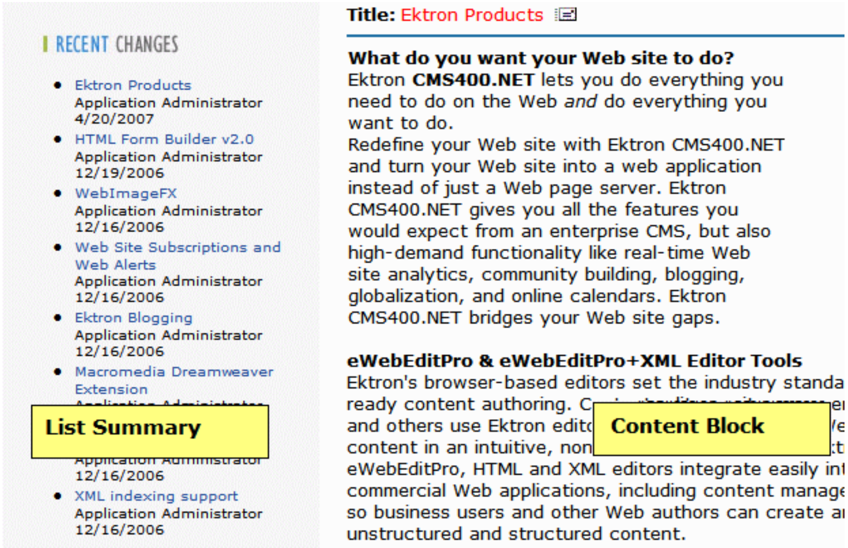
The top of the page contains a PageBuilder menu control. Pierre will use it to perform actions on the page, such as check in, view properties, and drop widgets onto the page.



Pierre uses the right/left arrow buttons (circled below) to open and close the PageBuilder menu.



Pierre determines that the page needs a two-column layout, as shown below.



Note: Although you can drop existing content onto the page, the Marketing team will create new content on the page.

- The left column is 35% wide and displays a list of all content in the Marketing folder. Web site visitors use the list to access all Marketing collateral for AcmeBooks.com.
- The right column is 65% wide and displays a single content block.

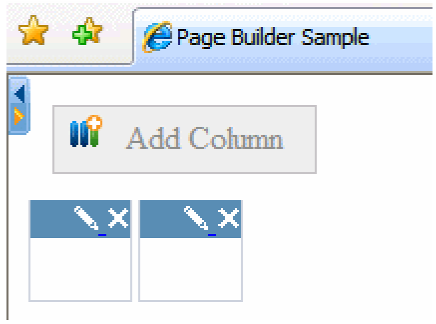
Pierre's Marketing team creates this layout in three steps:

- "Part 1: Add New Column and Set Column Widths" on page 6-22
- "Part 2: Insert New Content Block Widget into Right Column" on page 6-24
- "Part 3: Insert a List Summary Widget into Left Column" on page 6-27

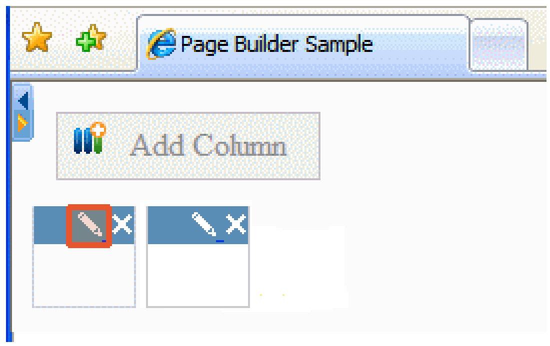
Part 1: Add New Column and Set Column Widths

In this part of the procedure, the Marketing team adds a second column to the right of the top one. Then, they set the width of both columns.

1. They click the Add Column button, and a new column appears to the right of the existing one.

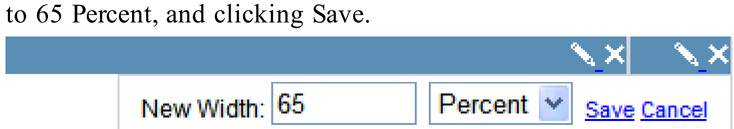


2. They set the left column width to 35% by clicking the pencil icon (circled below).



3. A field lets them enter a width and measurement (pixels or percent).

4. So, they enter 35 into the New Width field, change the measurement to Percent, and click Save.
5. Then, the team sets the right column to 65% width by clicking the pencil icon, changing its width to 65 Percent, and clicking Save.

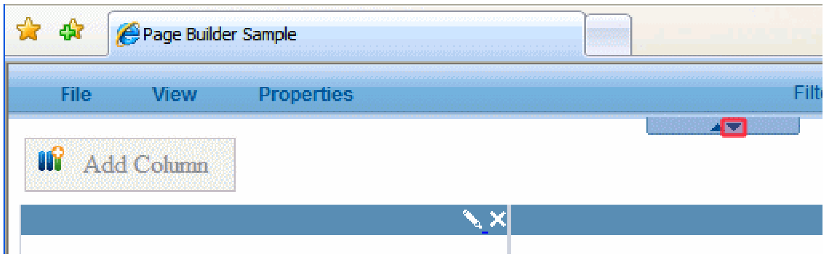


6. Now the screen looks like this.

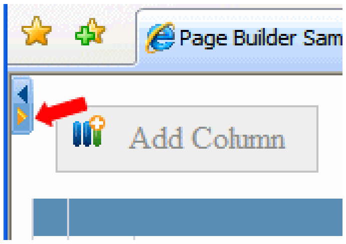
Part 2: Insert New Content Block Widget into Right Column

Now that Pierre's team has set up the columns, Pierre is eager to try inserting a ContentBlock widget into the right column.

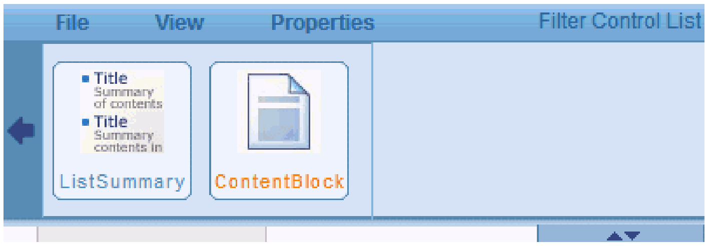
1. From the small block in the center of the PageBuilder menu, Pierre clicks the down arrow (circled below).



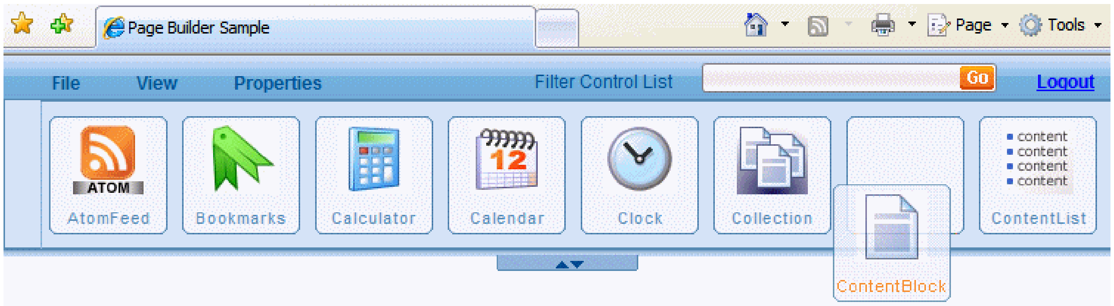
Note: Pierre tells his team that if they do not see the PageBuilder Menu, look for small block with two arrows, one orange and one blue (shown right). Click the orange arrow to open the menu.



2. All widgets that the Web site administrator (Grace) assigned to the page wireframe in "Identify the PageBuilder Wireframe in the CMS" on page 6-14 appear.

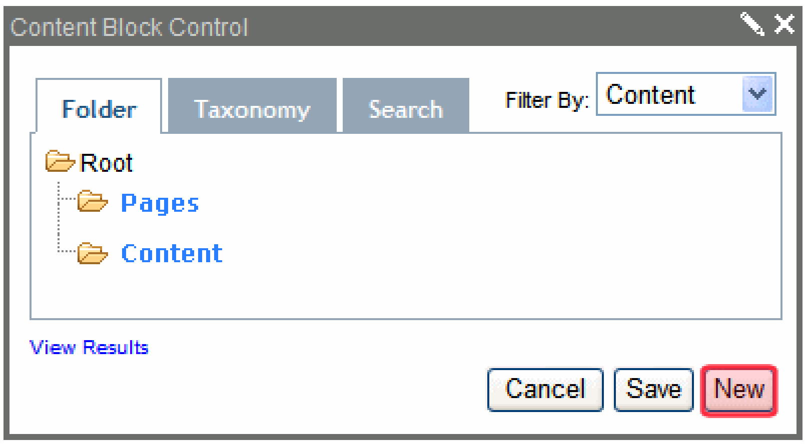


3. Pierre places the cursor over the content block widget and drags it below the widget panel.
4. The widget panel disappears.
5. Pierre drops the content block widget in the right column.

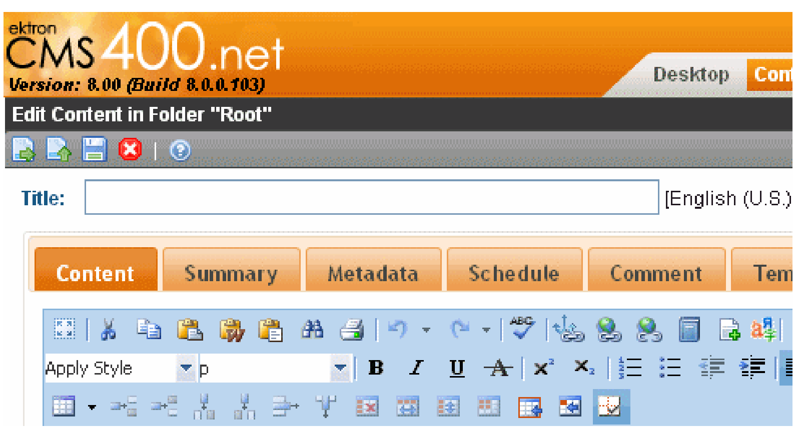


6. That column looks like this.

7. Pierre clicks the pencil icon (circled above), and the following screen appears.



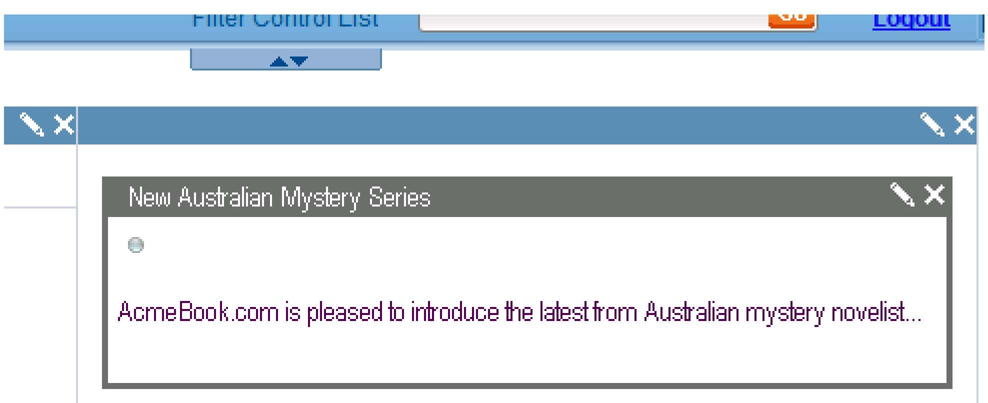
8. He selects the Content folder, and clicks New in the lower right corner (circled above).
9. The Add Content screen appears.



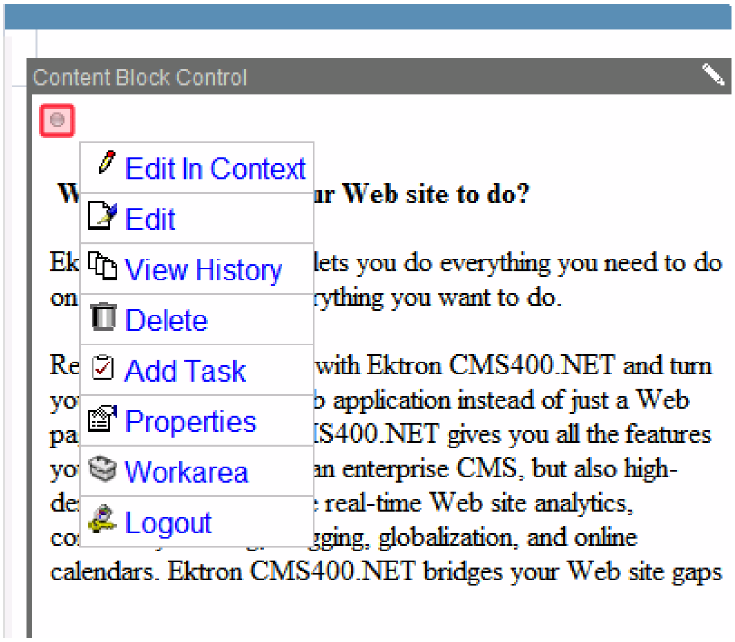
10. In the Title field, Pierre enters **New Australian Mystery Series**.

11. In the content area, he enters some text about the series of books, and clicks the Check In button ( ).

12. The content displays as shown below.



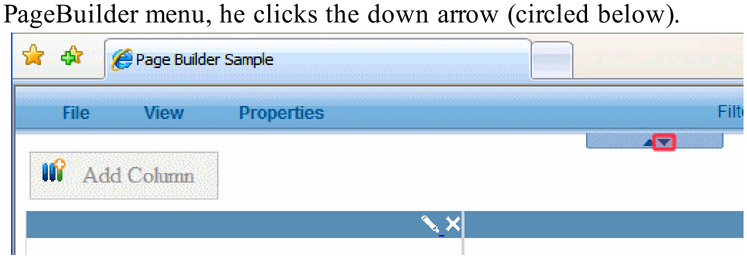
13. When the Marketing team wants to edit content on this page, they can click the Access Point in the upper left corner. A menu displays.



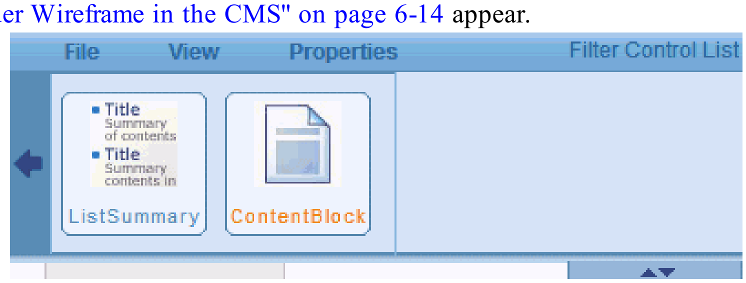
Part 3: Insert a List Summary Widget into Left Column

Now that Pierre has inserted content in the right column, he can insert a List Summary widget in the left column.

1. From the PageBuilder menu, he clicks the down arrow (circled below).

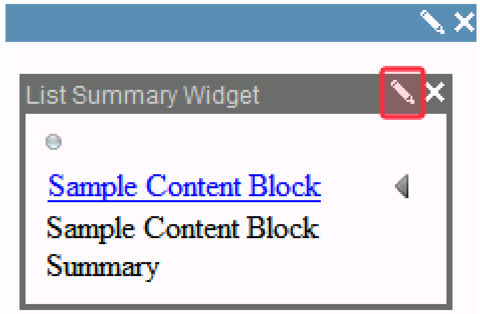


2. All widgets Grace (the CMS administrator) assigned to the page wireframe in "Identify the PageBuilder Wireframe in the CMS" on page 6-14 appear.

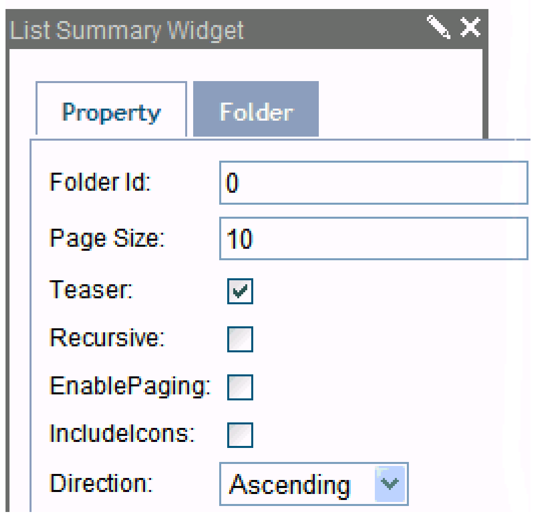


3. Pierre places the cursor over the List Summary widget and drags it below the widget panel.

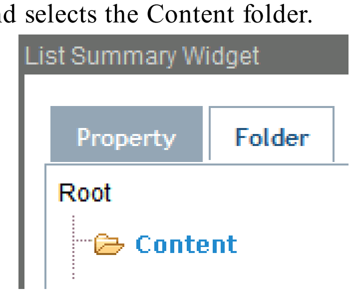
4. The widget panel disappears.
5. He drops the List Summary icon in the left column.
6. That column looks like this.



7. The widget displays a list summary for content in the root folder. Pierre needs to change it to refer to the Content folder. To do that, he clicks the pencil icon in the widget's top right corner (circled above).
8. The following screen appears.

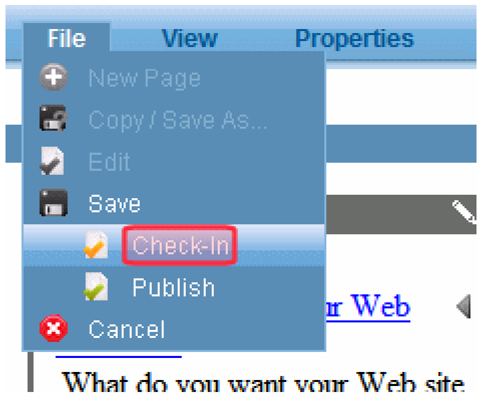


9. He clicks the Folder tab and selects the Content folder.



10. He clicks **Save**, and the list summary shows content in the Content folder.

11. From the PageBuilder menu, Pierre clicks File > Check In.



12. The whole Marketing team can now review the page in Preview mode and make sure it is formatted properly.
13. If they need to change it, they can click File > Edit from the PageBuilder menu.

Final Assessment

The CIO of AcmeBooks.com is can see the power of the PageBuilder, and is convinced that this will greatly increase effectiveness of the company's Marketing and sales goals. The simple workflow and ease of use will help the Marketing team quickly deploy and launch marketing campaigns and keep the Web site fresh and dynamic.

She still has one lingering question:

"How on earth do you build a widget?"

PageBuilder Code Samples

The following shows a complete example of pagelayout.aspx

PageLayout.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="PageLayout.aspx.cs"
Inherits="Developer_PageBuilder_PageLayout" %>
<%@ Register Src="~/Workarea/PageBuilder/PageControls/PageHost.ascx" TagName="PageHost"
 TagPrefix="PB" %>
<%@ Register Src="~/Workarea/PageBuilder/PageControls/DropZone.ascx" TagName="DropZone"
 TagPrefix="PB" %>
<%@ Register Assembly="Ektron.Cms.Widget" Namespace="Ektron.Cms.PageBuilder"
TagPrefix="PB" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
 <title>Page Builder Sample</title>
</head>
<body>
 <form id="form1" runat="server">
 <div>
 <PB:PageHost ID="ucCms400Developer" FolderID="382" runat="server" />
<PB:DropZone ID="top" AllowAddColumn="true" AllowColumnResize="true" runat="server">
<ColumnDefinitions>
<PB:ColumnData columnID="0" unit="percent" width="100" />
</ColumnDefinitions>
</PB:DropZone>
 </div>
 <div>
<PB:DropZone ID="bottom" AllowAddColumn="true" AllowColumnResize="true" runat="server">
<ColumnDefinitions>
<PB:ColumnData columnID="0" unit="percent" width="100" />
</ColumnDefinitions>
</PB:DropZone>
 </div>
 <div>
 </div>
 </form>
</body>
</html>
```

PageLayout.aspx.cs

The following shows a complete example of pagelayout.aspx.cs

```
using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
```

```
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;
using Ektron.Cms.PageBuilder;
public partial class Developer_PageBuilder_PageLayout : PageBuilder
{
 protected void Page_Load(object sender, EventArgs e)
 {
 }
 public override void Error(string message)
 {
 jsAlert(message);
 }
 public override void Notify(string message)
 {
 jsAlert(message);
 }
 public void jsAlert(string message)
 {
 Literal lit = new Literal();
 lit.Text = "<script type=\"\" language=\"\">{0}</script>";
 lit.Text = string.Format(lit.Text, "alert('" + message + "');");
 Form.Controls.Add(lit);
 }
}
```

Advanced PageBuilder Topics

This section covers the following advanced topics that help you implement PageBuilder more fully.

Wireframes:

- "Customizing the PageBuilder Menu Control" on page 6-32
- "Customizing the DropZone User Control" on page 6-34
- "Assigning a Default Page to a Wireframe" on page 6-35
- "Assigning a Default Taxonomy to a Wireframe" on page 6-37

Widgets:

- "Applying Global and Local Properties to Widgets" on page 6-41
- "Adding a Field to a Widget" on page 6-44
- "Including Help for a Widget" on page 6-45
- "Opening a Widget’s Edit Properties Screen in a Modal Dialog" on page 6-46
- "Working with JavaScript and Cascading Style Sheets" on page 6-39
- "Verifying that a Page is a PageBuilder Page" on page 6-40

Customizing the PageBuilder Menu Control

You can customize the PageBuilder Menu user control’s behavior in the following ways.

- "Determining the Ektron CMS400.NET Folder to Which Pages are Saved" on page 6-33
- "Changing the Page’s Cache Interval" on page 6-34

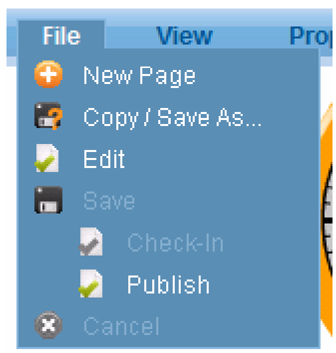
Determining the Ektron CMS400.NET Folder to Which Pages are Saved

How a Page's Default Folder is Set

By default, when a site user creates a new PageBuilder page from an existing one, it is saved to the same Ektron CMS400.NET folder. For example, consider this folder/content structure.

```
Root (folder id 0)
Products (folder id 20)
PageLayout: "Omaha Mailorder Steaks" (content id 35)
Services (folder id 30)
```

If you are viewing `content id` 35 and click New Page or Copy/Save as, the new page is saved to that content's folder (`Products, folder id= 20`).



Note: When you create a new page layout from the *Workarea*, you first select a folder then begin creating the page layout.

Overriding the Default Folder

Use the PageBuilder control's `FolderID` property to override the default and specify an Ektron CMS400.NET folder to which new pages are saved. Here is an example of that property:

<ucPageBuilder:PageHost ID="ucPageHost1" FolderID="25" runat="server" />

When a user is working on a page that hosts this PageBuilder control, and he saves a new page, it is saved to `folder id` 25.

Changing the Page's Cache Interval

Use the `CacheInterval` property to cache a page and its Widgets that represent Ektron CMS400.NET server controls, such as a Collection Widget.

This property sets the amount of time, in seconds, that data is cached. The default is 0 (zero).

<ucPageBuilder:PageHost ID="ucPageHost1" CacheInterval="25" runat="server" />

Customizing the DropZone User Control

Three properties lets you customize the DropZone user control's behavior in the following ways.

- "Letting Users Add Columns to a DropZone" on page 6-34
- "Letting Users Resize a Dropzone" on page 6-34
- "Setting a DropZone's Column Widths Programmatically" on page 6-35

Letting Users Add Columns to a DropZone

Use the `AllowAddColumn` property to let users add columns to a DropZone.

<ucPageBuilder:DropZone ID="ucDropZone1" AllowAddColumn="true" Allow-ColumnResize="true" runat="server" />

For example, a Dropzone initially contains one column, but the page creator wants three. If this property is set to `true`, this change is possible.

This property's default value is `true`.

Letting Users Resize a Dropzone

Use the `AllowColumnResize` property to let users change the width of columns in a DropZone.

<ucPageBuilder:DropZone ID="ucDropZone1" AllowAddColumn="true" Allow-ColumnResize="true" runat="server" />

For example, column width is 100% by default. A page creator wants to change it to 50%. If this property is set to `true`, this change is possible.

This property's default value is `true`.

Setting a DropZone's Column Widths Programmatically

If you want to set a dropzone's column widths programmatically, follow these steps.

1. Add the following `Register` statement to the page's `<head>` tags.

```
<%@ Register Assembly="Ektron.Cms.Widget" Namespace="Ektron.Cms.PageBuilder"
TagPrefix="PB" %>
```

Warning! The Widget and Dropzone assemblies must have the same Tag Prefix. See example.

```
<%@ Register Src="~/Workarea/PageBuilder/PageControls/PageHost.ascx" TagPrefix="PB"
TagName="PageHost" %>
<%@ Register Src="~/Workarea/PageBuilder/PageControls/DropZone.ascx" TagPrefix="PB"
TagName="DropZone" %>

<%@ Register Assembly="Ektron.Cms.Widget" Namespace="Ektron.Cms.PageBuilder" Tag-
Prefix="PB"%>
```

2. Within the page's `<body>` tags, add the following code. the following example adds three columns of 100 pixels each.

```
<PB:DropZone ID="Middle" runat="server">
<ColumnDefinitions>
<PB:ColumnData width="100" columnID="0" unit="pixels"></PB:ColumnData>
<PB:ColumnData width="100" columnID="1" unit="pixels"></PB:ColumnData>
<PB:ColumnData width="100" columnID="2" unit="pixels"></PB:ColumnData>
</ColumnDefinitions>
</PB:DropZone>
```

Set `width` to an appropriate number. For the `unit`, the options are

- pixels
- percent
- em

If you set a dropzone's column widths programmatically, you must also set the `AllowAddColumn` and `AllowColumnResize` properties to `false`. If you do not, users working with widgets can add columns and adjust column widths on the page, but their changes will revert to these settings when they try to save.

Customizing the Wireframe

Assigning a Default Page to a Wireframe

You can assign a default page to a wireframe. If you do, and a site visitor enters a URL with a path to that wireframe that lacks a query string ID, the default page appears. The following example explains this feature.

URL	Returns this Page Layout content
`http://`*site root*`/cms400developer/developer/PageBuilder/PageLayout.aspx?pageid=1036`	In the PageBuilder folder, PageLayout ID 1036
`http://`*site root*`/cms400developer/developer/PageBuilder/PageLayout.aspx` (Note lack of query string parameter)	The Page Layout page identified in the `PageLayout.aspx` file's PageBuilder menu user control `DefaultPageID` property.

To assign a default page to a wireframe, follow these steps.

1. In the Ektron CMS400.NET Workarea, create a PageBuilder page that will be used as the default pageid for a wireframe.
2. In Visual Studio, open the wireframe file assigned to that folder.
3. Find the PageBuilder menu user control (circled below).

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="PageLayout.aspx.cs" Inh
<%@ Register Src="~/Workarea/PageBuilder/PageControls/PageHost.ascx" TagName="P
    TagPrefix="ucPageBuilder" %>
<%@ Register Src="~/Workarea/PageBuilder/PageControls/DropZone.ascx" TagName="I
    TagPrefix="ucPageBuilder" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.c
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Page Builder Sample</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <ucPageBuilder:PageHost ID="ucCms400Developer" runat="server" />
            <ucPageBuilder:DropZone ID="Top" AllowAddColumn="true"   AllowColur
        </div>
        <div>
            <ucPageBuilder:DropZone ID="Bottom" AllowAddColumn="true" AllowColu
        </div>
```

4. Add a new property, `DefaultPageID`.
5. For the property's value, enter the ID of the page you created in Step 1.

Here is an example of that line with the `DefaultPageID` property added.

```
<ucPageBuilder:PageHost ID="ucCms400Developer" DefaultPageID="1035" runat="server" />
```

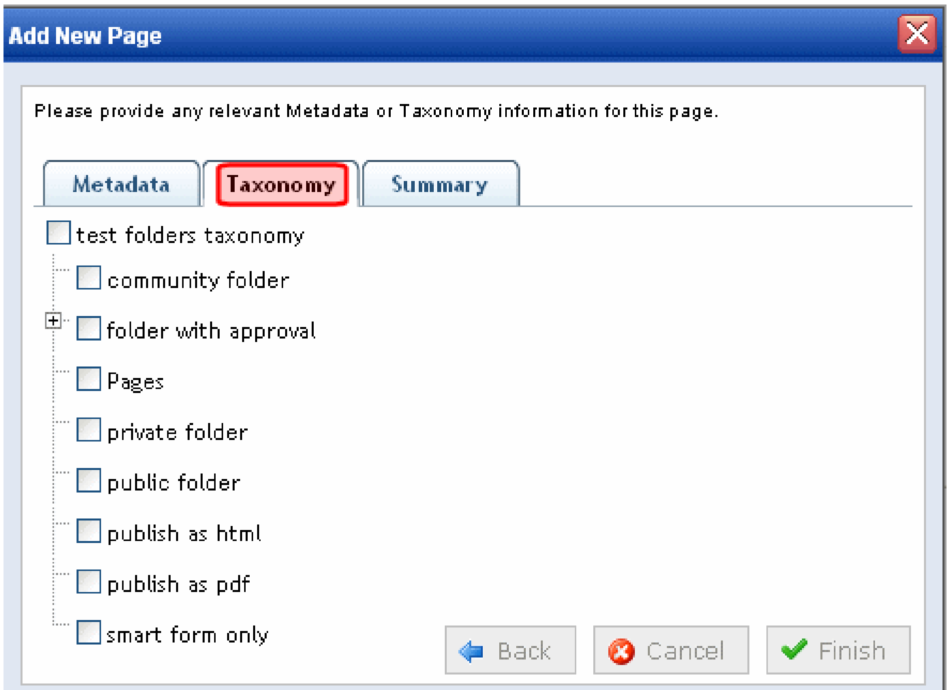
6. Save your changes.

To continue the above example, if someone opens a browser and enters `http://`*site root*`/cms400developer/developer/PageBuilder/PageLayout.aspx`, he is redirected to

```
http://site root/cms400developer/developer/PageBuilder/PageLayout.aspx?pageid=1035
```

Assigning a Default Taxonomy to a Wireframe

While creating a new PageBuilder page in the Ektron CMS400.NET Workarea, the user can assign one or more of the taxonomy categories that are set in the page's folder properties. See example below.



As a developer, you can assign a *default* taxonomy category to a wireframe. If you do, and the user creating a page using that wireframe makes no changes, the default category is assigned to the page. However, the user can change the taxonomy when the Add New Page screen appears.

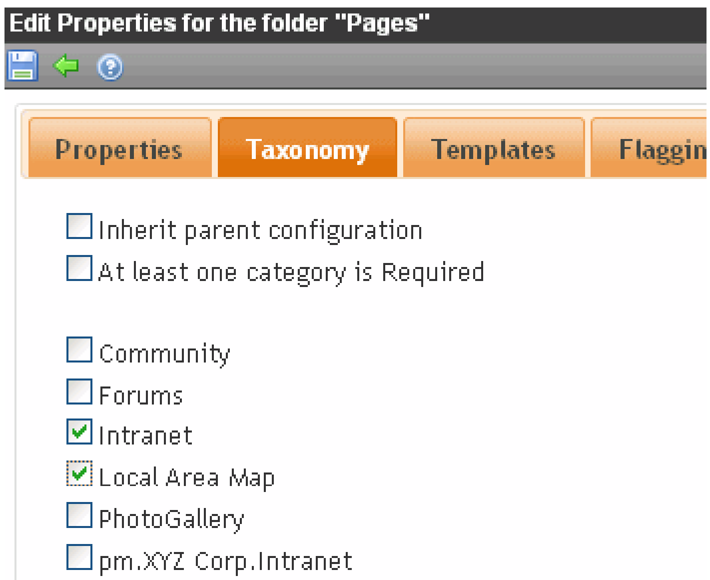
Note: Default taxonomies are applied only when a user logs into a Web site and adds a new page -- they are *not* applied when creating new pages within the Workarea.

To assign a default taxonomy category to a wireframe, follow these steps.

Prerequisite

The ID number and the name of the top-level parent taxonomy for the default taxonomy category. For example, the screen below shows that the Photo category's ID is **138**, and its parent taxonomy is **Photo Gallery.**

1. In the Ektron CMS400.NET Workarea, navigate to the folder properties screen of the folder to which the wireframe is applied.
2. Click the Edit button ( ).
3. Locate the Taxonomy tab of the Edit Folder properties screen.



4. If you will assign to the wireframe a top-level taxonomy (that is, one of those in the area circled above), check its box.
5. If you will assign a taxonomy *category* (that is, a child node below a top-level taxonomy), check the box of its *parent* Taxonomy.
6. Save your changes to folder properties.
7. Open Visual Studio.
8. Open the wireframe to which you will assign a default taxonomy.
9. Find the PageBuilder menu user control (circled below).

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="PageLayout.aspx.cs" Inh
<%@ Register Src="~/Workarea/PageBuilder/PageControls/PageHost.ascx" TagName="P
    TagPrefix="ucPageBuilder" %>
<%@ Register Src="~/Workarea/PageBuilder/PageControls/DropZone.ascx" TagName="I
    TagPrefix="ucPageBuilder" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.c
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Page Builder Sample</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <ucPageBuilder:PageHost ID="ucCms400Developer" runat="server" />
            <ucPageBuilder:DropZone ID="Top" AllowAddColumn="true"   AllowColur
        </div>
        <div>
            <ucPageBuilder:DropZone ID="Bottom" AllowAddColumn="true" AllowColu
        </div>
```

10. Add a new property, `SelTaxonomyID`.

11. For the property's value, enter the ID of the default taxonomy or category.

Here is an example of that control with the `SelTaxonomyID` property added.

```
<ucPageBuilder:PageHost ID="ucCms400Developer" SelTaxonomyID="13" runat="server" />
```

12. Save your changes.

To continue the above example, the next time someone creates a page based on that wireframe, taxonomy ID 13 will be the page's default taxonomy category. If desired, the user can change it by navigating to the Taxonomy tab and assigning different or additional categories.

Customizing Widgets

The following topics let you further customize widget behavior.

- "Working with JavaScript and Cascading Style Sheets" on page 6-39
- "Verifying that a Page is a PageBuilder Page" on page 6-40
- "Applying Global and Local Properties to Widgets" on page 6-41
- "Adding a Field to a Widget" on page 6-44
- "Including Help for a Widget" on page 6-45
- "Opening a Widget's Edit Properties Screen in a Modal Dialog" on page 6-46

Working with JavaScript and Cascading Style Sheets

You can use JavaScript or a cascading style sheet to add custom functionality or styling to a widget. To do this, place the JavaScript or cascading style sheet (css) instructions in an external file, then register it in the codebehind file.

Here is an example of including a JavaScript file.

```
void EditEvent(string settings)
JS.RegisterJSInclude(this, _api.SitePath + "widgets/contentblock/jquery.cluetip.js",
"EktronJqueryCluetipJS");
```

Here is an example of including a .css file.

```
Css.RegisterCss(this, _api.SitePath + "widgets/contentblock/CBStyle.css","CBWidgetCSS");
```

Warning! You must register JavaScript and .css files in an external file, as shown above. If you do not, the OnSubmit event places HTML in the TextArea field in encoded brackets (< >) and generates a dangerous script error.

The `JS.RegisterJSInclude` and `Css.RegisterCss` functions take three arguments.

Argument	Description	Example (from above code)
1	A reference to the control that needs the script or style sheet on the page. Typically, 'this' or 'me'.	`this`
2	A unique key. Only include the script specified by a key once. Your organization should develop a standard way to define JavaScript and .css keys.	■ `"EktronJqueryCluetipJS"` ■ "CBWidgetCSS"
3	The URL of the script or style sheet being included. Ektron recommends prefixing the URL with a site path, so it can be used with URLs like `http://localhost/ektrontech` and `http://ektrontech`.	■ `_api.SitePath + "widgets/contentblock/jquery.cluetip.js"` ■ `_api.SitePath + "widgets/contentblock/CBStyle.css"`

Note that Widgets use an update panel for partial postbacks. As a result, the ASP.NET tree view and file upload controls do not work with widgets. Ektron CMS400.NET has workarounds for these functions. For an example of a tree view, see the content block widget (*site root*/widgets/contentblock.ascx). For an Ajax file uploader, see the flash widget (*site root*/widgets/flash.ascx).

Verifying that a Page is a PageBuilder Page

Whenever your code is interacting with a widget, you need to verify that it is on a page builder page (as opposed to another Ektron CMS400.NET page that hosts widgets, such as personalization).

To check for this, insert the following code:

```
Ektron.Cms.PageBuilder.PageBuilder p = (Page as PageBuilder);
If(p==null) // then this is not a wireframe
```

When you want to check the mode, use code like this.

```
If(p.status == Mode.Edit) // we are in edit mode
```

Applying Global and Local Properties to Widgets

Global and local widget properties reduce your development effort by eliminating settings data classes. While you can still use these classes and manage your own serialization, for the vast majority of types, the built-in engine performs all the work necessary.

Global properties apply to every instance of a widget. *Local* properties can apply to one instance of a widget. If both local and global values are assigned to a property, the local overrides the global.

As an example of using a local property to override a global, consider a ListSummary widget. You may want its sort to mostly be by modified date in descending order, but in certain instances you want to override that and sort by title in ascending order.

The following table explains how to set the different property types.

Type	Setting default value in codebehind file	How to change default

Global	`[GlobalWidgetData()]`
	public string NewWidgetTextData {
	get {return _ NewWidgetTextData;}
	set {_NewWidgetTextData = value;
	}}
		Workarea > Settings > Configuration > Personalizations > Widgets

Local	`[WidgetDataMember()]`
	public string New-WidgetTextData {
	get { return _New-WidgetTextData; }
	set { _NewWidgetTextData = value;
	} }
		User drops widget onto PageBuilder page, then clicks edit button ()

See Also: "Setting a Widget's Global Properties" on page 6-42; "Setting a Widget's Local Properties" on page 6-43

Setting a Widget's Global Properties

A *global* property lets an Ektron CMS400.NET developer or administrator assign properties and values that apply to all instances of a widget. You apply a global property to the widget's codebehind page. Administrators could then set or update the property's value in the Workarea's Widgets screen.

For example, the BrightCove Video widget requires a player ID. You could insert that in the widget's codebehind file. Then, an administrator could review and possibly update that information in the Workarea widgets screen. Whenever a user drops a BrightCove Video widget onto a page, the player ID is already assigned.

If the developer does *not* set a default value in the codebehind, an administrator must set one on the Workarea's Widgets screen.

If the developer *does* set a default value in the codebehind, it will be applied unless changed by an administrator on the Workarea's Widgets screen.

Steps for Setting a Global Property

Follow these steps to set a global property.

1. Open the widget's codebehind file, which is located in the `site root/widgets` folder.
2. In the `properties` section, insert the `GlobalWidgetData` attribute (shown below) to set the global property's name and type.

```
[GlobalWidgetData()]
public string NewWidgetTextData { get { return _NewWidgetTextData; } set { _
NewWidgetTextData = value; } }
```

Here is an example.

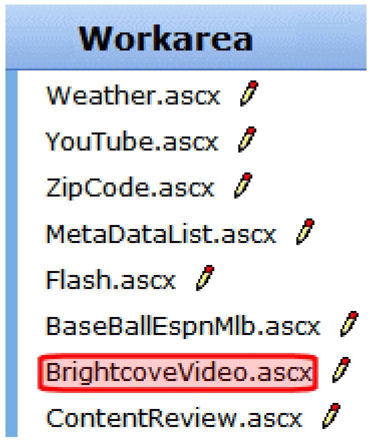
```
public partial class Widgets_BrightcoveVideo : System.Web.UI.UserControl, IWidget
{
    #region properties
    private long _PlayerID;
    public long _VideoID;
    [WidgetDataMember(15037095001)]
    public long PlayerID { get { return _PlayerID; } set { _PlayerID = value; } }
    [GlobalWidgetData(15053010001)]
    public long VideoID { get { return _VideoID; } set { _VideoID = value; } }
    public long publisherID = 14459838001;  // Your company Publisher ID Get from
    public string token = "R2tftyEmD8Kn3M3zoXFj9gA7rax2BIzZDijTcsUCkJl5tXA8c-hgwQ
    #endregion
```

The supported types for `GlobalWidgetData` are

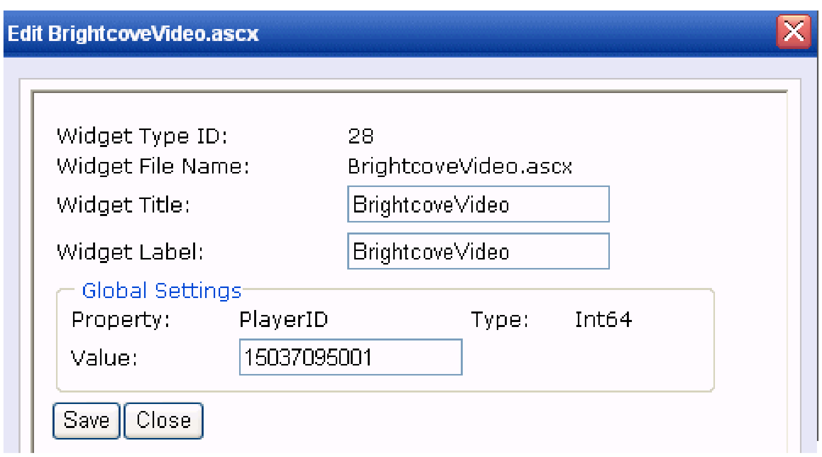
- Date Time
- int
- long
- double

- boolean
- string
- any enumeration

1. Save the codebehind file.
2. In the Ektron CMS400.NET Workarea, go to Settings > Configuration > Widgets.
3. Click the edit icon () for the widget whose codebehind file you edited in Step 1.



4. A dialog lets you view and edit global properties set in the codebehind file. See example below.



Setting a Widget's Local Properties

A *local* property lets an Ektron CMS400.NET user assign property values that apply to a particular instance of a widget. For example, the BrightCove Video widget requires a Video ID, which identifies the video that appears where you drop the widget.

To set a local property, follow these steps.

1. Open the widget's codebehind file, which is located in the `site root/widgets` folder.

2. In the `properties` section, insert the `WidgetDataMember` attribute to set the property. See example below.

```
[WidgetDataMember(150530105432)]1
public long VideoID { get { return _VideoID; } set { _VideoID = value; } }
```

3. If you want to set a default value for the widget, use the attribute's optional argument, which follows `[WidgetDataMember`. In the example above, the value is `150530105432`.
4. Save the settings in your properties by populating them as you normally would.
5. In the Save event, call `_host.SaveWidgetDataMembers();`. See example below.

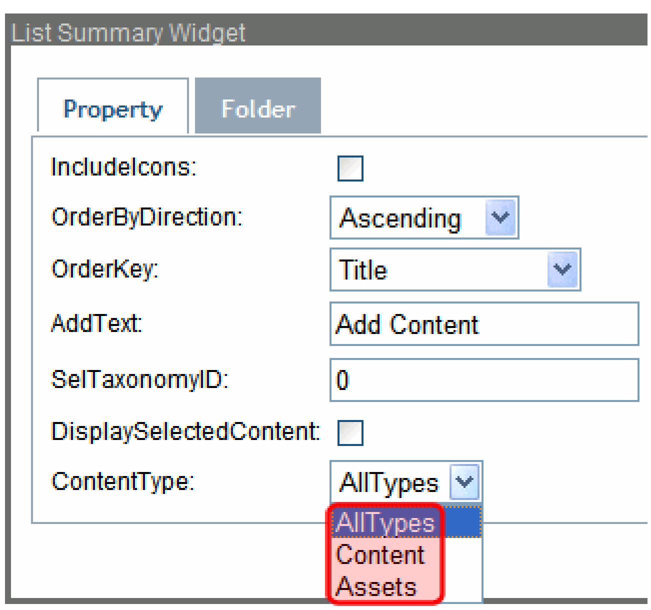
```
protected void SaveButton_Click(object sender, EventArgs e)
{
        VideoID = Int64.Parse(tbData.Text);
        _host.SaveWidgetDataMembers();
      ViewSet.SetActiveView(View);
}
```

Adding a Field to a Widget

This section provides an example of adding a Content type drop down to the List Summary widget. The drop down lets the person dropping the widget on the page select from these choices.

- all types of content
- HTML content only
- assets only

Here is what the drop down looks like once it is implemented.



To add this drop down to the List Summary widget, follow these steps.

1. In Visual Studio, open the ListSummary widget, `site root/widgets/ListSummary.ascx`.
2. Find the text `DisplaySelectedContent`.
3. Below `DisplaySelectedContent`, add the following code to create a drop down list for the `ContentType` property.

```
<tr>
<td>
DisplaySelectedContent:</td>
<td>
<asp:CheckBox ID="DisplaySelectedContentCheckBox" runat="server" />
</td>
</tr>
<tr>
<td>
ContentType:
</td>
<td>
<asp:DropDownList ID="ContentTypeList" runat="server">
<asp:ListItem Value="AllTypes">AllTypes</asp:ListItem>
<asp:ListItem Value="Content">Content</asp:ListItem>
<asp:ListItem Value="Assets">Assets</asp:ListItem>
</asp:DropDownList>
</td>
</tr>
```

4. Save the ListSummary.ascx file.
5. Open the codebehind file, `ListSummary.ascx.cs`.
6. In the properties region, declare a string variable for the `ContentType` property, as shown below.

```
private string _ContentType;
```

7. Create a local property with default setting of `AllTypes`, as shown below.

```
[WidgetDataMember("AllTypes")]
public string ContentType { get { return _ContentType; } set { _ContentType = value; } }
```

8. In the `EditEvent` area, set the select list's value to `ContentType`.

```
ContentTypeList.SelectedValue = ContentType;
```

9. In the `SaveButton_Click` event, set `ContentType` as the select list's value.

```
ContentType = ContentTypeList.SelectedValue;
```

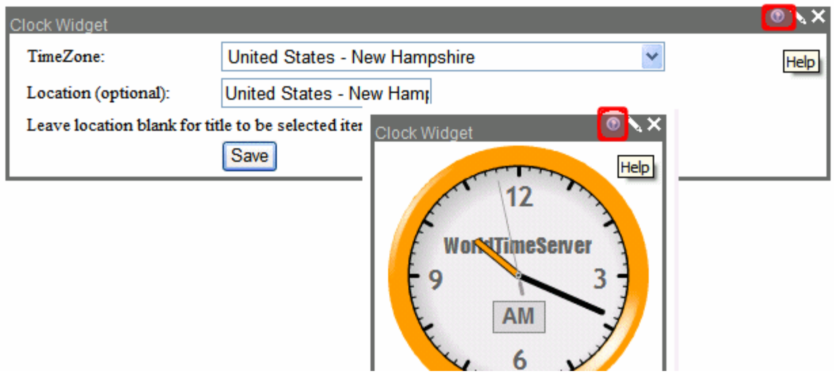
10. In the `SetListSummary()` function, set the List Summary server control's `ContentType` to the `CMSContentType` property.

```
ListSummary1.ContentType = (CMSContentType)Enum.Parse(typeof(CMSContentType),
ContentType);
```

11. Save the ListSummary.ascx.cs file.

Including Help for a Widget

You can include help for any widget. The help is intended to guide the user who is dropping the widget on the page and setting its properties.



The help icon only appears when a user is editing a PageBuilder page. The icon appears both when a user is viewing a widget and editing its properties.

It is not available to a page's site visitors.

Defining a Widget's Help File

To create a widget's help file, follow these steps.

1. Create an HTML file with information for users who will drop the widget on the PageBuilder page.

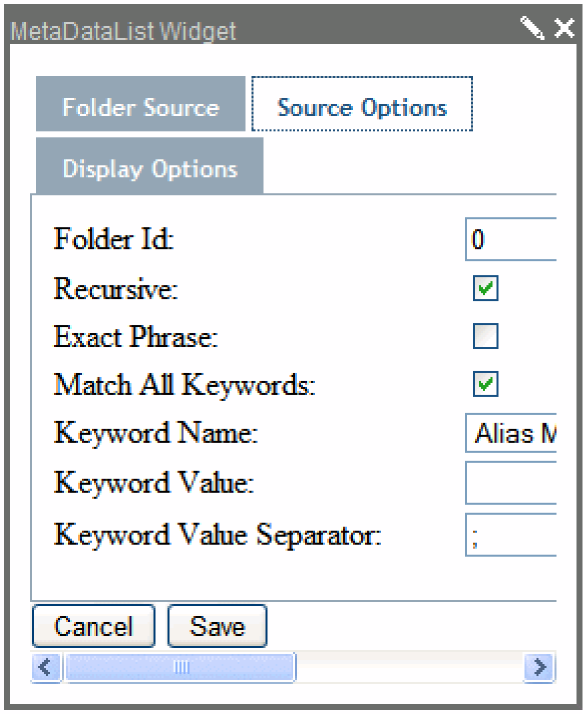
Note: You could create a content block within Ektron CMS400.NET then switch to source view, copy the content into a word processor (like Notepad), and save it with an HTML extension.

2. Save the help file to the folder that contains the widget.
3. Add the WidgetHost's `HelpFile` property to the codebehind of the page that hosts the widget. See example below.

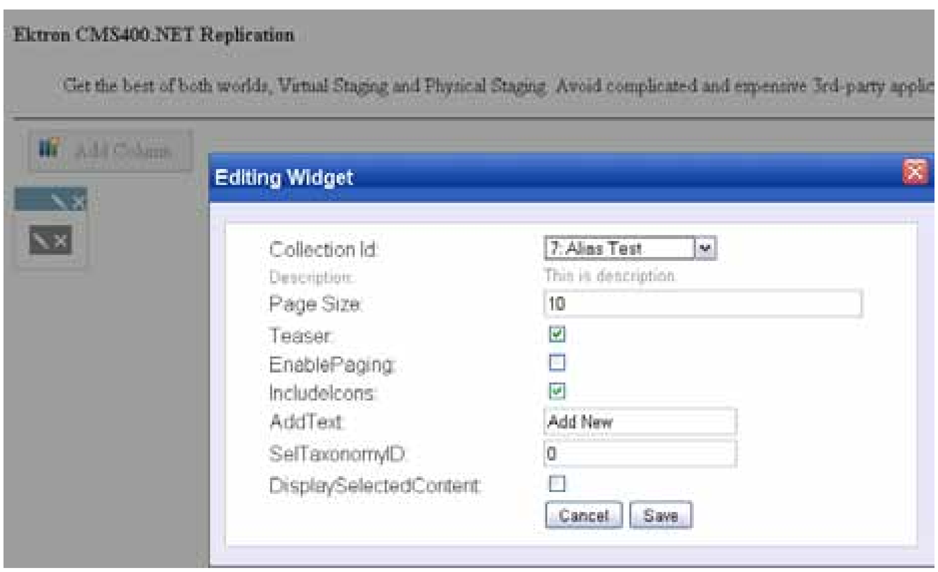
```
protected void Page_Init(object sender, EventArgs e)
{
_host = Ektron.Cms.Widget.WidgetHost.GetHost(this);
_host.HelpFile = "~/widgets/myWidget/help.html";
```

Opening a Widget's Edit Properties Screen in a Modal Dialog

If your PageBuilder page has several columns, some property screens do not have adequate space for data entry. See example below.



If desired, you can display a widget's properties screen in a modal dialog, which is much wider and provides room for data entry. See example below.



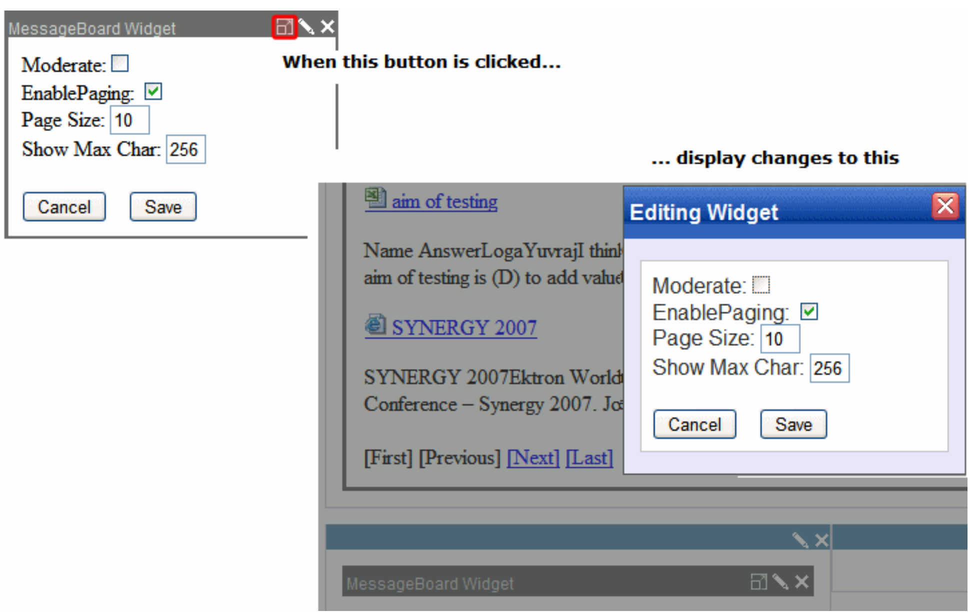
To do this, use the `ExpandOptions` property in the widget's codebehind file. Its type is `Ektron.Cms.Widget.Expandable`, and it is an enumeration with three possible values.

To have the edit button	Use this option
Open a modal dialog, where the user can edit properties	Within the widget's `page_init` event, set `_host.ExpandOptions = Expandable.ExpandOnEdit;`

Provide a button that a user can click to open a modal dialog	1. Within the widget's `page_init` event, set
	`_host.ExpandOptions = Expand-able.DontExpand;`
	2. In your Edit Event callback, update the property to
	`_host.ExpandOptions = Expand-able.ExpandOnExpand;`
	See "Option to Display Properties Screen as Modal Dialog" on page 6-48.

Show edit options in a regular window Note: This is the default setting. You can do nothing to achieve this result.	Within the widget's `page_init` event, set `_host.ExpandOptions = Expandable.DontExpand;`

Option to Display Properties Screen as Modal Dialog



Chapter 7

Content

For an introduction to Ektron CMS400.NET content concepts, see

- "What is a Content Block?" on page 2-2
- Workflow in
- "The Lifecycle of Content" on page 2-5

Working with Content From Workarea vs. Web Site

You can perform many actions from either the Ektron CMS400.NET Workarea or your Web site. In both cases, you must sign in before you can work with content.

Ektron CMS400.NET provides three types of dropdown menus that let you edit content. The first menu is available within the Workarea. The second and third menus are available after you log into your Web site.

- *Workarea* Content Menu - available within the Ektron CMS400.NET Workarea; lets you edit content from the View Contents of Folder screen. See Also: "Workarea Content Menu" on page 5-9

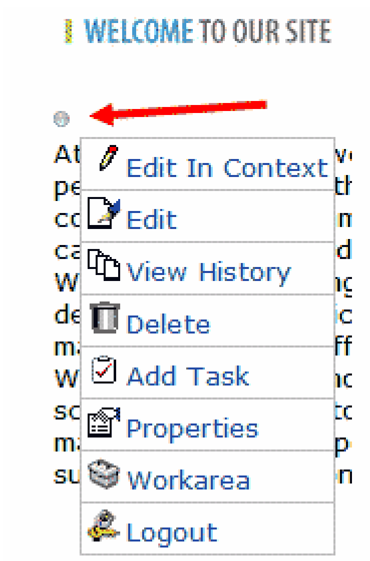
Note: The Web site menus do not appear if you are in site preview mode. See Also: "Site Preview" on page 3-4.

- *Web Site* Server Control Menu - available after signing into an Ektron CMS400.NET Web site. Lets you edit content from most *server controls* on a Web page. The options depend on the control and user's folder permissions. To display this menu, click the triangle to right of content (see below).

- *Web Site* Content Menu - available after signing into an Ektron CMS400.NET Web site. See Also: "The Web Site Content Menu" on page 7-4

The Web Site Content Menu

After you sign in to your Web site, just above content you have permission to edit is a silver access point (see illustration below). When you hover the cursor over it, a menu appears.



You can perform Ektron CMS400.NET tasks from the menu. Menu options vary depending on the content's status, your permissions, etc. The advantage of this feature is that you can see how a Web page will appear to site visitors.

See Also:

- "Web Site Content Menu Options" on page 7-4
- "Hiding and Showing the Content Border" on page 7-6

Web Site Content Menu Options

The following table describes the menu options that may appear.

Button	Name	Description	More Information
	Add	Appears if you selected a language and the content is not available in that language. Use this button to copy existing content into new content	

Button	Name	Description	More Information
		and translate it to the new language.	
	Approve	Approve or decline a request to publish or delete content	"Approve/Decline One Content Item" on page 5-35
	Add Task	Add a task to a user	"Managing Tasks" on page 11-1
	Delete	Open View Content page. From it, you can delete the content.	"Viewing Content" on page 7-9
	Edit	Check out content for editing; open in separate window	"Editing HTML Content" on page 7-105
	Edit in Context	Check out content for editing; content remains within Web page	"Edit in Context" on page 7-107
	Logout	Log out of Web site	"Logging Out of the Sample Site" on page 3-5
	New Poll	Create new poll or survey	"Creating Polls and Surveys" on page 7-274
	Preview	Preview content before it is published	"Site Preview" on page 3-4
	Properties	Open content's View Content page	"Viewing Content" on page 7-9
	View Content Difference	Display differences between previous and currently-published version of content	"Comparing Versions of Content" on page 7-120

Button	Name	Description	More Information
	View History	Open View History screen, where you can view previous versions of content	"Viewing and Restoring Previous Content" on page 7-117
	Workarea	Open Workarea. From here, you can perform all Ektron CMS400.NET tasks.	"The Workarea and Smart Desktop" on page 4-1

Hiding and Showing the Content Border

By default, the Ektron CMS400.NET provides the silver access point to indicate where the edit menu is located. An alternate view of the edit menu can be seen by using borders around the content areas. This is optional and can be set in the web.config file. To learn how to set this option, see "Changing the Appearance of the Web Site Content Menu" on page 7-7.

Warning! When changing the border to hidden, the **Add** and **Edit** buttons for menus are also hidden. This displays the page as it appears when you are not logged in. For information on menus, see "Working with Menus" on page 9-129.

You can hide the border that may surround content when you are logged into Ektron CMS400.NET. This lets you view the page as it appears when not logged in.

When the border is hidden and you hover over a content area, there is no indication that it is CMS400.NET content. However, you can still right click to access the menu.

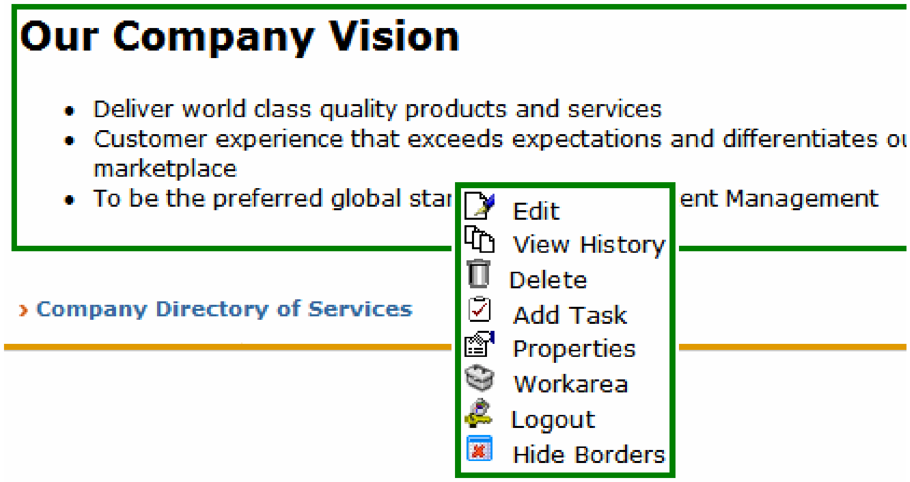
TECHNICAL NOTE

Note: Information about whether a border is hidden is stored in a cookie on a user's system. This preserves the information between sessions.

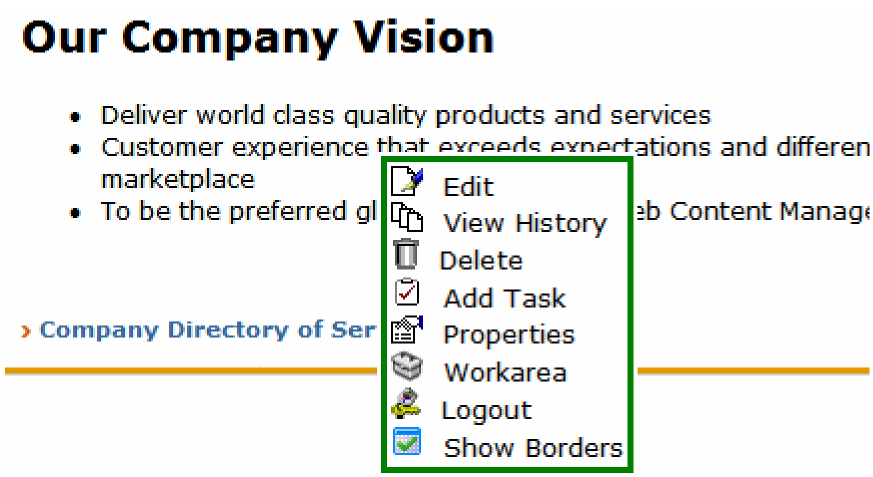
Hiding the Border

To hide the content border, right click a content block while logged in. Next, select **Hide Borders**. The page refreshes, and no border appears.

This image shows the content with a border and menu.



This image shows the same content without the border.

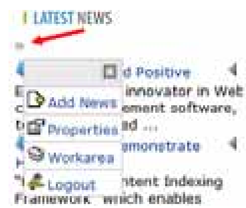
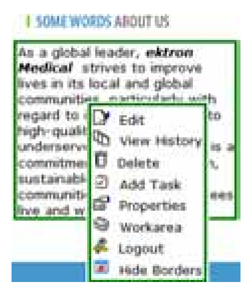


Showing the Border

To show the border, right click a content block while logged into Ektron CMS400.NET. Next, select **Show Borders**. The page refreshes, and the border appears.

Changing the Appearance of the Web Site Content Menu

You have three choices for determining the appearance of the Web Site Content menu. To make your choice, edit the `ek_UserMenuType` element of the *siteroot*/web.config file. By default, ek_UserMenuType is set to **2**.

Value set in ek_ UserMenuType	Description	Illustration
2 (default)	**Dropdown Interface** - No borders; dropdown menu appears when user clicks the Silver Access Point in top left corner of server control	
1	**Classic Interface** - Colored borders and menus always appear; menu options appear as icons in the top row Note: If you use this interface, the page layout is not depicted accurately because of the fixed toolbars.	
0	**Hover Interface** - Colored border appears when user hovers mouse over area; menu appears when user right clicks mouse inside border. This interface has two display options: vertical (*shown on right*) and horizontal. To change: 1. Open the *siteroot*/web.config file. 2. Find `ek_MenuDisplayType`. 3. Change its value: 0 (zero) = horizontal 1 = vertical	

Viewing Content

You can view all content in your Ektron CMS400.NET Web site. Viewing content allows you to see the content, metadata, summaries, and other information.

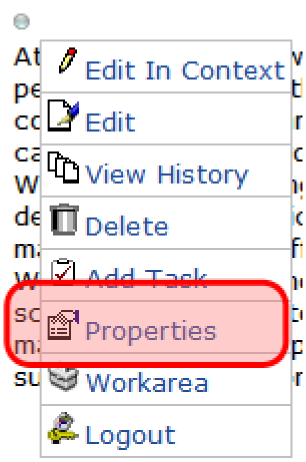
For more information, see:

- "Viewing Content from a Web Page" on page 7-9
- "Viewing Content from the Workarea" on page 7-10

Viewing Content from a Web Page

To view content from a Web page, follow these steps.

1. Sign in.
2. Browse to the content you want to view.
3. Mouse over the silver access point.
4. Click **Properties**.

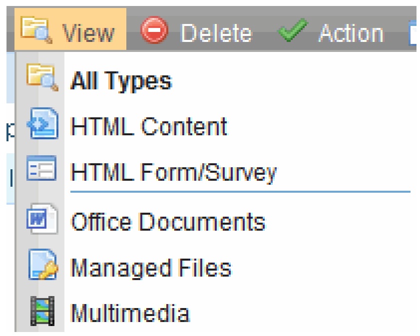


5. Continue reading from "The View Content screen appears." on page 7-11.

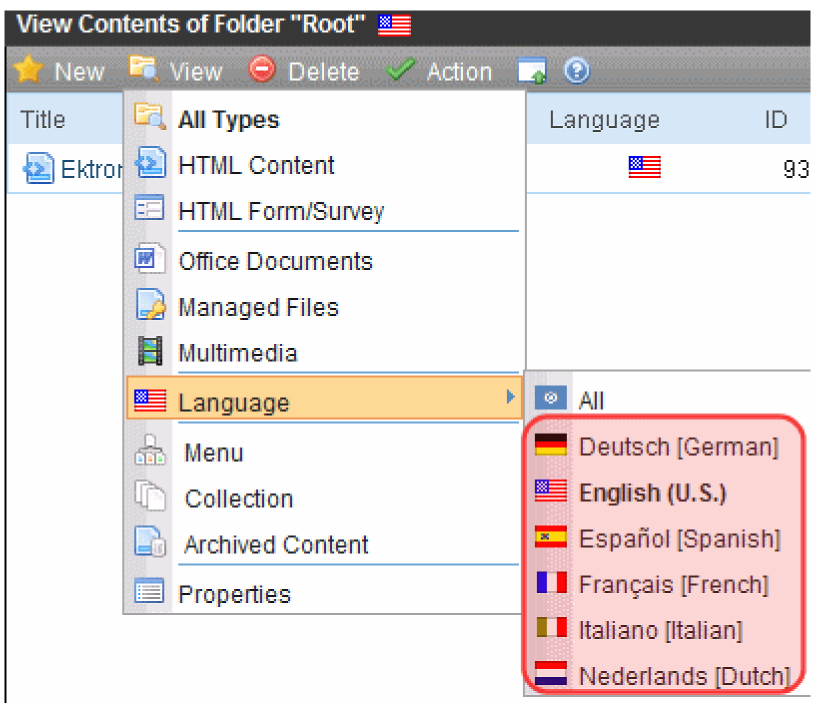
Viewing Content from the Workarea

Navigate to the folder that contains the content, as explained in "Viewing a Folder" on page 5-3.

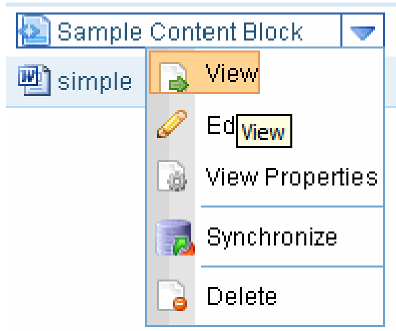
To change the type of content being displayed, click **View** then select a type.



1. If your system supports more than one language, you can view only content in any language via the **View > Language** menu option (illustrated below).

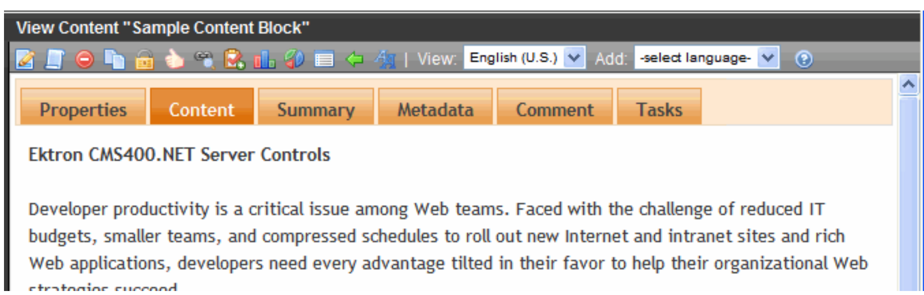


2. Hover the cursor over the content, click the triangle ( ), and select **View** from the dropdown menu.



Alternatively, click the content's title.

3. The View Content screen appears.



Note: You can also click the content title to access the View screen.

After you select the content, you have the following options.

Your options depend on your permissions and the status of the content.

Button or Tab	Name	Description	For more information, see
Properties tab	Content Properties	View the content's properties	"Properties" on page 7-13
Content tab	View Content	Displays content	
Summary tab	Edit Summary	Edit content's summary	"Working with Content Summary" on page 7-142

Button or Tab	Name	Description	For more information, see
Metadata tab	Edit Metadata	Edit content's metadata	"Working with Metadata" on page 7-146
Alias tab	Edit Alias	▪ View and edit the content item's primary alias ▪ View all secondary aliases	"Manual Aliasing" on page 10-27
Comment tab	View Comment	View comments on changes made when editing content. This comment also appears on the View Content and Content History screens. Use it to help distinguish one version from another.	
Tasks tab	Add/edit tasks	Add or edit tasks for this content	"Managing Tasks" on page 11-1
Web Alerts tab	Add/edit Web Alerts	Add or edit Web Alerts for this content	"Web Alert Feature" on page 20-1
Templates tab	Add/edit Templates	The template currently assigned to the content.	"Creating/Updating Templates" on page 7-184
Category tab	Add/edit Taxonomy Category	Any taxonomy categories currently assigned to the content.	"Taxonomy" on page 9-200
	Edit Content	Open content for editing	"Editing HTML Content" on page 7-105
	View History	View older versions of content; restore older version	"Viewing and Restoring Previous Content" on page 7-117
	View Published	Displays content as it is currently published	
	View Difference	Compares current and earlier versions of content	"Comparing Versions of Content" on page 7-120

Button or Tab	Name	Description	For more information, see
	Delete	Delete content	"Deleting a Single Content Item" on page 7-130
	Check for content linked to this content	Identify all content with Quicklinks to this content	"Link Checking" on page 7-132
	Add Task	Attach a task to content	"Creating a Task via the Content Folder" on page 11-23
	Return	Go back to previous menu	
View (language)	View	If you can view content in more than one language, select a language from the drop down list.	
Add -select language-	**Add -select language-**	Lets you copy current content into a new item and translate it to selected language.	"Translating Content to Another Language" on page 7-112

Properties

The content properties screen contains information about the content.

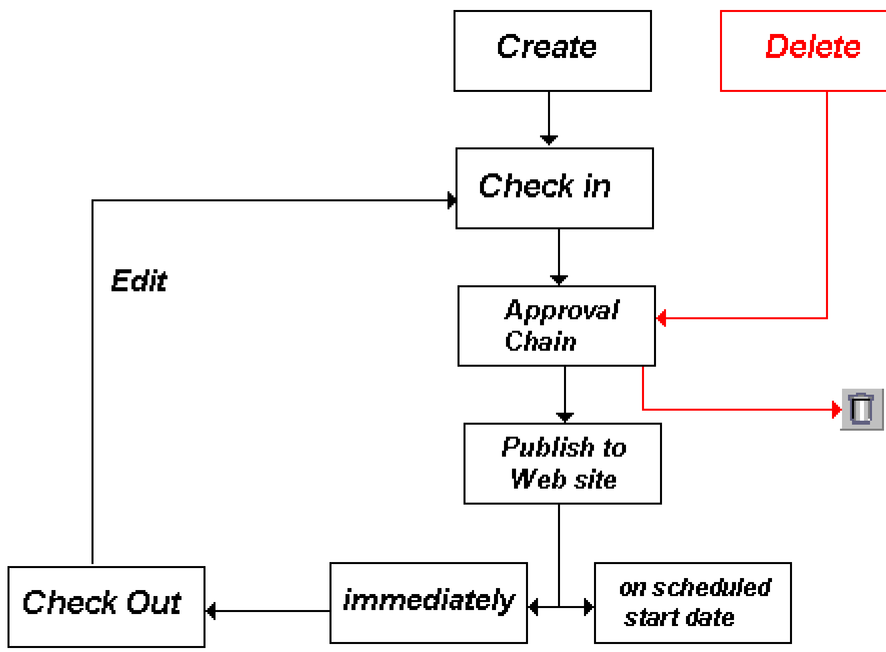
Field	Description
Content Title	The title assigned to the content
Content ID	The ID number assigned to the content. The ID number is used to retrieve content from a database.
Content language	The content's language
Status	The current status of the content. See Also: "Content Statuses" on page 7-133
Last User to Edit	The last user to edit this content

Field	Description
Last Edit Date	When the content was last edited
Start Date	When the content will go live on the Web site
End Date	When the content will be removed from the Web site
Action on End Date	What happens to the content when its end date and time are reached. See Also: "Setting Archive Options" on page 7-198
Date Created	When the content was created
Approval Method	Whether all approvers must sign off on content before it is published; managed by your system administrator. See Also: "The Approval Method" on page 5-41
Approvals	The users in the approval chain for this content. See Also: "Approve/Decline One Content Item" on page 5-35
Smart Form Configuration	The Smart Form applied to the content. This is typically managed by your system administrator. See Also: "Working with Smart Forms" on page 7-288
Template	The template currently assigned to the content. This is typically managed by your system administrator. See Also: "Creating/Updating Templates" on page 7-184
Path	The folder path to the content's folder. A slash (\) represents the Content folder.
Rating	Ektron CMS400.NET provides a Content Rating feature that lets site visitors rate any content item on a scale of 1 to 10. If this feature is enabled for the content item, the average numerical rating appears. See Also: "Content Rating" on page 7-743
Content Searchable	**True** appears if the content can be found when someone searches your Web site. However, even if content is *not* searchable, the Workarea Advanced search still finds it. See Also: "The Advanced Search Tab" on page 9-90

.

Adding HTML Content

You can only add content to a folder if you have permission to do so. The following flowchart illustrates a typical sequence of events when working with content.



After you create content, you or your system administrator typically make it available on the site. For example, you can add a hyperlink to it from another page, or place it in a collection or menu. Your administrator can add it to a list summary or content list.

Note: Only users with **Add** permission for a folder can add content to it. See Also: "Folder Permissions" on page 5-43

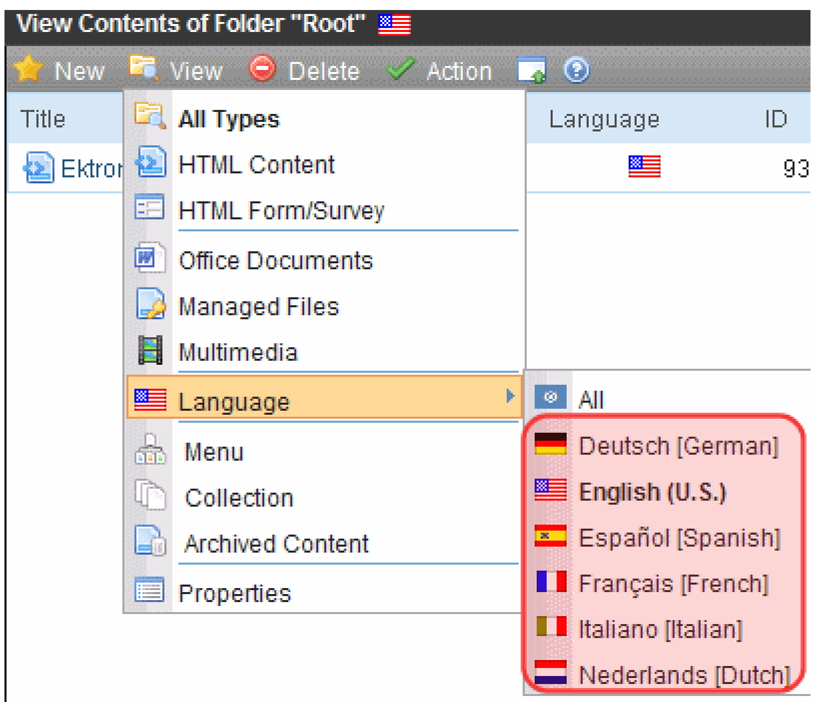
Note: This section only explains how to create HTML content. Procedures for creating/uploading other types content are in the appropriate chapters.

Content Type	Create/Upload Procedure
HTML Form/Survey	"Creating a New Form" on page 7-222
XML Smart Forms	See "Working with Smart Forms" on page 7-288

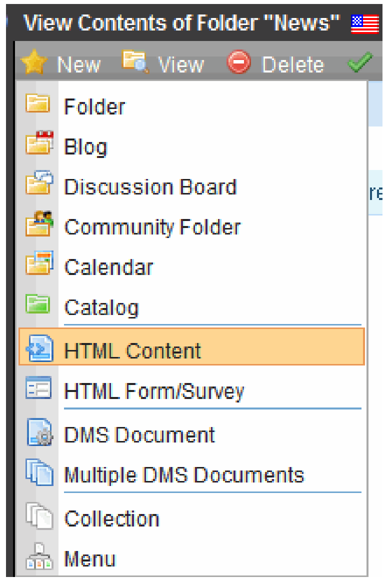
Content Type	Create/Upload Procedure
Assets (including multimedia)	"Working with Managed Files" on page 7-435
Microsoft Office documents	"Working with Microsoft Office Documents" on page 7-413
PageBuilder Page	"Building PageBuilder Pages" on page 6-1

To add HTML content, follow these steps.

1. Browse to the folder where you want to create the new content.
2. Click **View** > **Language** and select a language from the list.



3. Click **New** > **HTML Content**.



4. The Edit Content window opens.
5. Create content in the editor using the following table.

   To learn about the content editor, which you use to create or update content, see "Ektron CMS400.NET Editors" on page 7-20.

Responding to the Fields on the Add Content Screen

Field	Description
Title	Enter a title for the content. It cannot include these characters: \, /, *,>, <,|
Content Searchable	Note: This checkbox only appears if you are a member of the Administrators User Group. Check this box if the content should be found when someone searches your Web site. However, even if content is *not* searchdisplay' ■ the Workarea Advanced search still finds it. See Also: "The Advanced Search Tab" on page 9-90 ■ it can appear among Suggested Results. See Also: "Suggested Results" on page 9-31

After you respond to the above fields, the following buttons are available.

Buttons on the Add Content Screen

Button	Name	Description
	Submit	Submit the content into the approval chain. This action also returns the new or updated content to the database and exits the editor. See Also: "Approve/Decline One Content Item" on page 5-35
	Publish	Publish the content to the Web site. Note: Only the last approver in the approval chain sees this button. If no approval chain is assigned to the content's folder, every authorized user sees this button. See Also: "Approve/Decline One Content Item" on page 5-35 This action updates the content in the database and exits the editor.
	Check In	Save and check-in the document. This action updates the content in the database and exits the editor. It does *not* submit the content into the approval chain. Rather, it allows you and other users to continue changing it.
	Save	Save the content without leaving the editor. It is a good idea to save your work frequently.
	Cancel	Close the editor without saving changes.

Tabs on the Edit Content Screen

Tab	Description
Content	Insert content. For more information about using Ektron CMS400.NET's editors, see "Ektron CMS400.NET Editors" on page 7-20.
Summary	Enter or edit the content summary. See Also: "Working with Content Summary" on page 7-142

Tab	Description
Metadata	Enter or edit the content metadata. Note: All required metadata must be added before content can be checked in or submitted into the approval chain. See Also: "Working with Metadata" on page 7-146
Comment	Briefly describe the content, or comment on changes made when editing content. The history comment appears on the View Content and Content History screens.
Schedule	Use this tab to set a future publication date/time. In order to be published, this content must be approved *and* reach its publication date/time. See Also: "Scheduling Content to Begin and End" on page 7-195 If appropriate, enter a date when the content will no longer be viewable on the Web site. See Also: "Setting an End Date on Content" on page 7-197
Web Alerts	See "Web Alert Feature" on page 20-1.
Templates	This content's folder must have a default template. It can also have additional templates assigned. When content is created, the default template is automatically assigned to it. If you want to change the template assigned to this content, click this tab and choose a template from the dropdown list. See Also: "Creating/Updating Templates" on page 7-184
Category	Assign taxonomy categories to this content. See Also: "Taxonomy" on page 9-200

Ektron CMS400.NET Editors

Ektron CMS400.NET has two choices for a main content editor, depending on your computer's operating system.

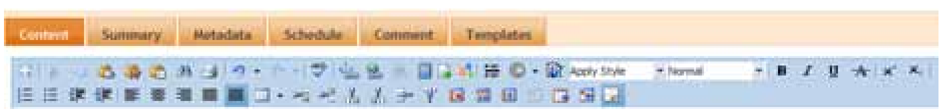
Operating System	Possible editors
Windows	▪ eWebEditPro+XML ▪ eWebEdit400
Macintosh	▪ eWebEdit400

TECHNICAL NOTES

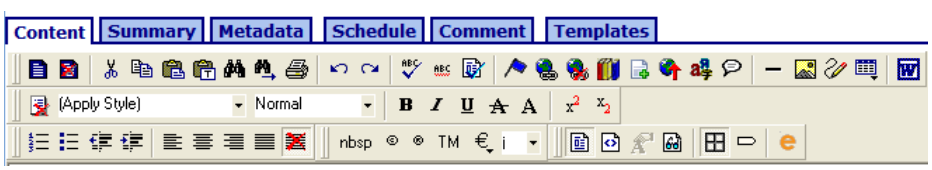
Note: eWebEdit400 does not require installation of an ActiveX control to each client computer.

Each editor's toolbar is illustrated below.

eWebEdit400 Toolbar



eWebEditPro+XML Toolbar



Note: Your choice of editors only affects the main HTML content editor. It does not affect other screens which use eWebEdit400, such as the Task Description.

Setting the Editor for Ektron CMS400.NET Users

Each Web server that hosts Ektron CMS400.NET has two editor options: one for clients that run Windows and another for clients using MacIntosh. Your system administrator determines the editor options in the site's web.config file, using the following settings.

```
<appSettings>
.
!-- EditControlWin may be either "ContentDesigner" or "eWebEditPro" or "UserPreferred" -
->
<add key="ek_EditControlWin" value="UserPreferred" />
<!-- EditControlMac Only "ContentDesigner" -->
<add key="ek_EditControlMac" value="ContentDesigner" />
.
```

</appSettings>

The table below contains information about both editors.

Operating System	Web.Config file key	Possible editor key values
Windows	ek_ EditControlWin	`eWebEditPro` `ContentDesigner` (use to load eWebEdit400) `UserPreferred` (loads editor selected by user at **Content and Forum Editor** field in User Profile) See Also: "Content and Forum Editor" on page 15-5
Macintosh	ek_ EditControlMac	`ContentDesigner` (use to load eWebEdit400)

The following section explains how to use the eWebEdit400 editor.

To learn about eWebEditPro+XML, see http://www.ektron.com/manuals/CMS400/76/usermanual.pdf > "Introduction to eWebEditPro+XML".

Introduction to Ektron CMS400.NET

eWebEdit400 is a browser-based, Web content editor designed for dynamic Web sites. It lets you create and publish your own Web content in any language supported by the operating system and your Web site.

Note: To learn how to enable eWebEdit400 for all clients that connect to your server, see "Setting the Editor for Ektron CMS400.NET Users" on page 7-21.

More specifically, eWebEdit400 lets you perform Web page editing functions, such as

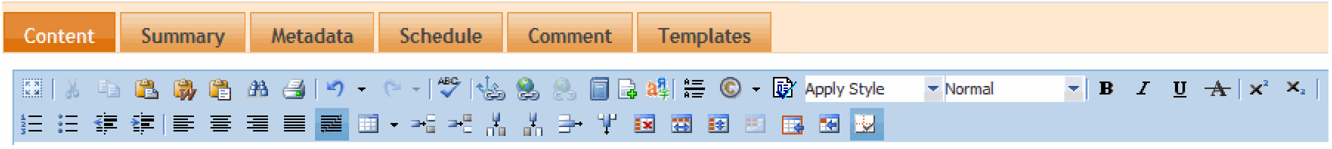
- copy content from any Windows-based application
- cut, copy, and paste
- find and replace text
- check spelling
- change font style, size, attributes (bold, italics, underline), and color
- begin lines with bullets or numbers
- adjust indentation
- right, center, or left justify text and images
- add a bookmark, hyperlink, image, or table
- view your text as WYSIWYG or HTML code
- insert or clean HTML source code

You gain access to these functions from the toolbar at the top of the editor, or from a menu that appears when you right click the mouse inside the editor.

Also, if you create and maintain HTML forms, this chapter describes how to do that using eWebEdit400.

Using eWebEdit400

eWebEdit400 is like many other word processing applications. You type text and then use toolbar buttons (illustrated below) and menu options to change the text's appearance or perform functions on it, such as spell checking.

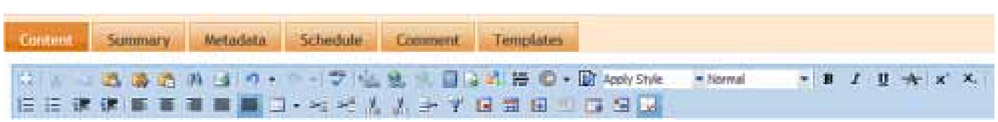


To learn more about using eWebEdit400, see these topics.

- "Toolbar Buttons" on page 7-23
- "Copying from Other Applications" on page 7-30
- "Finding and Replacing Text" on page 7-31
- "Checking Spelling" on page 7-36
- "Working with Images" on page 7-37
- "Using Bookmarks" on page 7-53
- "Using Hyperlinks" on page 7-55
- "Inserting email Links" on page 7-59
- "Working with HTML" on page 7-60
- "Working with Tables" on page 7-63
- "Working with HTML Forms" on page 7-220

Toolbar Buttons

This section explains how to use the buttons and drop-down lists on the toolbar. (The toolbar is the row of buttons across the top of the editor window, illustrated below.)



The buttons let you perform functions such as cutting and pasting text, inserting images, and creating tables.

All buttons may not appear. Your Webmaster determines which buttons appear on your toolbar.

Note: The following Ektron Knowledge Base article explains how a Webmaster adds a custom toolbar button to eWebEdit400: http://dev.ektron.com/kb_article.aspx?id=16550.

See Also:

- "Selecting Text" on page 1-472
- "Applying Formatting Attributes to Text" on page 1-473
- "Table of Toolbar Buttons" on page 7-24
- "Form Elements Toolbar" on page 7-30

Table of Toolbar Buttons

eWebEdit400's toolbar buttons are explained below.

Button	Equivalent Keystroke (Internet Explorer only)	Function	For more information, see
Select All	Ctrl+A	Select all content	
Cut	Ctrl+X	Remove selected text and graphics. Place that data into temporary memory, also known as the "clipboard." (If you later cut or copy more information onto the clipboard, the new information overwrites the original information.)	
Copy	Ctrl+C	Copy selected text and graphics into temporary memory. Leave selected data where it is. (If you later cut or copy more information into memory, the original information is lost.)	"Copying from Other Applications" on page 7-30
Paste	Ctrl+V	Insert the most recently cut or copied text and graphics at the current cursor location.	"Copying from Microsoft Word" on page 7-31

Button	Equivalent Keystroke (Internet Explorer only)	Function	For more information, see
Paste from Word, Cleaning Fonts & Styles		Designed for pasting Microsoft Word content, this button strips fonts and classes. For example, if you use the Paste button, Word content contains these tags. `<p class="MsoNormal" style="MARGIN: 0in 0in 0pt"><span style="BACKGROUND: lime; mso-highlight: lime"><font size="3"><font face="Times New Roman">` But if you paste that content using this button, only <p> tags are preserved.	"Copying from Microsoft Word" on page 7-31
Paste Plain Text		Paste the clipboard's contents as plain text. That is, all HTML tags (including images) are stripped out. This button is helpful when you want to eliminate HTML formatting from the copied text.	"Copying from Microsoft Word" on page 7-31
Find and Replace		Launch the Search and Replace dialog box. The dialog searches for (and lets you optionally replace) text that you specify.	"Finding and Replacing Text" on page 7-31
Print	Ctrl+P	Print the editor content.	
Undo	Ctrl+Z	Reverse the most recent action, as if it never occurred. You can undo as many actions as you wish.	
Redo	Ctrl+Y	Reverse the undo action.	
Spell Check		Begin spell checker.	"Checking Spelling" on page 7-36
Anchor Tag		Insert a bookmark anchor.	"Using Bookmarks" on page 7-53

Button	Equivalent Keystroke (Internet Explorer only)	Function	For more information, see
Add/edit Hyperlink		Change information about a hyperlink.	"Using Hyperlinks" on page 7-55
Remove Hyperlink		Remove a hyperlink.	"Removing a Hyperlink" on page 7-59
Library		Insert a library file.	"Adding a Library File to Content" on page 8-18
Add Wiki Link		Create a wiki link.	
Translate		Translate content into another language	"Translating Content to Another Language" on page 7-112
Horizontal Line		Insert a horizontal line.	
Insert Symbol		Insert symbols and special characters.	
Validate		Check content for adherence to XTMHL and accessibility standards.	"Validating with eWebEdit400" on page 7-682
Apply CSS Class Apply CSS Cl		Display a list of style sheet classes. Users can select from the list to apply a class to selected text. The list can change depending on the selected text. Your Webmaster determines which styles are available.	
Paragraph Style Normal		Display a list of paragraph styles. Users can select from the list to apply a style to selected text. The list can change depending on the selected text.	

Button	Equivalent Keystroke (Internet Explorer only)	Function	For more information, see
		Your Webmaster determines which styles are available.	
Bold	Ctrl+B	Make selected text **bold**.	
Italic	Ctrl+I	Make selected text *italic*.	
Underscore	Ctrl+U	Make selected text underlined.	
Strikethrough		Apply strikethrough to selected text. For example: ~~Here is some text~~	
Superscript		Make selected text appear smaller and above text line.	
Subscript		Make selected text appear smaller and below text line.	
Relative Font Size 2		Change the relative font size. Your Webmaster determines which relative font sizes are available.	
Verdana Font Style		Change the font style. Your Webmaster determines which fonts are available. Note: If more than one font appears in a selection, the browser on the reader's PC tries to display text using the first font. If the browser cannot find that font, it tries to use the second, etc. Note: Your system administrator can enable or disable the font toolbar buttons (style, size, color, and background color). See "Enable Font Buttons" on page 19-12.	"Font Manager" on page 19-43
10pt Font Size		Change the font size in points. Your Webmaster determines which font sizes in points are available.	

Button	**Equivalent Keystroke** **(Internet Explorer only)**	Function	For more information, see
Font Color		Change the font color.	
Background Color		Change the background color of the selected content.	
Number		Begin the line on which the cursor rests with a number. If the line above this line is - not numbered, assign this line 1 - numbered, assign a number one more than the line above Note: The Number toolbar button applies a number to each paragraph. If you want to switch to regular (that is, non-numbered) paragraphs, click the button a second time.	
Bullet		Begin the line on which the cursor rests (or all selected lines) with a bullet (•). Note: The Bullet toolbar button applies a bullet to each paragraph. If you want to switch to regular (that is, non-bulleted) paragraphs, click the button a second time.	
Indent		Increase or decrease the current line's distance from the left margin.	
Left, Center, and Right Justify		Align paragraph so that it is arranged - evenly on the left side (uneven on the right) - in the center of each line - evenly on the right side (uneven on the left) - evenly on right and left side Use the last button to remove justification.	

Button	**Equivalent Keystroke** **(Internet Explorer only)**	Function	For more information, see
Insert table		Insert a table.	"Working with Tables" on page 7-63
Insert row above		Insert a new row above current one (that is, the one in which the cursor currently resides).	
Insert row below		Insert a new row below current one (that is, the one in which the cursor currently resides).	
Insert column left		Insert a new column to the left of the current one.	
Insert column right		Insert a new column to the right of the current one.	
Delete row		Delete current row.	
Delete column		Delete current column.	
Delete cell		Delete current cell.	"Deleting a Cell" on page 7-95
Merge cells horizontally		Merge current cell with cell to its right.	"Merging Two Cells" on page 7-102
Merge cells vertically		Merge current cell with cell below it.	"Merging Two Cells" on page 7-102

Button	Equivalent Keystroke (Internet Explorer only)	Function	For more information, see
Split cell		Divide a cell into two. After you split, each cell occupies one half the size of the original cell.	"Splitting a Cell" on page 7-101
Table properties		Adjust a table's properties	"Modifying Table Properties" on page 7-66
Cell properties		Adjust properties of current cell	"Working with Table Cells" on page 7-92
Show/hide border		Display/suppress internal table border	"Setting Table Borders" on page 7-82

Form Elements Toolbar

These toolbar options appear when you are working with an HTML form, poll, or survey.

See "The Form Toolbar Options" on page 7-229.

Copying from Other Applications

You can copy information from most other Windows applications into eWebEdit400 and retain most or all of the original application's formatting. In general, copying from another application involves these steps.

1. Sign on to the application that contains the information.
2. Select the text to be copied.
3. Press <Ctrl>+<C>.
4. Go to eWebEdit400.
5. Press <Ctrl>+<V> to paste the selected information.

Note that you can only copy content, not background information that generates content. So, for example, you can copy the values in a spreadsheet but not the formulas used to generate them. Also, copying dynamic fields from Microsoft Word retrieves the current value of the fields but not the variables that generate the values.

It's a good idea to experiment with copying from different sources to test the results.

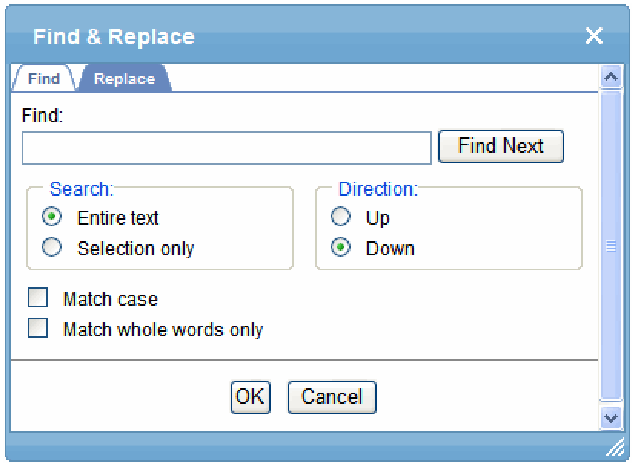
Copying from Microsoft Word

eWebEdit400 is very flexible in handling content pasted from Word. The table below present your options and how your users can achieve them.

To preserve	Apply this Application Setup screen setting	Press this toolbar button
MS Word styles, class attributes, and all HTML tags	Check **Preserve MS-Word Styles**, **Preserve MS-Word Classes**	Paste ( ) or <Ctrl> + <V>
All HTML tags	Uncheck **Preserve MS-Word Styles**, **Preserve MS-Word Classes**	Paste ( ) or <Ctrl> + <V>
HTML tags except `<span>` and `<font>` tags	Not applicable	Paste from Word ( )
Visual line breaks only	Not applicable	Paste Plain Text ( )

Finding and Replacing Text

To find (and optionally replace) text on your Web page, click the Find and Replace button ( ). When you do, the Find and Replace dialog box appears.



You can use this dialog to simply find text, or to find text then replace it with other text. Each option is explained below.

Note: You can also use this dialog to delete text that appears repeatedly. To do so, follow the directions in "Finding and Replacing Text" on page 7-32 and enter nothing in the **Replace With** field.

See Also:

- "Finding Text" on page 7-32
- "Finding and Replacing Text" on page 7-32
- "Additional Options on the Dialog Box" on page 7-33

Finding Text

1. In the **Find** field, type the text you want to find.
2. Set dialog box options (see "Additional Options on the Dialog Box" on page 7-33).
3. Click **Find Next** to find the next occurrence of the “find” text.

Finding and Replacing Text

1. In the **Find** field, type the text you want to find.
2. Click the **Replace** tab.
3. In the **Replace With** field, type the text to replace the “find” text.
4. Set dialog box options (see "Additional Options on the Dialog Box" on page 7-33).
5. If you want to
   - replace all occurrences of the “find” text with the “replace” text, click **Replace All**.

Note: You can undo replacements one at a time using the Undo button ( ).

- replace only the highlighted term with the "replace" text, click **Replace**.
- find the next occurrence of the "find" text (and optionally replace it with the "replace" text), click **Find Next**.
- change the highlighted term using the editor, exit the Find and Replace dialog, move to the term and edit as needed. To restart the search, press the Find button ( ).

6. Continue to find and optionally replace or edit until you reach the end of the text.

Additional Options on the Dialog Box

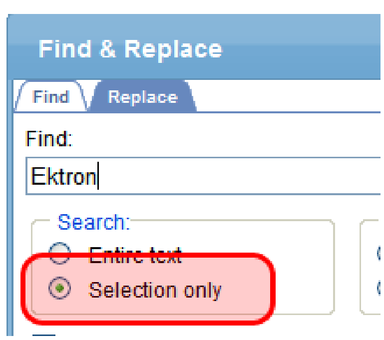
The dialog box also lets you do the following.

- "Searching Selected Text" on page 7-33
- "Specifying a Search Direction" on page 7-34
- "Considering the Case of a Search Term" on page 7-34
- "Whole Word Match" on page 7-35

Searching Selected Text

You can search and replace text in a selected portion of content. To do so, follow these steps.

1. Select text that you want to search and replace by dragging the cursor over it.
2. Click the Find and Replace button ( ).
3. In the Find & Replace dialog, enter the search string.
4. If desired, click the **Replace** tab and enter a replacement string.
5. Under **Search**, click **Selection only**.

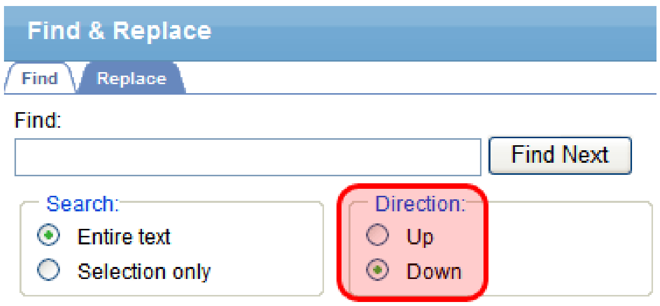


6. Click **Find Next**.
7. The search runs but is limited to text you selected in Step 1.

Specifying a Search Direction

The search begins where the cursor is when you click **Find Next**. To make sure you find every occurrence of a term, place the cursor at the top of the content before beginning the search.

If you begin the search somewhere other than the top of the page, use the **Direction** field to search from the current location to the top or bottom of the content.

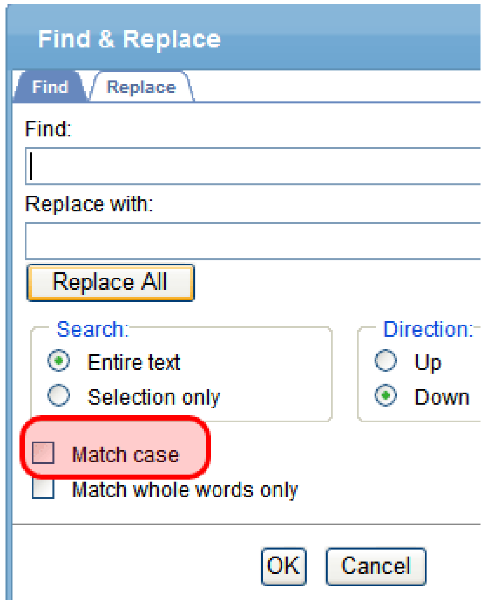


To search from the cursor location to the	Click this option in the Direction field
end of the page	**Down**
top of the page	**Up**

Considering the Case of a Search Term

By default, the search ignores the case (upper or lower) of a search term. In other words, if you enter **Bob** in the **Find** field, the search finds bob, Bob, BOB, etc.

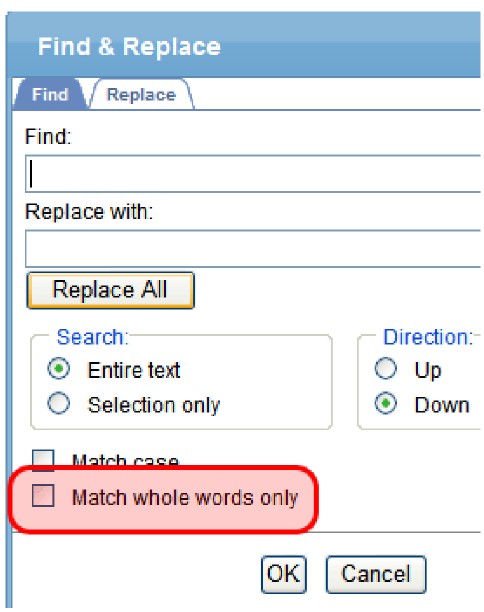
If you want the search to be *case sensitive*, use the **Match case** check box. If you enter **Bob** in the **Find** field and place a check in the **Match case** box, the search only stops at Bob, not bob or BOB.



Whole Word Match

By default, the search finds any occurrence of the text that you type into the **Find** field. For example, if you enter **the**, the search finds the word the, as well as those letters embedded in other words, such as o***the***rs and ***the***ater.

If you want the search to find only whole word occurrences of the text in the **Find** field, click the **Match whole words only** box.

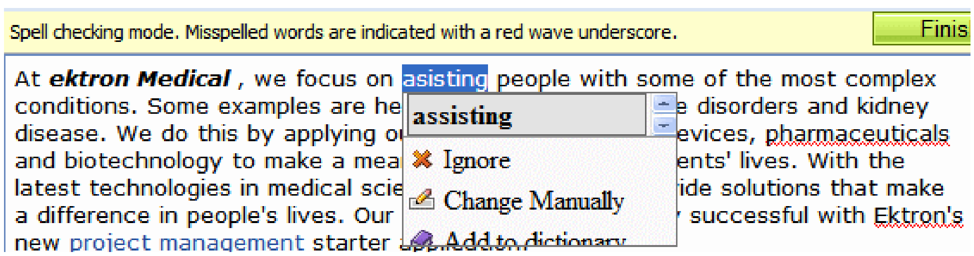


Checking Spelling

Note: This section describes the spell check software installed with eWebEdit400. If you use the FireFox browser, it has its own spell check software. To eliminate confusion between eWebEdit400's and Firefox's spell checker, Ektron suggests disabling Firefox's. This is set on Firefox's Tools > Options dialog > General Tab > **Check my spelling as I type** check box.

To begin spell checking, click the spell check button ( ).

When you do, eWebEdit400 underscores in red each word that's not in the dictionary. Then, it stops at the first misspelled word and displays your options for fixing the problem.



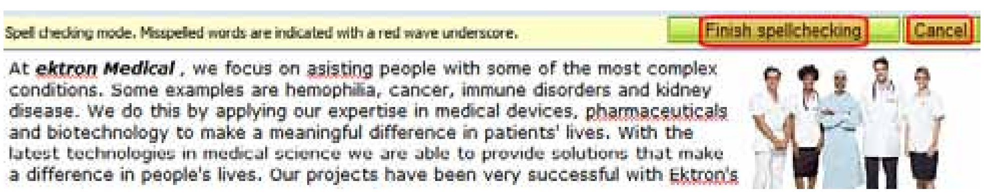
The Spelling Options

Option	Use this option if you want to...
One or more similar, correctly-spelled words	Replace highlighted word with one from the list. To do this, click the correct word.
Ignore, Ignore All	Don't want to change the highlighted word, nor do you want to add it to the dictionary. If the word appears repeatedly in the content, **Ignore All** also appears. Use this to skip all occurrences of the word in this spell check session.
Change Manually	Retype the highlighted word. If the word appears repeatedly in the content, the following message asks if you want to change *all* occurrences to the fixed version. **This word occurs more than once in the text. Would you like to replace all instances?**

Option	Use this option if you want to...
Add to Dictionary	Add the selected word to the "dictionary." Do this if it is correctly spelled, and you expect to use the word in the future. Once you add a word to the dictionary, it will no longer be highlighted by the spell checker. The word can also now appear on the correctly-spelled words list. Technical note: Words added using this option are placed in a .txt file located in the host server's `site root/Workarea/Foundation/RadControls/Spell/TDF` folder. The file's name begins with the selected language, and ends with `custom.txt`. For example, if the language is U.S. English, the file is en-US-custom.txt.

Using the Spell Checker

- As soon as you select an option, the spell checker moves to the next misspelled word and displays its options.
- If you finish spell checking all words, you return to edit mode.
- Instead of stopping at every misspelled word, you can place the cursor on any highlighted word. When you do, its spelling options appear.
- If you are done before fixing every misspelled word, click **Finish spell checking** from the toolbar (circled below). If you do, your changes are saved, and you return to edit mode.



- If you want to exit the spell checker and ignore all changes you have made since beginning it, click **Cancel** (circled above) at any time.

Working with Images

eWebEdit400 makes it easy to insert images in to your content.

First, you import the image into library or as a Ektron CMS400.NET asset. Then, add it to the content. Next, you can edit its properties, such as border width and color, spacing, width and height, etc.

For more information, see

- "Inserting an Image" on page 7-38
- "Inserting an Image Thumbnail" on page 7-39
- "Editing an Image's Properties" on page 7-40
- "Editing an Image" on page 7-47
- "Deleting an Image from Content" on page 7-52

Inserting an Image

Prerequisite

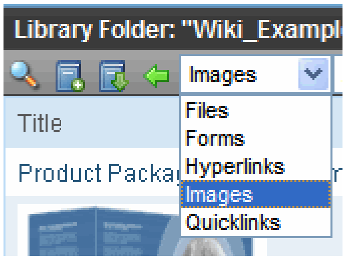
Before you can insert an image into eWebEdit400, it must be either uploaded to the Library or imported as an asset.

- "Copying Files to the Library" on page 8-12 explains how to upload an image to the Library
- "Importing Managed Files" on page 7-437 explains how to import an asset

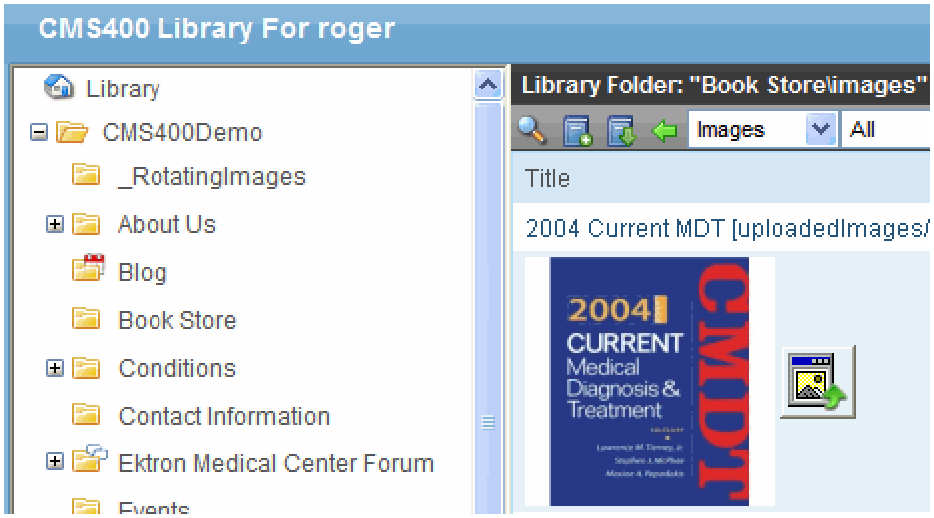
Procedure for Inserting an Image

To insert an image into the editor, follow these steps.

1. Place the cursor where you want the image to appear
2. Click the library button ( ).
3. Make sure **Images** is selected in the content type dropdown (circled below).



4. From the folder display in the left panel, select the folder that contains the image you want to insert.



If you don't know the image's folder, use the search button () to find the image by title, description, or internal file name.

5. Select the image you want to insert.
6. Click the insert button ().
7. The image is inserted into the content.

Inserting an Image Thumbnail

As an alternative to inserting an image, you can insert a *thumbnail*, a miniature version of the image. When the thumbnail appears on a Web page, a site visitor can click it to see a full-sized version of the image. See an example of both below.

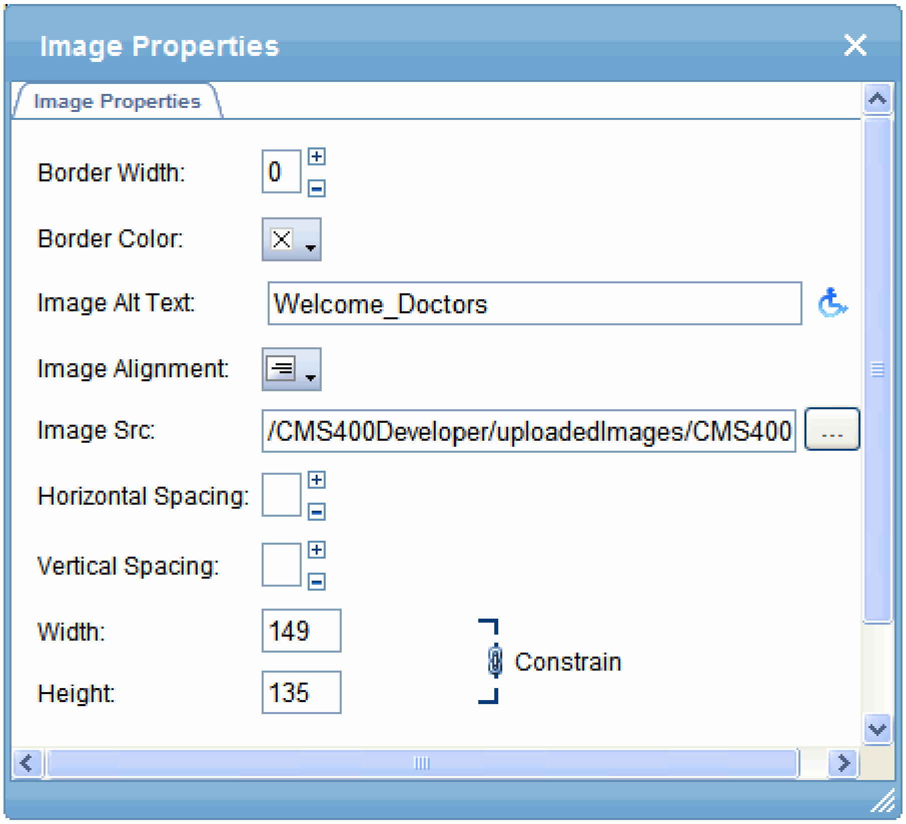
To insert an image thumbnail, follow the steps in "Procedure for Inserting an Image" on page 7-38, but when you get to Step 5, click the image's thumbnail button ().

Note: You can change the thumbnail image by right clicking it, selecting **Set Image Properties** and editing the **Image Src** field. If you do that, however, and someone clicks it, the original full-sized image appears. If you want to change both the thumbnail and the full-sized image, delete it then enter a new thumbnail.

Editing an Image's Properties

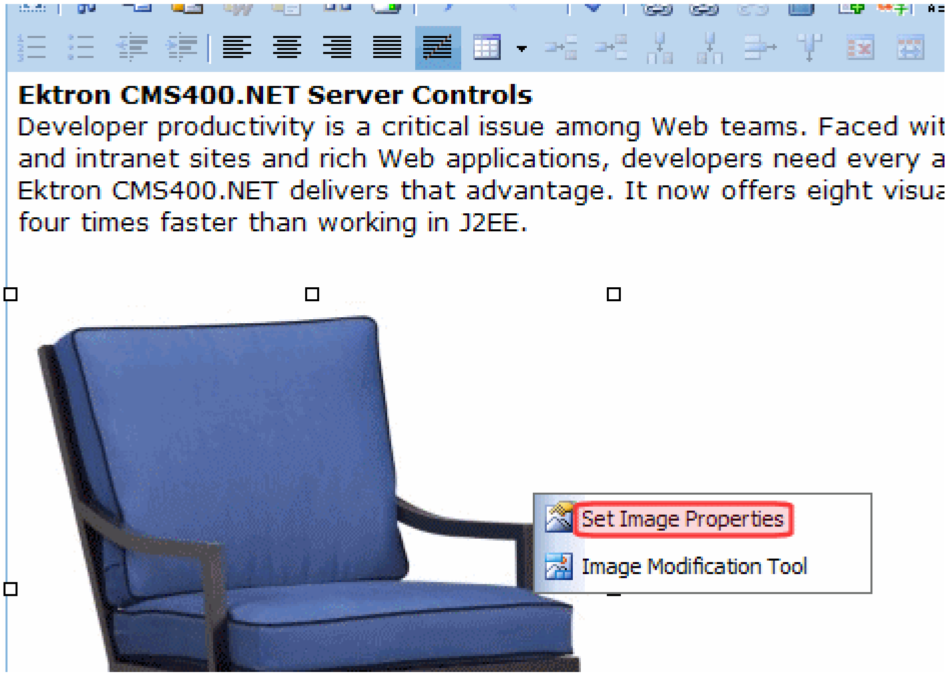
After an image in inserted, you can adjust the following properties for it.

- border width
- border color
- alt text
- description
- alignment
- the image itself
- horizontal and vertical spacing
- width and height

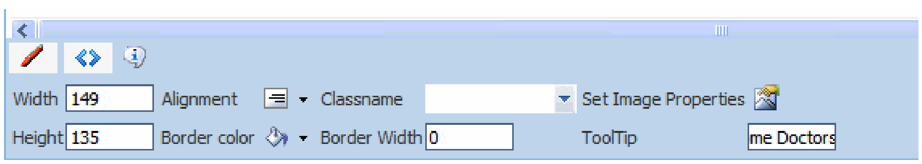


To access the Image Properties dialog, follow these steps.

1. Select the image.
2. Right click the mouse.
3. Click **Set Image Properties**.

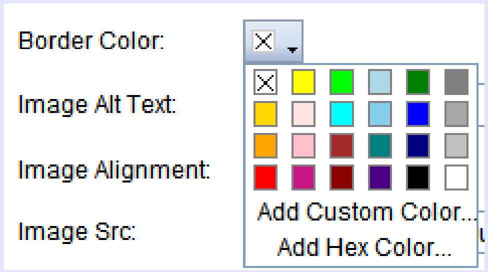


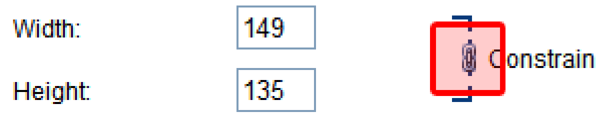
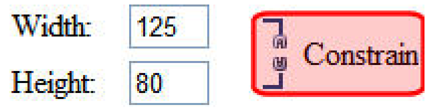
Note: You can also view and adjust some image properties at the bottom of the Edit Content screen, as shown below.



The following explains the fields on the Image Properties dialog.

Field	Description
Border Width	Set the width of the image's border in pixels. See Also: "Setting a Border" on page 7-45
Border Color	To set the color of the image's border, click the **X** circled below. When you do, a palette of colors appears. Click the border color from the palette.

Field	Description
	 If a color has already been assigned, it appears next to this field label. To change it, click down arrow next to the color to display the color palette.
Image Alt Text	The image's title is used as the default `alt` text. Change if desired. The `alt` text appears in place of the image on the Web page if the image does not display. Examples of when an image does not display include: - a speech browser (for example, a visually impaired person) - a text-only browser (for example, browsing from a mobile phone) - a graphical browser with images turned off
Image Alignment	The alignment of the image relative to adjacent text and images. If you choose left or right alignment, the text wraps around the image. For more information, see "Aligning the Picture" on page 7-45
Image Src	The path to the image. If you want to change the image, click the ellipsis (...) button to open the library. From there, select a replacement image.
Horizontal Spacing, Vertical Spacing	The amount of horizontal and vertical space around the picture. See Also: "Adding Space around the Picture" on page 7-47
Width	The width of the picture in pixels. See Also: "Pixels" on page 7-44 Note: The **Width** and **Height** settings determine the area on a Web page in which the image is displayed. To display an image correctly, its height and width settings should match its actual size (set using the resize button). See Also: "Resizing the Image" on page 7-49
Height	The height of the picture in pixels. See Also: "Pixels" on page 7-44

Field	Description
Constrain	The constrain feature lets you determine if an image's height and width can be adjusted independently. Typically, you want Constrain on, as shown below.  In this state, if one dimension is adjusted, the other is automatically adjusted in proportion to it. For example, if you change the height from 100 to 200, the width is also doubled. To turn Constrain off, click it. When you do, it looks like this.  When Constrain is off, the adjusted picture can be disproportionate, as shown below. 

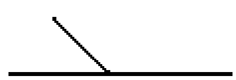
Warning! If you substantially adjust the picture's height and/or width, the picture may be distorted when users view your Web page.

Pixels

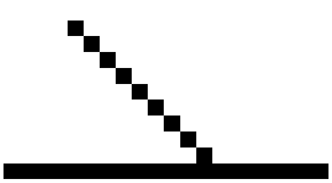
A pixel is a single point in a graphic image.

Computer monitors display pictures by dividing the screen into thousands of pixels, arranged in rows and columns. The pixels are so close together that they appear connected.

Below is an image shown at regular size and then enlarged so you can see the pixels that make up the picture.



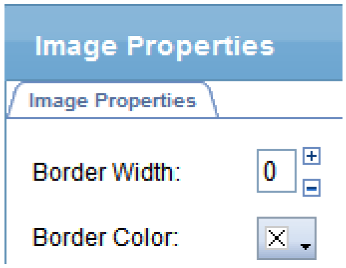
regular size



enlarged to show pixels

Setting a Border

To add a border around a picture, enter the border's thickness in pixels in the **Border Width** field on the Image Properties dialog. See Also: "Pixels" on page 7-44



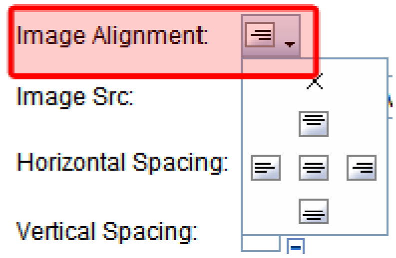
Here is a picture with a 1 pixel border.

Here is the same picture with a 10 pixel border.

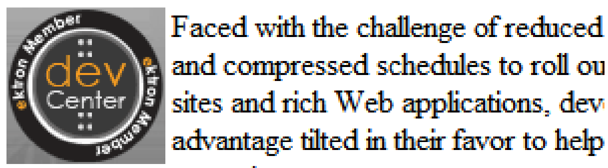
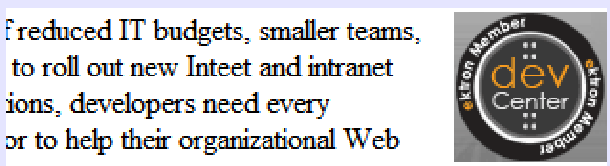
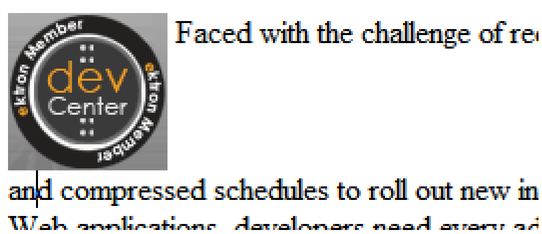
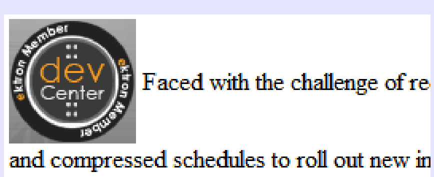
If the picture is not a hyperlink, its border is black. If the picture is also a hyperlink, the border is the same color as a hyperlink (for example, blue or purple if visited).

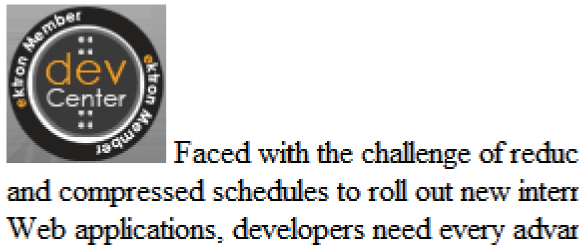
Aligning the Picture

To align a picture, use the **Image Alignment** field on the Image Properties dialog.



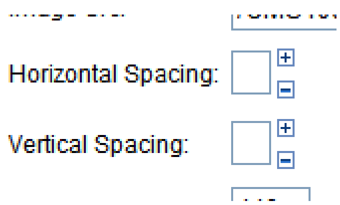
The following table lists your alignment choices.

To align	Click this Alignment option	Illustration
The picture on the left margin, allowing subsequent text to wrap around it		
The picture on the right margin, allowing subsequent text to wrap around it		
The top of the picture with the first line of text		
The vertical center of the picture with the first line of text		

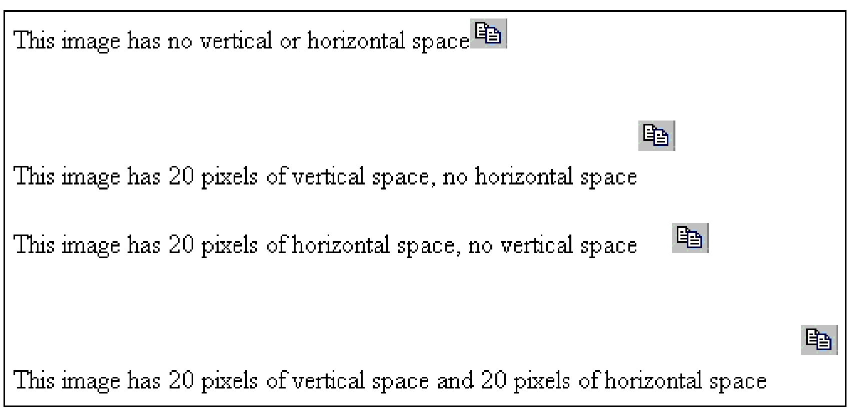
To align	Click this Alignment option	Illustration
The bottom of the picture with the first line of text		

Adding Space around the Picture

On the Image Properties dialog box, you can use the **Spacing** fields (**Horizontal** and **Vertical)** to add space around the picture. You enter a number of pixels to determine spacing value.



The following graphic illustrates the effect of adding spacing to a picture.



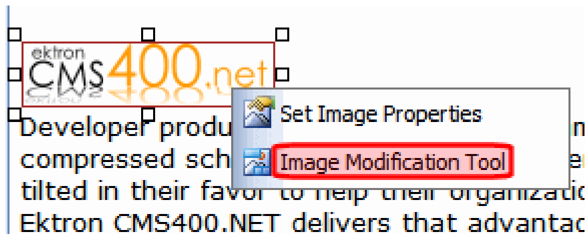
Editing an Image

You can perform the following tasks on any image inserted into eWebEdit400 content.

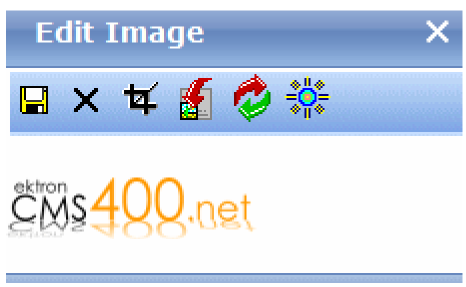
- crop
- resize
- rotate

- adjust brightness

To access the image editing tool, edit a piece of eWebEdit400 content, right click an image, then click **Image Modification Tool**.



When you do, the following dialog appears.



Note: When you save edits to an image, a version is placed in the *site root*/uploaded images/CMS folder folder. The version is named *filename.nextnumber.file extension*.
For example, if a library image is named ektronlogo.png, and someone inserts it into content and saves it, a new version is created and named ektronlogo.1.png. If someone later saves that image in another content block (or even another section of the same content), that version is named ektronlogo.2.png. Also, whenever someone edits and saves the image, a new version is created and assigned the next highest number.
These edits have no effect on the original image stored in the library.

The following table explains the toolbar buttons. After changing the image, click the Save button () to finalize changes.

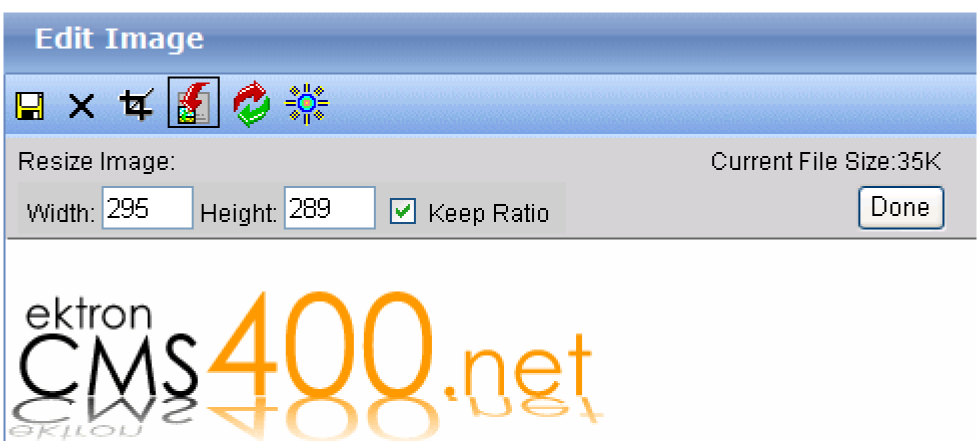
Button	Description	For more information, see
	Save changes	Note above
	Exit without saving changes	

Button	Description	For more information, see
	Crop image (that is, remove a portion of it). Drag the box around the area you want to keep and click **Done**.	"Cropping an Image" on page 7-52
	Change image size	"Resizing the Image" on page 7-49
	Rotate image	"Rotating an Image" on page 7-51
	Adjust brightness	"Adjusting Brightness" on page 7-51

Note: If you begin editing an image then click the cancel button ( ), and later try to edit that image, you may see a small, red x instead of the image. (This problem only occurs if your browser is Internet Explorer.) To remedy the problem, go to Tools > Internet Options > Browsing History > Settings (or Temporary Files > Settings in Internet Explorer 6). Set **Check for newer versions of stored pages** to **Every Visit**.

Resizing the Image

To change an image's size, click the Resize button ( ). When you do, the following dialog appears.



Change the image to the desired size then click **Done**.

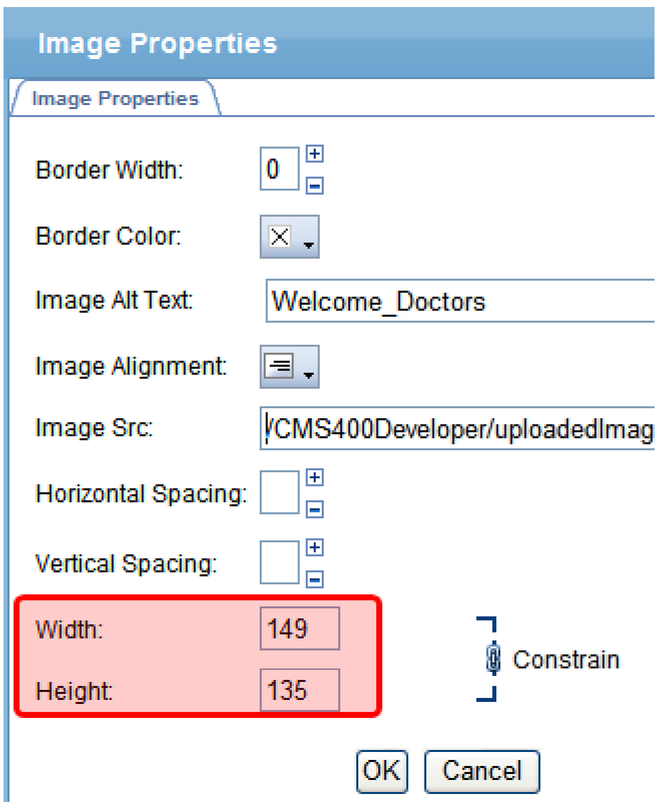
Keeping the Aspect Ratio

Aspect ratio is the relationship between an image's width and height. For example, if a graphic has an aspect ratio of 2:1, its width is twice as large as its height.

If you check the **Keep Ratio** box, just specify a new width or height - the other dimension is calculated for you.

Effect of Changing Image Size on the Image Properties Dialog

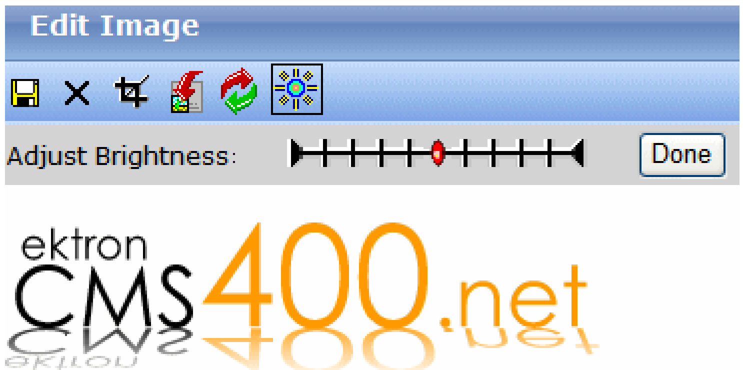
The **Width and Height** settings on the Image Properties dialog (shown below) determine the area on a Web page in which the image is displayed.



To display an image correctly, its height and width on this dialog should match its actual size (that you set using the Resize button).

Adjusting Brightness

To adjust the image's brightness, click the brightness button ( ). When you do, a brightness control appears.



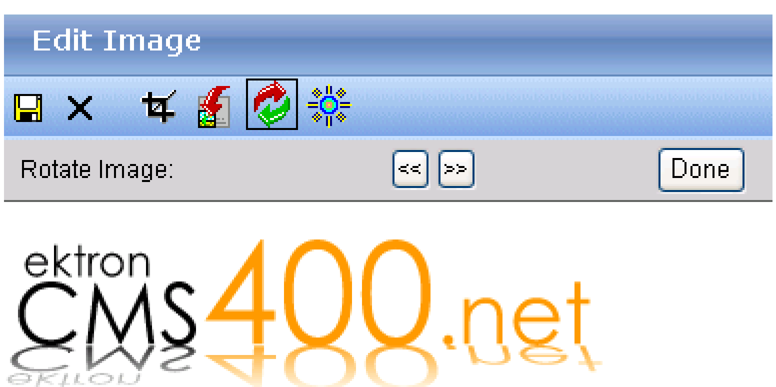
The red dot indicates the current brightness level.

- To *brighten* the image, place your cursor to the left of the red dot and click.
- To *darken* it, move the cursor to the right of the red dot and click.

When you click, the image redisplays using the new brightness level. When you are satisfied, click **Done**.

Rotating an Image

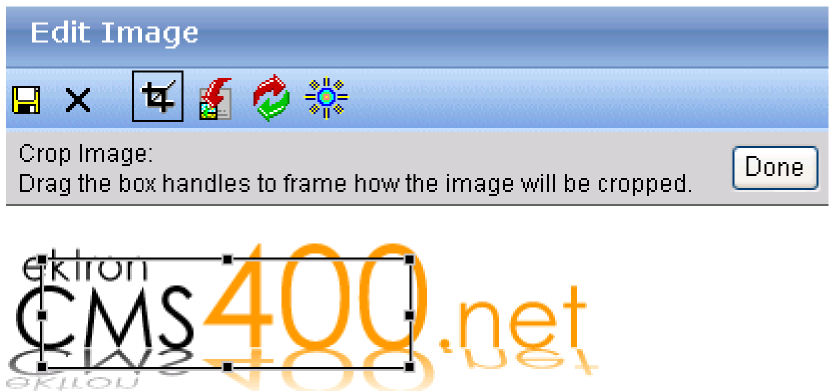
To rotate an image, click the Rotate Image button ( ). When you do, image rotation buttons appear.



Use the buttons to rotate the image clockwise or counterclockwise in ninety degree increments. When you are satisfied, click **Done**.

Cropping an Image

Cropping an image removes the portion of the image that is not within the cropping tool. To crop an image, click the Crop Image button ( ). When you do, the crop image box appears.



Drag the crop tool's handles to frame how the image is cropped. When you are satisfied, click **Done**. Everything outside the crop box is removed.

Deleting an Image from Content

If you want to delete a picture, follow these steps.

1. Move the cursor over the picture.
2. Click the mouse to select the picture.
3. Click the Cut button ( ).

Note: If you want to remove an image from content created from an XML Smart Form and eWebEdit400 is your editor, click the image icon ( ), open the Image Properties dialog, and delete the image path (circled below).

Using Bookmarks

Use a bookmark to let a user "jump" from any word or phrase to another place in the same content block. On your Web page, text appears in a different color to indicate the bookmark.

Bookmarks are particularly helpful if your page is very long. For example, if your Web page contains minutes from several meetings, the top of the page could list the meeting dates. You could then assign a hyperlink to each date and a bookmark to each set of minutes. The user sees that a date is in a different color, so clicks it to "jump" (using the bookmark) to the correct minutes.

"Creating a Bookmark" on page 7-53 describes how to set up a bookmark within a file. You can also set up hyperlink to

- another Web page. This procedure is described in "Using Hyperlinks" on page 7-55.
- a bookmark within another Web page. This procedure is described in "Creating a Hyperlink to a Location Within a Web Page" on page 7-58.

Creating a Bookmark

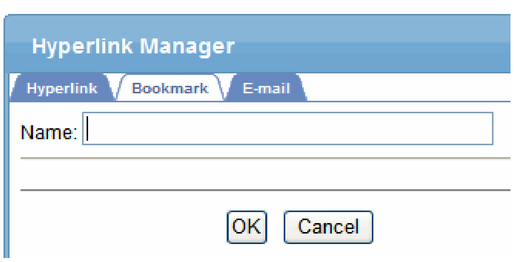
When creating a bookmark, you must specify a

- *source*, the text a user clicks to move to the bookmark
- *bookmark*, the destination to which the cursor jumps when a user clicks the source

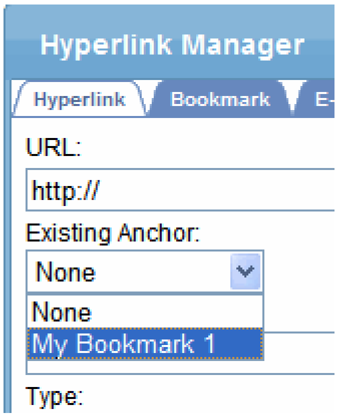
To continue with the above example, a meeting date is the source, and the meeting minutes are the bookmark.

To create a bookmark, follow these steps.

1. Select the bookmark text.
2. Click the Insert Bookmark button ( ).
3. The Hyperlink Manager dialog appears with the **Bookmark Tab** selected.



4. Enter a name for the bookmark.
5. Click **OK**.
6. The editor screen redisplays. (The bookmark does not appear on the page.)
7. Select the source text.
8. Click the Hyperlink Manager button ( ).
9. The Hyperlink Manager dialog appears with the **Hyperlink** tab selected.
10. Click the down arrow below the **Existing Anchor** field and click the bookmark you created in Step 4.

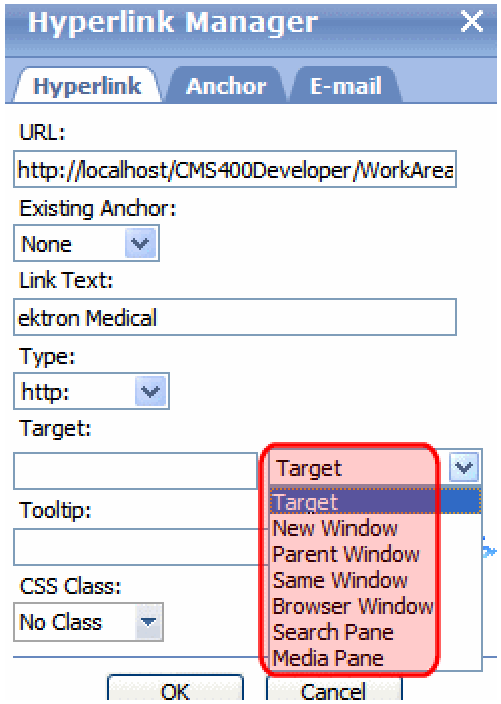


11. If desired, use the **Target** dropdown to change the destination text 's window. For details, see "Changing the Destination Window" on page 7-54.

    If you leave the **Target Frame** field blank, the new window replaces the current window.
12. Click **OK**.

Changing the Destination Window

Use the **Target Frame** field on the Hyperlink Manager dialog to change the window that displays the destination page.



The values you can enter into the **Target Frame** field are explained below.

If you want the destination page to appear	Click this in the Target Frame field
In a new browser window, on top of the current browser.	**New Window**
In the same position within the browser window. The new window replaces the current one.	**Same Window** Note: this is the default.
If your page contains frames, in the frame that contains the frame with the hyperlink.	**Parent Window**
If your page contains frames, in the full display area, replacing the frames.	**Browser Window**

Using Hyperlinks

Use hyperlinks to let a user “jump” from any word or phrase to another Web page. The page can be within your network (that is, on an intranet) or anywhere on the internet.

Note: If you want to create jumps within a content block, see "Using Bookmarks" on page 7-53.

For example, if your Web page should include a link to the Ektron Web site, you would enter the text to indicate the jump (for example **Ektron Web Site**), then create a hyperlink to `www.ektron.com`. When users see **Ektron Web Site** in a different color, they can click the text to "jump" to the site.

Although most jumps go to the top of another Web page, you can also jump to a bookmark within a Web page.

This section explains

- "Creating a Hyperlink" on page 7-56
- "Creating a Hyperlink to a Location Within a Web Page" on page 7-58
- "Creating a Hyperlink to a Location Within a Web Page" on page 7-58
- "Editing a Hyperlink" on page 7-58
- "Removing a Hyperlink" on page 7-59
- "Preventing a URL from Becoming a Hyperlink" on page 7-59

Creating a Hyperlink

When creating a hyperlink, you must specify a

- *source*, the text the user clicks to move to the destination
- *destination*, the Web page that appears when someone clicks the source

To continue with the above example, **Ektron Web Site** is the source, and `www.ektron.com` is the destination.

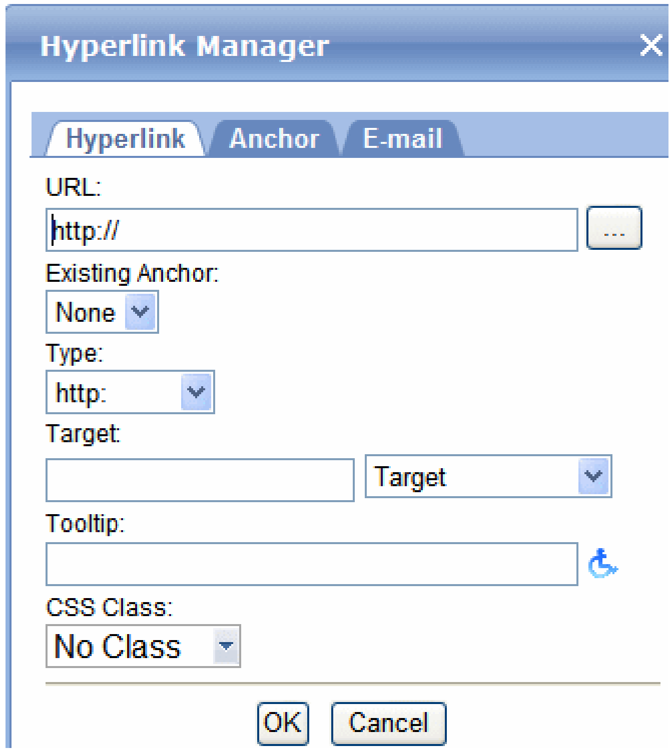
Entering a Hyperlink

To create a hyperlink, follow these steps.

1. Select the source text.

Note: Alternatively, you can select an image and apply a hyperlink to it.

2. Click the Hyperlink Manager button ( ). The Hyperlink dialog appears.



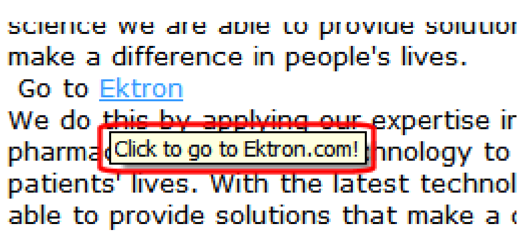
3. Click in the **URL** field after `http://`. Then, enter the address of the destination Web page. For example, `www.ektron.com`.

   If your version of Ektron CMS400.NET has URLs that have been entered into the library as hyperlinks, click the ellipsis button (...) to browse the library and insert a hyperlink. See Also: "Hyperlinks" on page 8-20

4. If desired, use the **Target Frame** field to change the window in which the destination text appears. For details, see "Changing the Destination Window" on page 7-54.

   If you leave the **Target Frame** field blank, the new window replaces the current window.

5. You can enter text to appear in a small window when someone hovers his cursor over this link. For example:



   To add such text, use the **Tooltip** field.

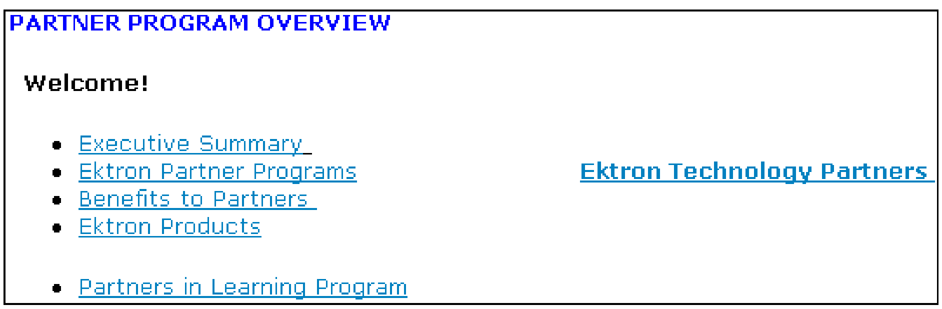
6. The style of this hyperlink is normally determined by the style sheet assigned to the content's page template. However, if you want to apply a special style sheet class to this link, select it from the **CSS Class** dropdown.
7. Click **OK**.

Creating a Hyperlink to a Location Within a Web Page

Sometimes, the destination Web page contains bookmarks, and you want to jump from your page to a bookmark on another page. (Bookmarks are described in "Using Bookmarks" on page 7-53.)

To create a hyperlink that jumps to another page's bookmark, follow these steps.

1. Open a browser and your Web site.
2. Go to the Web page that contains the bookmark link.
3. Click the bookmark that you want to jump to. For example, on the illustration below, the text **Benefits to Partners** jumps to a bookmark further down the page.



4. When you click the bookmark, its full address appears in the browser address bar. This bookmark's address looks like this.

```
http://www.example.com/single.aspx?id=35#Benefits2
```

5. Click the address bar. The address is selected.
6. Press <Ctrl>+<C> to copy the address into the Windows clipboard.
7. Go to eWebEdit400.
8. Select the text or image from which you want to jump to the bookmark.
9. Click the Hyperlink button ( ). The hyperlink dialog box appears.
10. Move the cursor to the **Link** field.
11. Press <Ctrl>+<V> to paste the address you copied in Step 4 into the **Link** field.
12. Click **OK**.

Editing a Hyperlink

If you need to change a hyperlink's destination Web page or target frame, follow these steps.

1. Select the hyperlinked text.
2. Right click your mouse.
3. Click **Set Link Properties**.
4. The Hyperlink Manager dialog appears.
5. Edit the fields as needed. Several fields are explained in "Entering a Hyperlink" on page 7-56.
6. Press **OK**.

Removing a Hyperlink

If you want to remove a hyperlink from text, select the text and press the Remove Link button ( ).

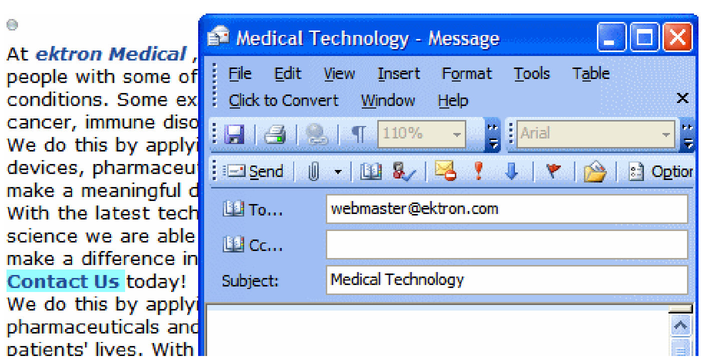
Preventing a URL from Becoming a Hyperlink

If you enter a URL or an email address into eWebEdit400, it automatically becomes a hyperlink. To avoid this, select the text and click the Remove Link toolbar button ( ).

Inserting email Links

You can easily insert email links into your content. Such links provide an easy way for your site visitors to communicate with your organization.

An email link resembles a hyperlink. But, when a site visitor clicks the link, instead of opening a different Web page, his email application is launched.



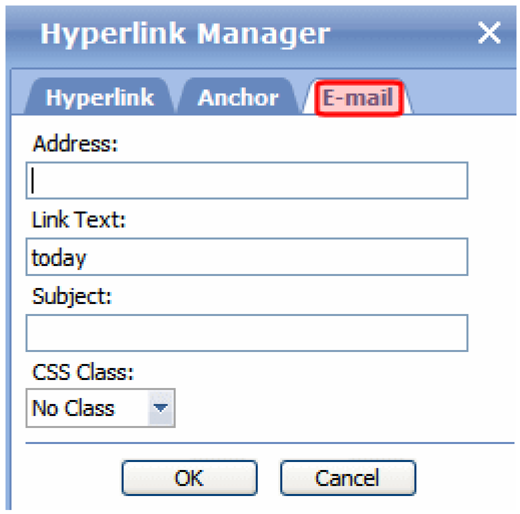
The address and subject are retrieved from the mail link and inserted into the user's email screen, as shown above.

To insert an email link, follow these steps.

1. Within eWebEdit400 content, insert text that a site visitor will click to open the email link. For example: **Contact us today!**

   If the text does not exist yet, insert it.

2. Select the text.
3. Click the Hyperlink Manager button ( ). The Hyperlink dialog appears.
4. Click the **E-mail** tab.



5. Note that the selected text appears in the **Link Text** field.
6. In the **Address** field, enter the email address to which the message will be sent.
7. In the **Subject** field, enter default text for the email's Subject line if desired. The user sending the mail can edit this text if desired.
8. Press **OK**.

Working with HTML

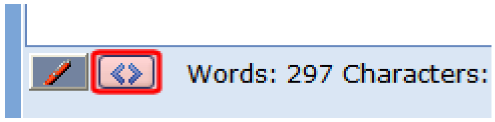
eWebEdit400 creates pages for display on the internet or an intranet. These pages use HTML (hypertext markup language) to format text and images for display in a browser. You do not need to know HTML to use eWebEdit400.

However, if you know HTML, you can view, insert or edit your Web page's HTML code.

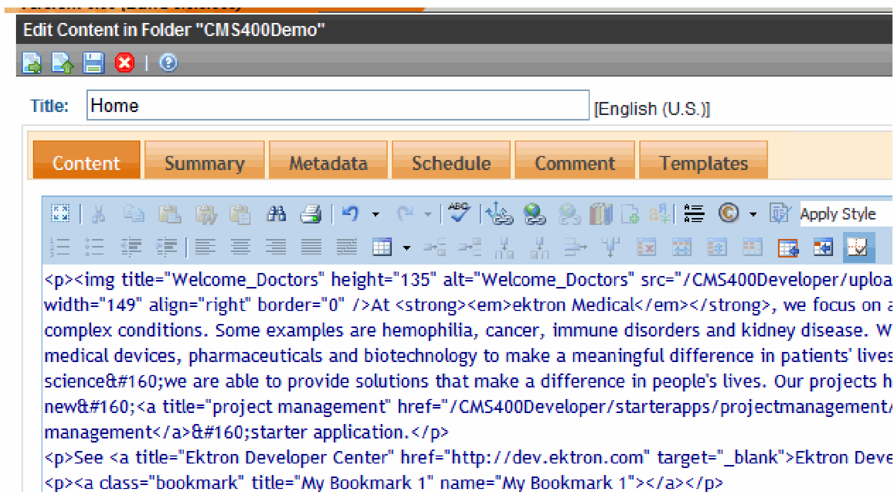
Viewing and Editing HTML

To view your page's HTML, follow these steps.

1. Scroll to the bottom of the screen.
2. Click the HTML button (circled below).



3. The HTML code appears, as shown below.

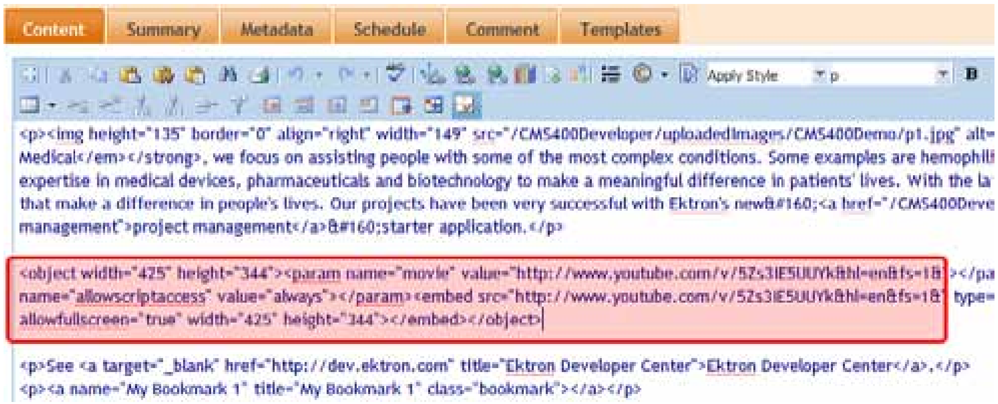


4. You can edit the HTML using functions like Cut, Copy, Paste and Delete. To access these functions, right click the mouse.
5. To return to normal view, click the Design button (circled below).

Adding Custom Tags to the Content's Source

You can insert custom tags into your content. The tags can be used to provide all kinds of functionality, such as video/object tag support, JavaScript and .css file support.

To insert custom tags, edit the source of your content, as explained in "Viewing and Editing HTML" on page 7-60. Then, enter the custom tags. Here is an example.


Content
Summary
Metadata
Schedule
Comment
Templates
Apply Style
p
B
<p><img height="135" border="0" align="right" width="149" src="/CMS400Developer/uploadedImages/CMS400Demo/p1.jpg" alt=
Medical, we focus on assisting people with some of the most complex conditions. Some examples are hemophili
expertise in medical devices, pharmaceuticals and biotechnology to make a meaningful difference in patients' lives. With the la
that make a difference in people's lives. Our projects have been very successful with Ektron's new <a href="/CMS400Deve
management">project management starter application.</p>
<object width="425" height="344"><param name="movie" value="http://www.youtube.com/v/5Zs3IE5UUYk&hl=en&fs=1&"></pa
name="allowscriptaccess" value="always"></param><embed src="http://www.youtube.com/v/5Zs3IE5UUYk&hl=en&fs=1&" type=
allowfullscreen="true" width="425" height="344"></embed></object>
<p>See Ektron Developer Center.</p>
<p></p>

Working with Tables

Sometimes, the information on your Web page looks better when displayed on a table. Here is an example.

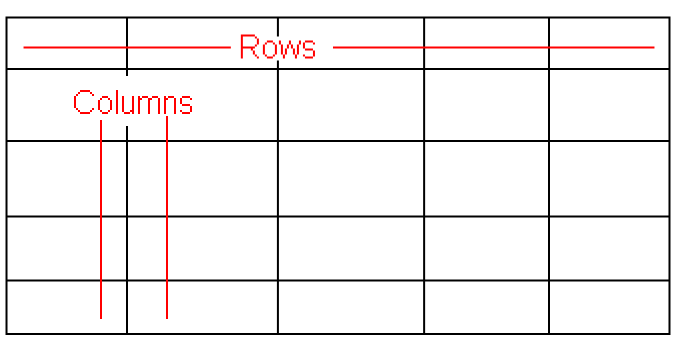
City	Baseball Team	Hockey Team
Boston	Red Sox	Bruins
New York	Yankees / Mets	Rangers
Chicago	White Sox / Cubs	Black Hawks

This chapter explains everything you need to about working with tables. It explains

- "Creating a Table" on page 7-63
- "Deleting a Table" on page 7-68
- "Inserting a Table within a Table" on page 7-69
- "Modifying Table Properties" on page 7-66
- "Working with Table Cells" on page 7-92
- "Section 508 Tables" on page 7-87

Creating a Table

When creating a table, you need to specify a number of rows and columns. A row is a horizontal series of cells, while a column is a vertical series.



If you know how many rows and columns the table will be, enter those numbers. If you don't know the exact number when you create the table, estimate how many you need. You can easily add or remove rows and columns later.

There are two ways to create a table. If your table will be six rows by six columns or less, use the Table Builder. See Also: "Creating a Table Using the Table Builder" on page 7-64

If it will exceed 6 x 6, use the Table Wizard. See Also: "Creating a Table Using the Table Wizard" on page 7-65

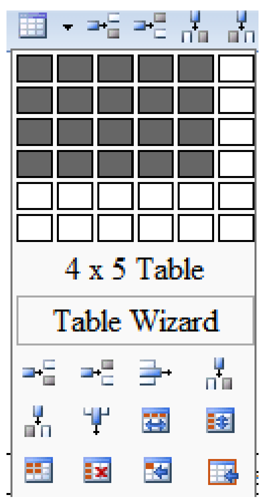
Either way, once the table is created, you use the features described in "Modifying Table Properties" on page 7-66 to add borders, background color, set width and height, etc.

Creating a Table Using the Table Builder

To create a table, follow these steps.

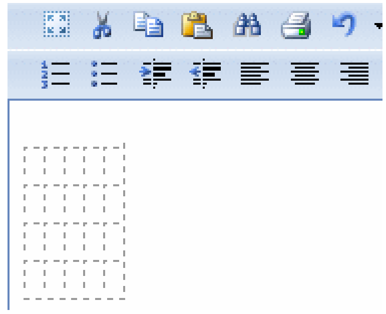
1. Click the table button ( ).
2. Drag the cursor over rows and column to indicate the size of the table.

The following example shows a table that is 4 rows by 5 columns.



3. Click the mouse.

At this point, the table looks like this.

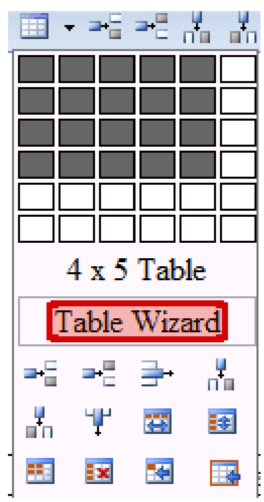


4. Begin entering text and images into the table cells. To further modify the table, see "Modifying Table Properties" on page 7-66.

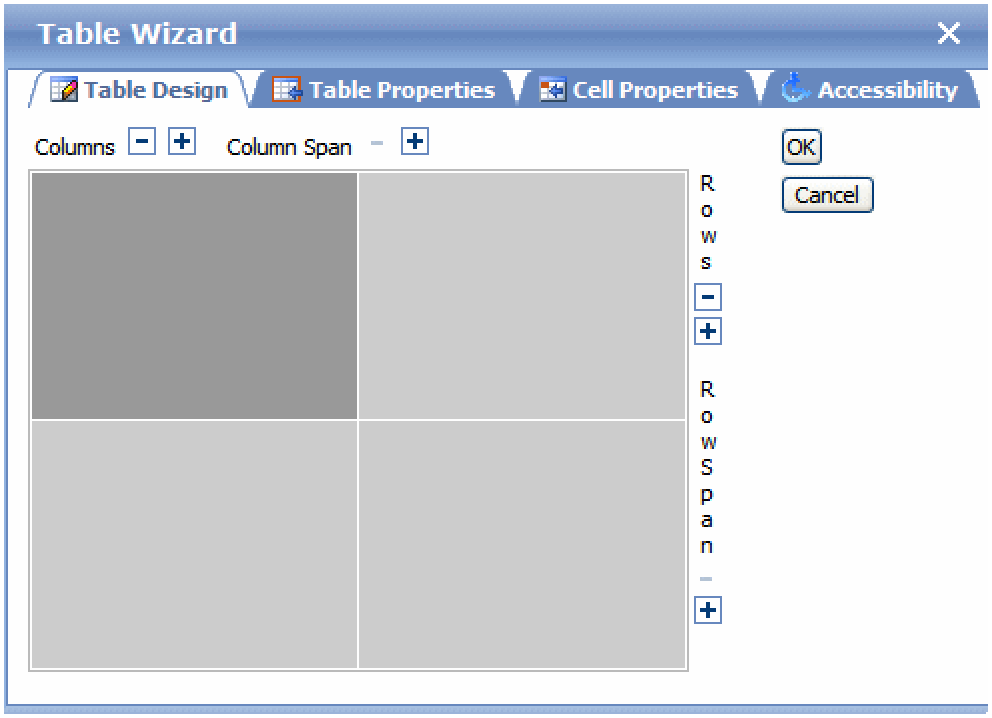
You can also select the table and drag its right border to the right and/or down to enlarge it for ease of use.

Creating a Table Using the Table Wizard

1. Click the table button ( ).
2. Click **Table Wizard** (circled below).



3. The Table Wizard dialog appears.

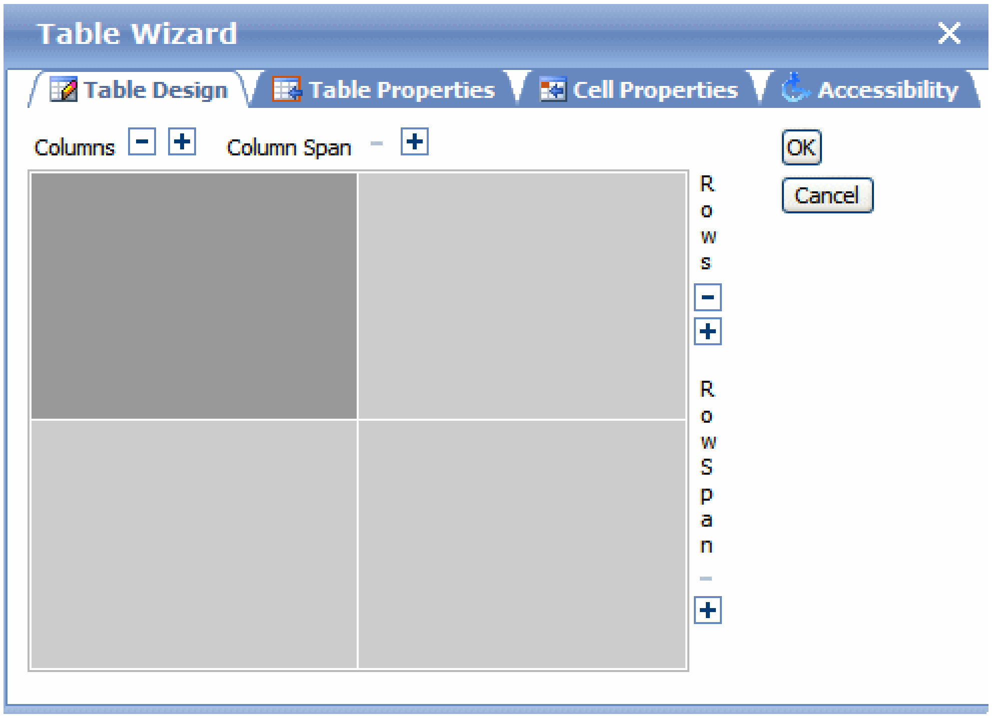


4. To change the number of columns or rows, click the plus or minus signs (+ -) next to **Columns** and **Rows**.
5. The image adjusts to show the number of rows and columns.
6. Press **OK**.
7. Begin entering text and images into the table cells. To further modify the table, see "Modifying Table Properties" on page 7-66.

Modifying Table Properties

To modify a table's properties, follow these steps.

1. Click inside the table.
2. Right click the mouse.
3. Click **Set Table Properties**.
4. The Table Wizard dialog appears.



The dialog has four tabs, described below.

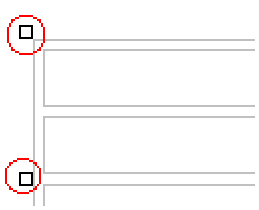
Tab	Description	For more information, see
Table Design	Lets you ■ adjust the number or row and columns ■ *span* rows or columns (that is, two or more adjacent cells are merged)	"Choosing the Number of Rows and Columns" on page 7-69 "Spanning Rows or Columns" on page 7-97
Table Properties	Lets you set the table's ■ width ■ height ■ background color ■ background image ■ alignment ■ cell spacing and padding ■ Id ■ css class ■ border	"Specifying Table Width" on page 7-71 "Table Backgrounds" on page 7-77 "Specifying Horizontal Alignment" on page 7-75 "Setting Cell Padding and Spacing" on page 7-103 "Setting Table Borders" on page 7-82

Tab	Description	For more information, see
Cell Properties	Lets you set the selected cells' ■ alignment ■ background color ■ background image ■ height and width ■ ID ■ css class ■ abbreviation ■ categories	"Aligning Text Within a Cell" on page 7-100 "Specifying a Cell's Background Color " on page 7-95 "Specifying a Background Image for a Cell" on page 7-96 "Specifying a Cell's Background Color " on page 7-95 "Spanning More than One Row or Column" on page 7-98
Accessibility	Lets you assign accessibility information for the table. ■ heading rows caption ■ heading columns caption ■ caption alignment ■ caption ■ summary	"Section 508 Tables" on page 7-87

Deleting a Table

To delete a table, follow these steps

1. Move the cursor over the table until the cursor becomes a four-headed arrow ( ).
2. Click the mouse button. The table becomes selected (small squares appear around it).



3. Press <Delete>.

Inserting a Table within a Table

You can insert a table within a table. You might want to do this to arrange text in columns.

Horizontal Alignment	Right	Left	Center
	text	text	text

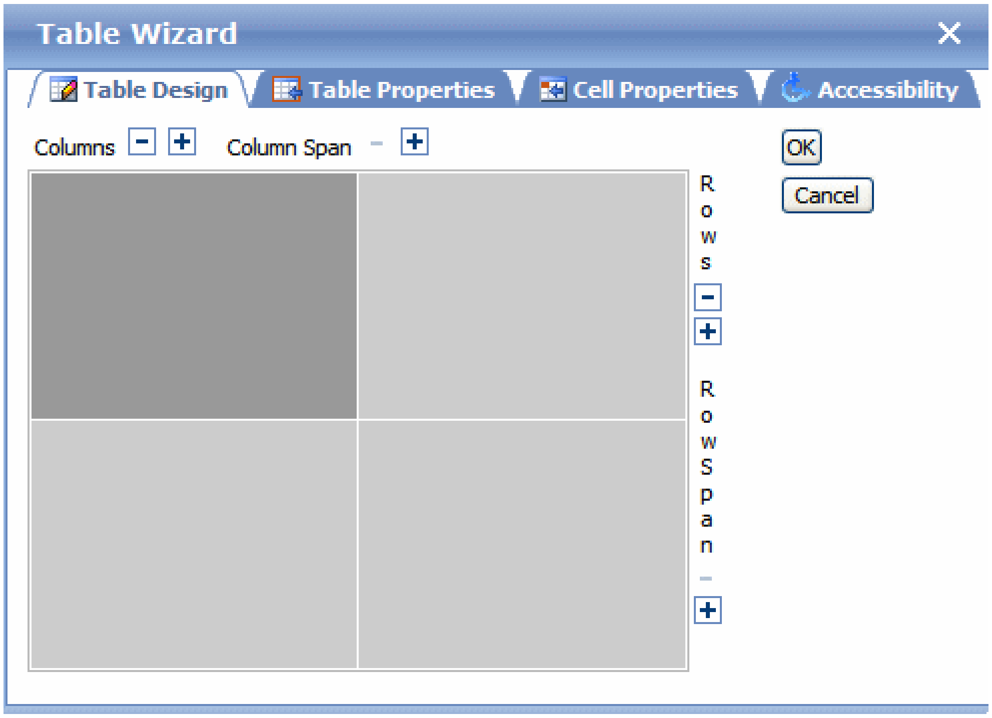
Note: HTML does not let you use tabs or spaces to align text in columns. You must use a table to align columns. You can remove the table's border, so that no lines appear between the columns and rows.

To insert a table within a table, follow these steps.

1. Place the cursor in the cell into which you want to insert a table.
2. Click the Insert Table button ().
3. Drag the cursor over rows and column to indicate the size of the table.
4. Click the mouse.

Choosing the Number of Rows and Columns

Use the **Table Design** tab of the Table Properties box to change the number of rows or columns in a table.



Use the plus (+) or minus (-) signs next to **Columns** or **Rows** to adjust the number.

Alternatively, place the cursor within the table then add or remove columns relative to that cell. See "Adding or Removing Rows and Columns" on page 7-70.

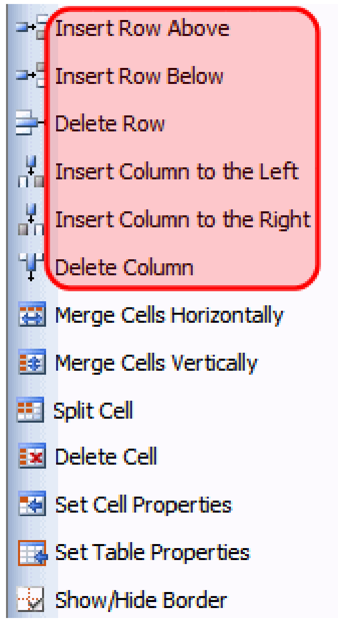
Adding or Removing Rows and Columns

To add or remove table rows and columns, follow these steps.

Note: You can also adjust the number of rows and columns using the Table Wizard. See Also: "Creating a Table Using the Table Wizard" on page 7-65.

1. Place the cursor in the cell from which you want to add or delete rows or columns.
2. Right click the mouse. A menu appears.

   Menu options relating to adding/removing rows or columns are highlighted below.



3. Click the appropriate menu option. For example, to add a row above the current cursor location, click **Insert Row Above**.

Note: These options are also available on the toolbar.

Specifying Table Width

After you create a table, you can set its width by specifying one of the following:

- *percentage* of the window: the table's width varies as a user adjusts the browser size
- *fixed number of pixels,* the table's width stays the same as a user adjusts the browser size

You can also *not* set a width but instead let information you enter into the table's cells determine its width.

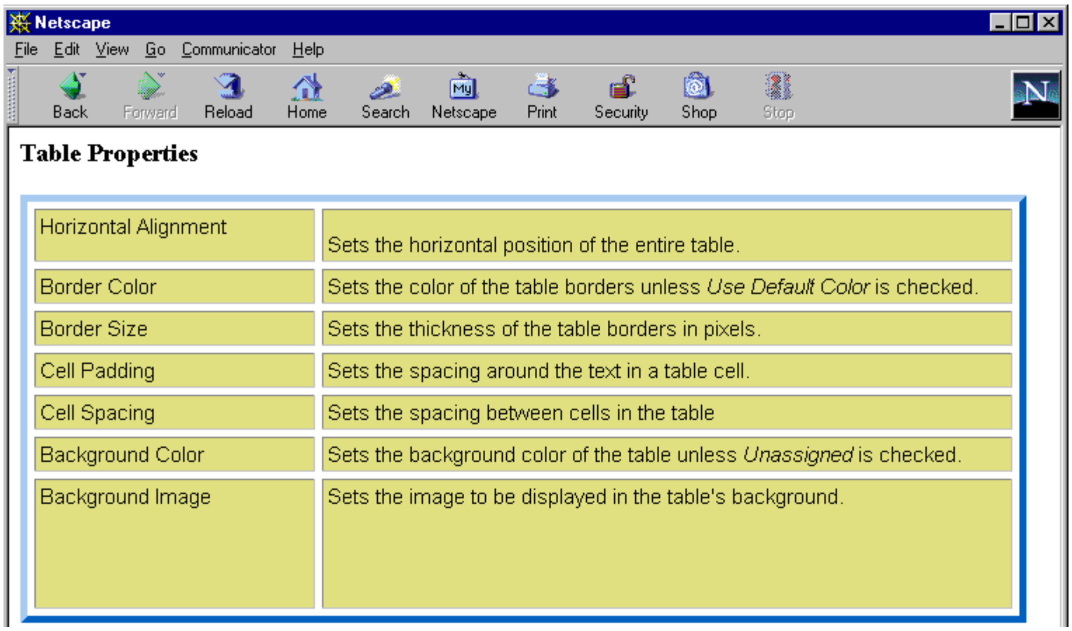
Note: To set the width of a column, adjust the width of one of the cells within the column (as described in "Specifying the Height and Width of a Cell" on page 7-94). Usually, this change affects the other cells in the column.

Specifying Table Width by Percentage

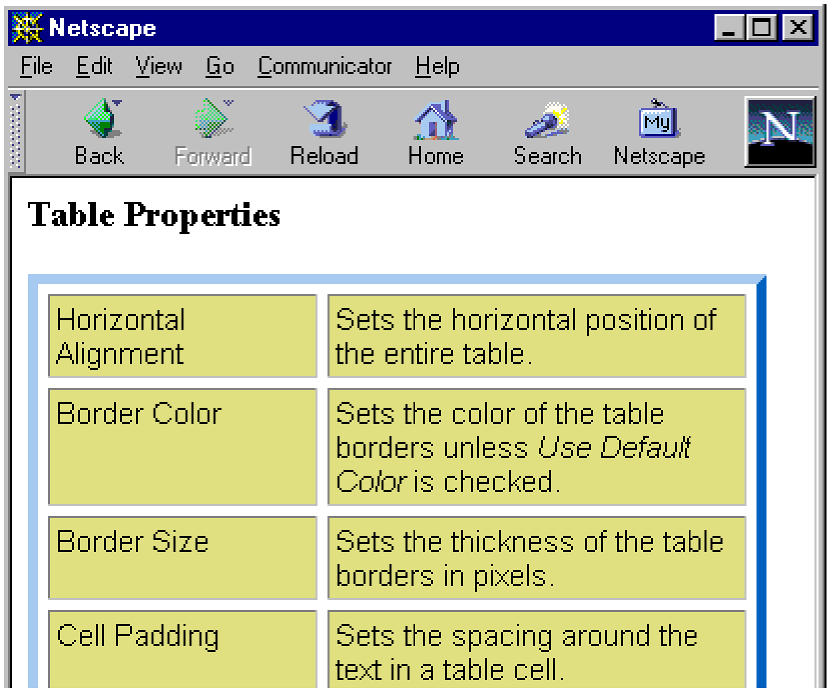
Specify table width and height by percentage if you want the table to be resized as the user resizes the browser.

Note: In order for the table to resize with the browser, the Word Wrap attribute must be turned on in all table cells. For details, see "Word Wrap" on page 7-102.

For example, if you specify that a table is 100% wide and high, and your browser displays 14 inches across when it is maximized, the table fills the screen (except for the browser border).



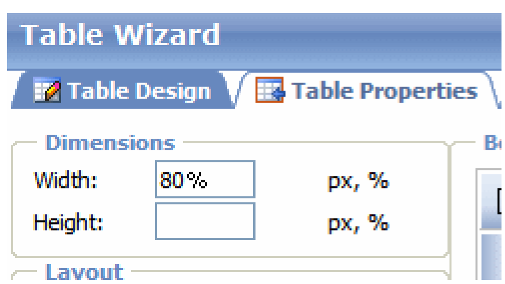
If you resize the browser to half the screen, the table will be about 7” wide. You still see both columns, but some of the data is moved down.



Setting Table Width or Height by Percentage

To specify table width by percentage, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. In the **Dimensions** section of the **Table Properties** tab, specify the percentage at the **Width** or **Height** field. Follow the number with the percent sign **(%)**, as shown below.

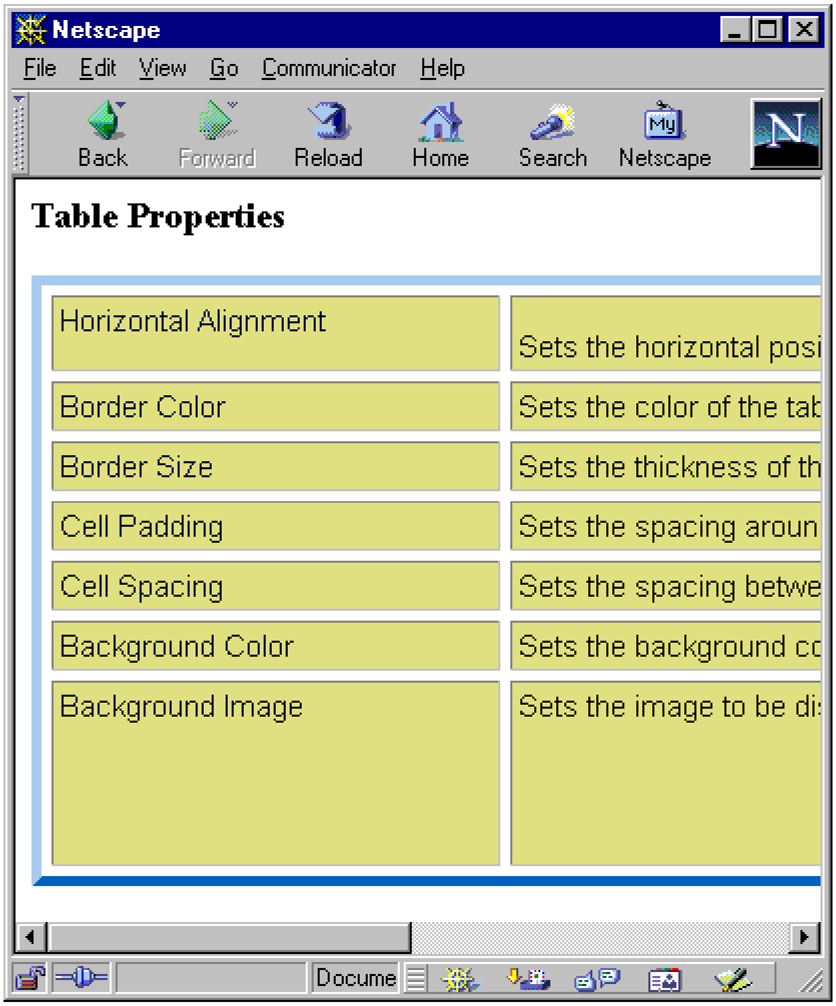


Specifying Table Width or Height by Pixels

Specify table width or height by pixels if you want the table size to remain the same when a user resizes the browser.

For example, if you specify that a table is 610 pixels wide, and the user's browser is set to low resolution (640 x 480 pixels), the table occupies the full width of the browser when it is maximized.

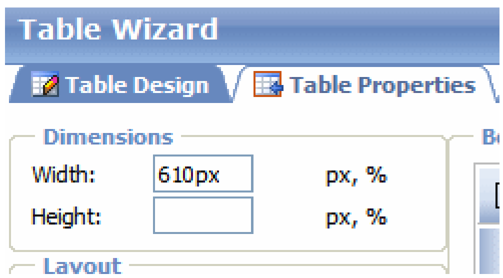
If the user resizes the browser so that it only occupies the left half of the screen, only the left half of the table appears. A scroll bar appears at the bottom of the browser. The user must move the scroll bar to see the rest of the table.



Setting Table Width by Pixels

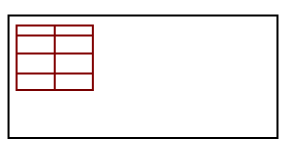
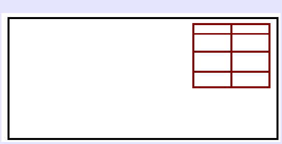
To specify table width or height by pixels, follow these steps.

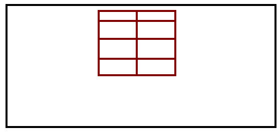
1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. In the **Dimensions** section of the **Table Properties** tab, enter the number of pixels at the **Width** or **Height** field.



Specifying Horizontal Alignment

You can specify your table's horizontal alignment (left, right, or center) within the browser.

Alignment	Example
left	
right	

Alignment	Example
center	

If you specify right or left justify, you can wrap text around the table. To do this, move the cursor to the right or left of the table and begin typing.

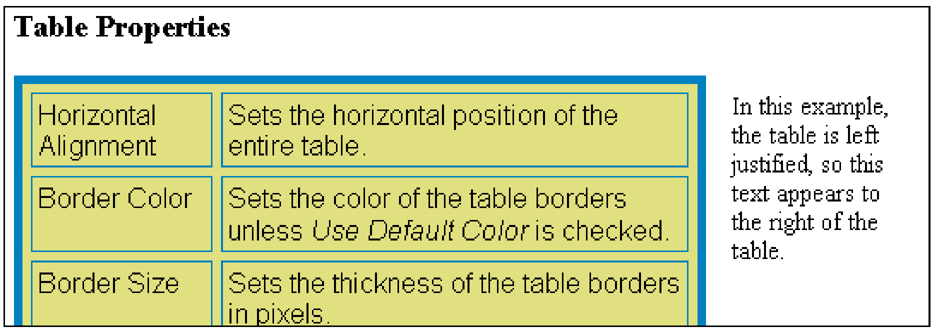


Table Properties

Horizontal Alignment	Sets the horizontal position of the entire table.
Border Color	Sets the color of the table borders unless *Use Default Color* is checked.
Border Size	Sets the thickness of the table borders in pixels.

In this example, the table is left justified, so this text appears to the right of the table.

To specify table alignment, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. Specify table alignment at the **Alignment** field.

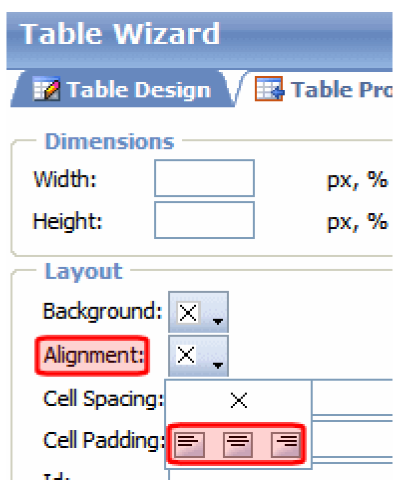


Table Backgrounds

You can specify a background color or image for your table.

- "Deleting a Table's Background Color" on page 7-79
- "Specifying a Table Row's Background Color" on page 7-79
- "Specifying a Table's Background Image" on page 7-81

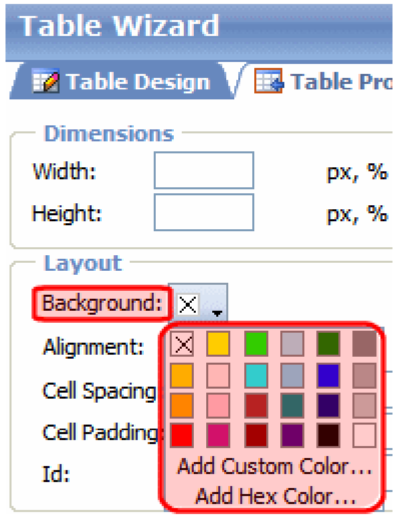
Specifying a Table's Background Color

You can assign a background color to a table to give it more visual appeal. Here is an example.

Width	Sets the width of the table on the page in terms of a percentage or by pixel width.
Horizontal Alignment	Sets the horizontal position of the entire table. For example, left, center, right.
Border Color	Sets the color of the table borders unless *Use Default Color* is checked.

To assign a background color to your table, follow these steps.

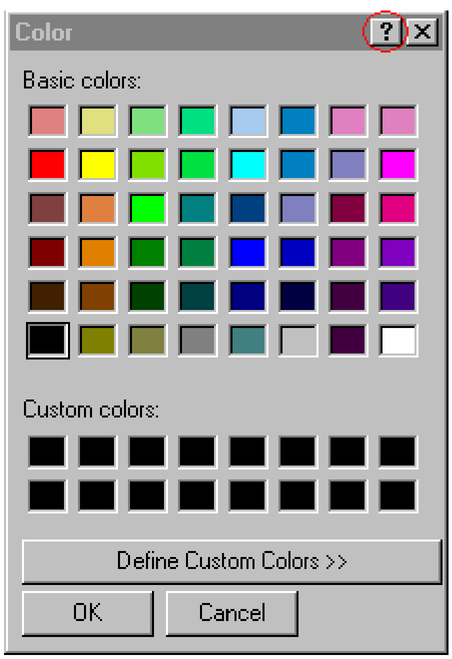
1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. Click the **Background** dropdown list.



6. A selection of colors appears. Click a color for the table's background.

From the dropdown, you can add custom colors by selecting a color patch or entering a color's hex value. Follow these steps to get help on how to use the color box.

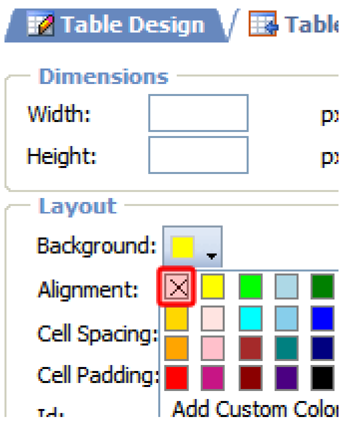
1. Click the question mark in the top right corner.



2. A large question mark appears next to your cursor.
3. Drag the question mark to the area of the dialog box that you want to learn about.
4. Click the mouse button. A box appears with instructions for that area.

Deleting a Table's Background Color

To delete a table's background color, click the **Background** dropdown list on the **Table Properties** tab of the Table Wizard.

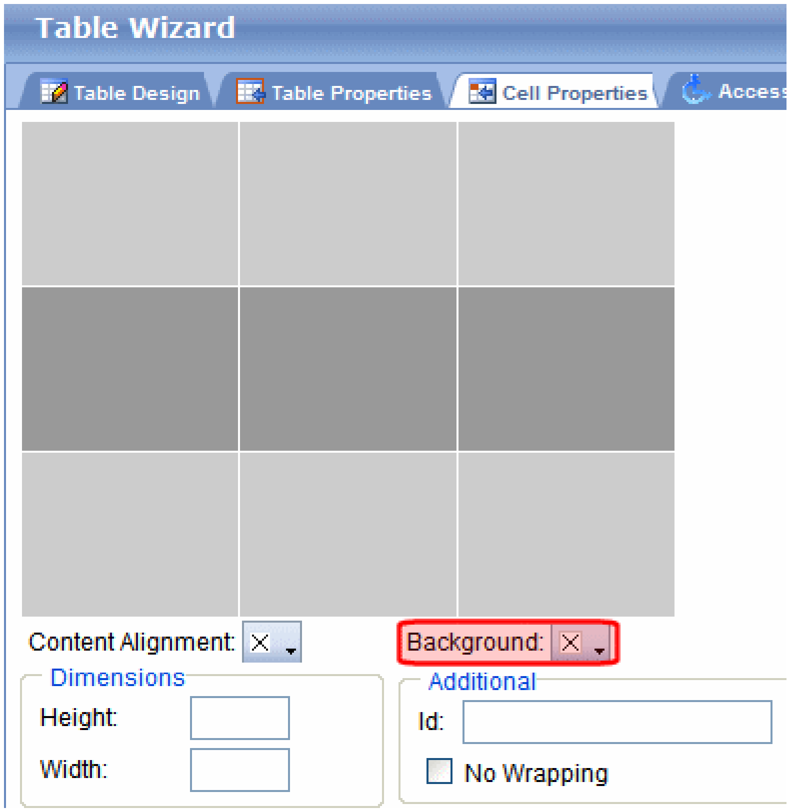


Then, click the top left choice (circled above).

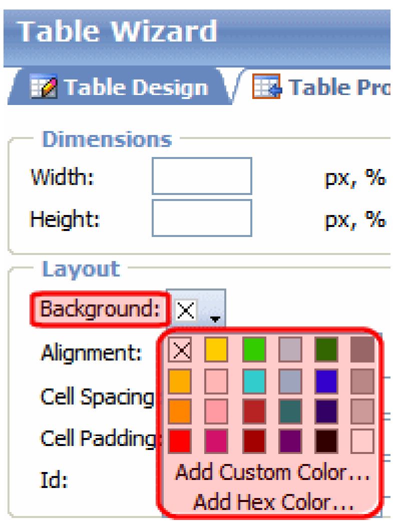
Specifying a Table Row's Background Color

To assign a background color to a table row, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Cell Properties** tab.
5. Within the Table Wizard dialog, hold down the <Ctrl> key while clicking all cells in the row. In the following illustration, the second row from the top is selected (dark gray).



6. Click the **Background** dropdown list (circled above).



7. A selection of colors appears. Click a color for the table's background.
8. Click **OK**.

Specifying a Table's Background Image

You can specify a background image for your table. Here is an example.

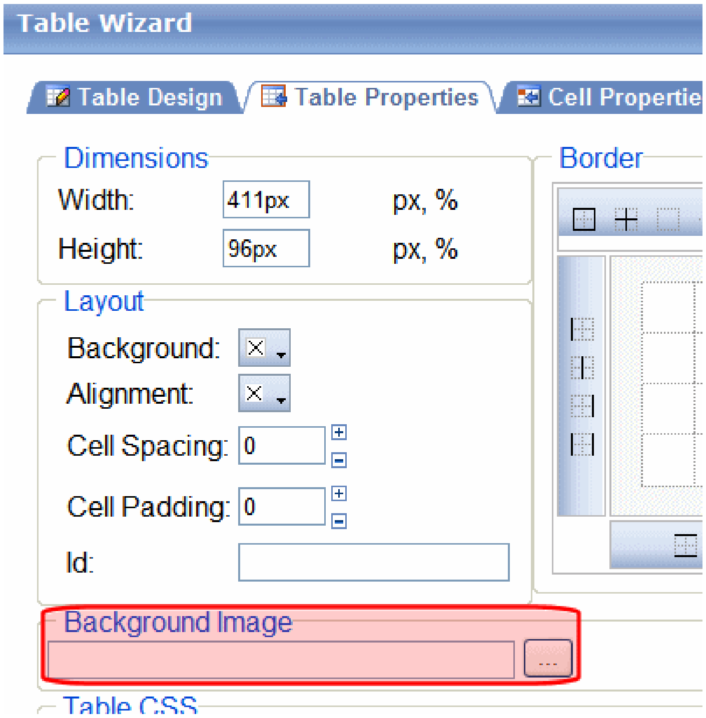
Team	Wins	Losses
Red Sox	94	68
Yankees	92	70

Note that when you apply a background image to a table

- if the table is larger than the image, the image repeats until it fills the table.
- if the image is larger than the table, the top left corner of the image aligns with the top left corner of the table. The rest of the image fills as much of the table as possible.
- you can also apply an image to individual cells (see "Specifying a Background Image for a Cell" on page 7-96).
- make sure the image does not obscure the table's legibility

To insert a table background image, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. In the **Background Image** field, click the ellipsis button (...) to open the Library. From there, select an image for the table's background. See Also: "Library Folder" on page 8-1



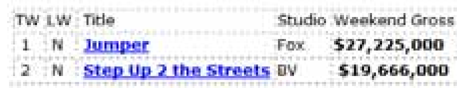
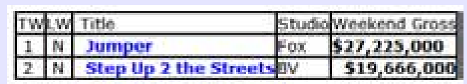
6. Click **Update**.

Deleting a Background Image

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. Select the value in the **Background Image** field.
6. Press <Delete>.
7. Click **OK**.

Setting Table Borders

A table border consists of the lines that separate a table's cells form each other, and the table from the rest of your Web page. There are two types of table borders.

Border type	Used by this type of user	Illustration
internal	content author	
external	site visitor	

See Also:

- "Assigning an Internal Table Border" on page 7-83
- "Assigning External Table Border Attributes" on page 7-83

Assigning an Internal Table Border

Note: If the table's border is on, these steps turn it off. If it is off, they turn it on.

1. Place the cursor inside the table.
2. Right click the mouse.
3. Click **Show/Hide border**.

Assigning External Table Border Attributes

You can modify these external border attributes

- color - see "Assigning Table Border Color " on page 7-83
- size (thickness) - see "Assigning Border Size" on page 7-85
- line selection - see "Determining Which Table Border Lines Appear" on page 7-86

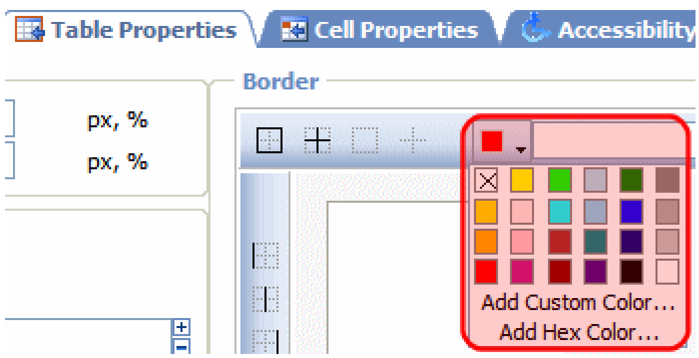
Assigning Table Border Color

This section explains how to change the color of a table's border (see example below).

Excursion	Cost ($USD)	Number of Days
Costa Rica	$3450	14
Bermuda	$1835	7

To assign the color of your table's border, follow these steps.

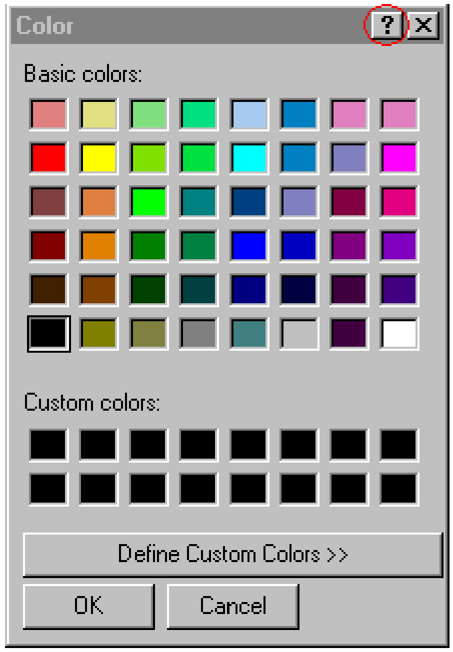
1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. Click the **Border Color** drop down (circled below).



6. A color selection box appears. Click a color to apply to the table's border.

Follow these steps to get help on how to use the color box.

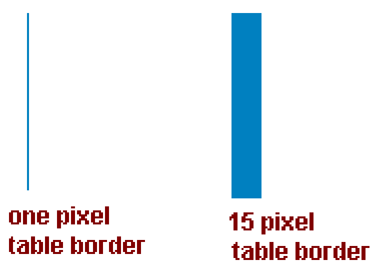
1. Click the question mark in the top right corner.



2. A large question mark appears next to your cursor.
3. Drag the question mark to the area of the dialog box that you want to learn about.
4. Click the mouse button. A box appears with instructions for that area.

Assigning Border Size

You can also adjust the size of a table border. Size is measured in pixels.

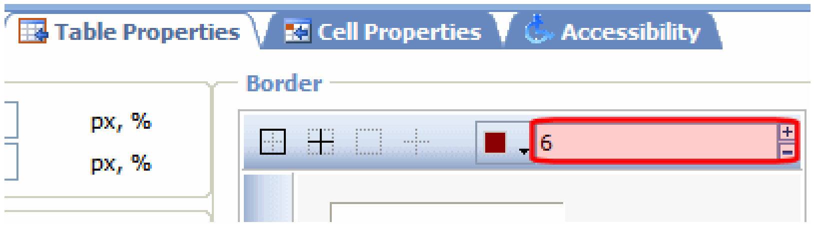


The border size only adjusts a table's exterior border - it has no effect on the border between cells.

To assign a border size to your table, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.

4. Click the **Table Properties** tab.
5. Enter a number of pixels into the **Border** field (circled below).



If you set a table's border size to zero (0) but wish to view boundary lines while editing, see "Assigning an Internal Table Border" on page 7-83.

Determining Which Table Border Lines Appear

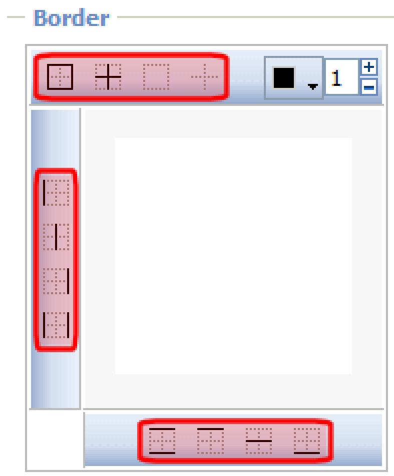
You may want to suppress some table borders. For example, the table below only shows horizontal lines.

TW	LW	Title	Studio	Weekend Gross
1	N	**Jumper**	Fox	**$27,225,000**
2	N	**Step Up 2 the Streets**	BV	**$ 19,666,000**

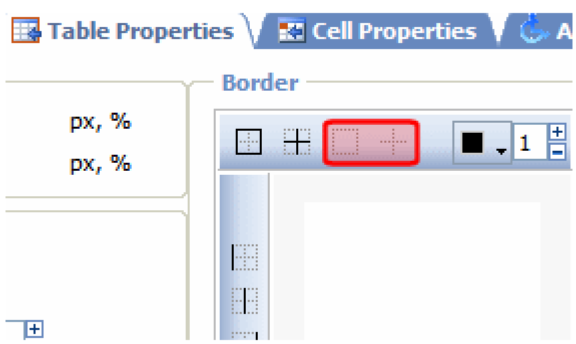
To modify which border lines appear, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Table Properties**.
4. Click the **Table Properties** tab.
5. Use the icons within the Border area to indicate which border lines should appear. Each icon has tooltip text that explains its function.

Note: In order to view the selected borders on the dialog, a border color must be assigned. See "Assigning Table Border Color " on page 7-83.



Note that if a table already has border lines but you want to start “fresh,” it is a good idea to remove all borders using the icons indicated below. Then, you can begin adding new ones.



Section 508 Tables

You can apply the following information to any table to make it 508 compliant. Narrative software uses the information from the Accessibility table fields (heading rows, columns, caption alignment and summary) to produce a Tooltip message for each table cell. Users with impaired vision can see those Tooltips as they hover over the cells.

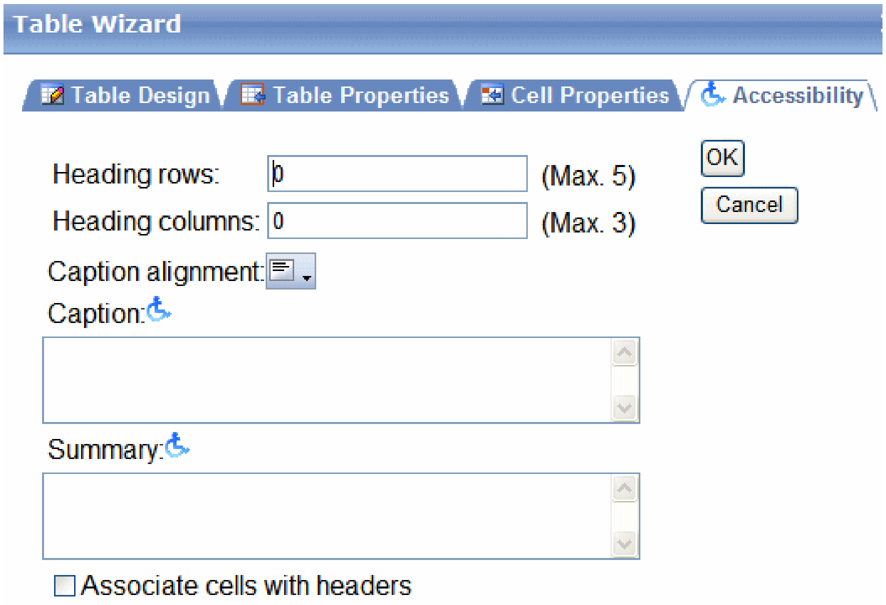
Information	Where applied	For more information, see
Heading Rows	Accessibility dialog	"Accessibility Dialog" on page 7-89

Information	Where applied	For more information, see
Heading Columns	Accessibility dialog	"Accessibility Dialog" on page 7-89
Summary	Accessibility dialog	"Accessibility Dialog" on page 7-89
Caption	Accessibility dialog	"Accessibility Dialog" on page 7-89
Horizontal Caption Alignment	Accessibility dialog	"Accessibility Dialog" on page 7-89
Vertical Caption Alignment	Accessibility dialog	"Accessibility Dialog" on page 7-89
Abbreviation	Cell properties dialog	"Accessibility Fields on Cell Properties Dialog" on page 7-91
Categories	Cell properties dialog	"Accessibility Fields on Cell Properties Dialog" on page 7-91

Learn About Creating a 508 Compliant Table

To create a 508 compliant table, follow these steps.

1. Create a new table or edit an existing one, as explained in "Creating a Table" on page 7-63.
2. Place the cursor inside the table.
3. Right click the mouse.
4. Click **Set Table Properties**.
5. The Table Properties dialog appears.
6. Click the **Accessibility** tab.



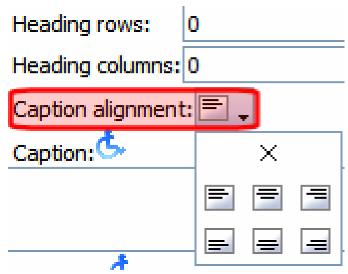
See Also:

- "Accessibility Dialog" on page 7-89
- "Setting Abbreviation and Category Attributes" on page 7-90

Accessibility Dialog

The fields on the tab are described below.

Field	Description
Heading Rows	If you want your table to have a horizontal header, enter the number of rows that it should occupy. The number cannot exceed five. Beginning with the top, all cells in the specified number of rows are designated as table headers.
Heading Columns	If you want your table to have a header, enter the number of columns that it should occupy. The number cannot exceed three. Beginning with the left column, all cells in the specified number of columns are designated as table headers.
Caption Alignment	To choose the caption's alignment, click the down arrow next to this field as shown below.

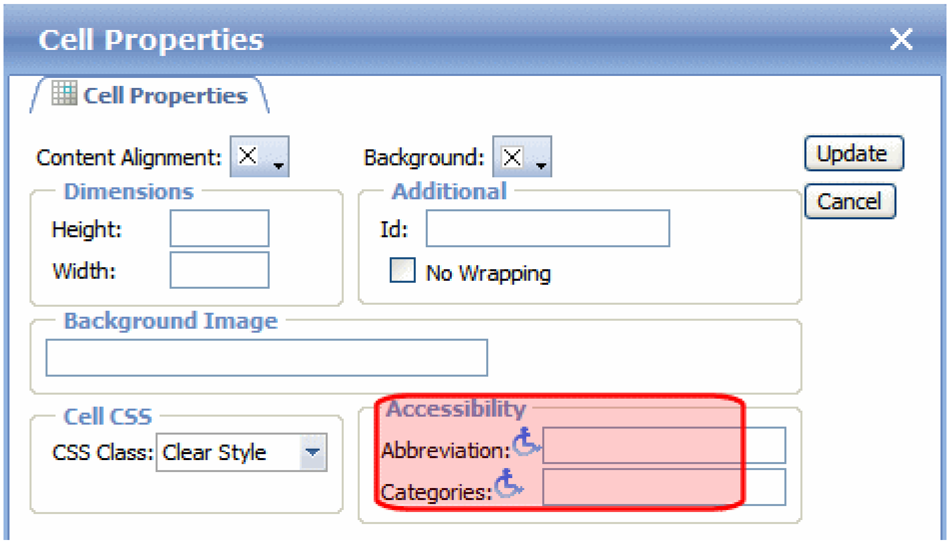
Field	Description
	 Click the box that represents the alignment style you want.
Caption	If desired, enter a table caption. The caption appears above the table. The caption's alignment is set in the **Caption Alignment** field.
Summary	If desired, enter the table summary. Non-visual browsers use the summary to explain the table's contents. From http://www.w3.org/TR/WCAG10-HTML-TECHS/#data-tables "A summary of the relationships among cells is especially important for tables with nested headings, cells that span multiple columns or rows, or other relationships that may not be obvious from analyzing the structure of the table but that may be apparent in a visual rendering of the table. A summary may also describe how the table fits into the context of the current document. If no caption is provided, it is even more critical to provide a summary."
Associate Cells with Headers	Check this box if you want to associate the table's data cells with the appropriate headers. See Also: http://www.w3.org/TR/WCAG20-TECHS/H43.html

After you complete the Table Properties dialog, click **OK** to make the table Section 508 compliant.

Setting Abbreviation and Category Attributes

You can modify abbreviation (ABBR) and category (AXIS) attributes within a table. To do so, follow these steps.

1. Select one or more cells.
2. RIght click the mouse.
3. Select **Set Cell Properties**.
4. The Cell Properties dialog appears. It includes the **Abbreviation** and **Categories** fields (see illustration below).



The following explains how to respond to these fields.

Accessibility Fields on Cell Properties Dialog

Field	Description
Abbreviation	Sets or retrieves abbreviated text for the content in the tag. Can be used to render non-visual media, such as speech or Braille. For more information, see http://msdn2.microsoft.com/en-us/library/ms533058.aspx
Categories	Sets or retrieves a comma-delimited list of conceptual categories associated with that tag. Can be used to render non-visual media, such as speech or Braille. For more information, see http://msdn2.microsoft.com/en-us/library/ms533489.aspx

Working with Table Cells

Along with functions for managing tables (described in "Working with Tables" on page 7-63), eWebEdit400 also lets you perform actions on individual cells within a table.

You can perform the following actions on individual table cells.

- "Specifying the Height and Width of a Cell" on page 7-94
- "Deleting a Cell" on page 7-95
- "Specifying a Cell's Background Color " on page 7-95
- "Specifying a Background Image for a Cell" on page 7-96
- "Spanning Rows or Columns" on page 7-97
- "Aligning Text Within a Cell" on page 7-100
- "Splitting a Cell" on page 7-101
- "Merging Two Cells" on page 7-102
- "Word Wrap" on page 7-102
- "Setting Cell Padding and Spacing" on page 7-103

Note: HTML does not allow you to adjust the width of a cell's border.

You can also select several cells or a row of cells and change them as described above. However, you cannot select and change a column of cells.

Selecting Cells to Modify

- "Modifying a Single Cell" on page 7-92
- "Modifying Several Cells" on page 7-93

Modifying a Single Cell

If you want to make any of the modifications described in this section to a single cell, follow these steps.

1. Place the cursor in that cell.
2. Right click the mouse.
3. Select **Set Cell Properties** from the menu.
4. Make the changes on the Cell Properties dialog.

5. Click **Update**.

Modifying Several Cells

If you want to make any of the modifications described in this section to several cells, follow these steps.

Note: Most procedures in this section tell you to select **Cell Properties** from the right click menu. To perform an action on several cells, select **Set Table Properties** from the right click menu, then click the **Cell Properties** tab.

1. Place the cursor anywhere in the table.
2. Right click the mouse.
3. Select **Set Table Properties** from the menu.
4. Click the Cell Properties tab.
5. Select the cells that you want to change. Hold down the <Ctrl> key while selecting.

   As you select a cell, its color changes from light to dark gray.

6. Make changes to fields on the lower part of the Cell Properties tab. The fields are described later in this section.
7. Click **OK**.

Specifying the Height and Width of a Cell

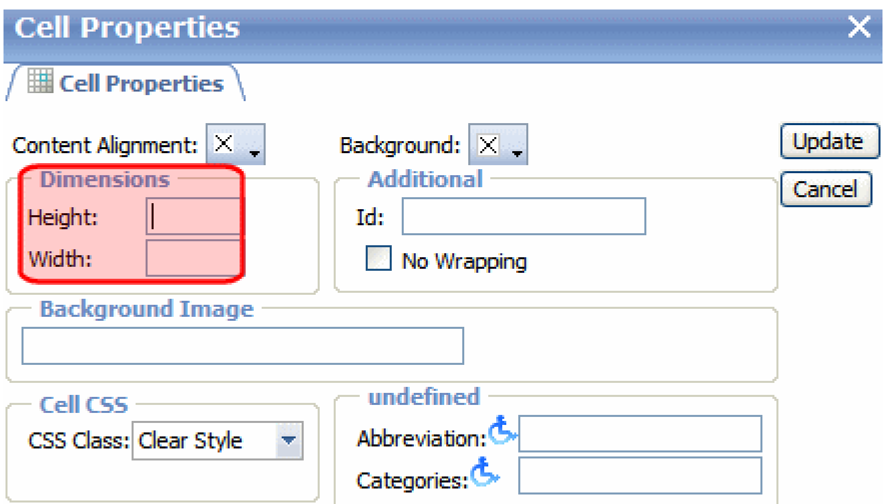
As described in "Specifying Table Width" on page 7-71, there are several ways to set the width of a table. Within a table, you can also specify the height and width of an individual cell.

When you set a cell width, there is no guarantee that the cell will occupy that width when displayed in a browser. This is because the cell is part of a column, and changes to other cells in the column can affect the cell whose width you set. Setting cell width only guarantees that the cell will not be *less than* the width you specify.

If you want to ensure that a cell's size does not change, set all cells in a column to that width.

To specify a cell's height and width, follow these steps.

1. Place the cursor in the cell whose height or width you want to set.
2. Right click the mouse.
3. Click **Set Cell Properties** from the menu.
4. Click **Cell Properties** from the menu.
5. The Cell Properties dialog appears.



6. Enter the cell width and height in the fields circled above. You can enter the width in pixels or percentage. These choices are explained in "Table Backgrounds" on page 7-77.
7. Click **Update**.

Deleting a Cell

To delete one or more cells, follow these steps.

1. Move the cursor to the cell you want to delete.
2. Right click the mouse.
3. Click **Delete Cell** from the menu.

Cells to the right of the deleted cell shift left to occupy the vacant space. In this example, the cursor was in cell “b” when the user clicked on **Delete Cells**.

Before

a	b cursor	c
d	e	f

After

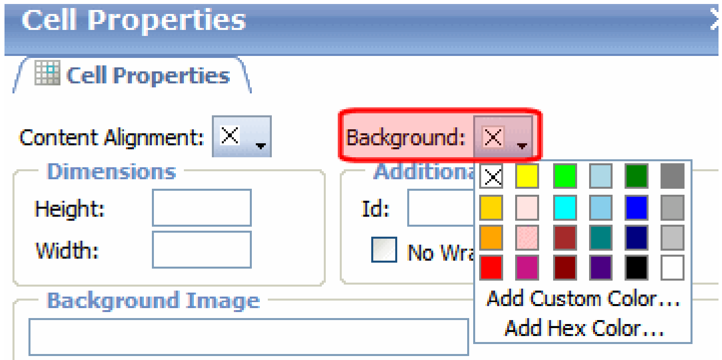
a	c	
d	e	f

Specifying a Cell’s Background Color

"Specifying a Table’s Background Color" on page 7-77 explains how to apply a background color to a table. You can also apply a background color to a cell.

To apply a background color to a cell, follow these steps.

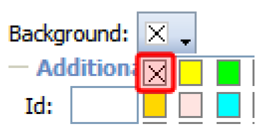
1. Move the cursor to the cell.
2. Right click the mouse.
3. Click **Set Cell Properties**.
4. Click the **Background** dropdown.



5. A color selection box appears.
6. Click a color to apply to the cell’s background.

Deleting a Cell’s Background Color

To delete a cell’s background color, click the square in the top left corner of the **Background** area (circled below).



Specifying a Background Image for a Cell

"Specifying a Table’s Background Image" on page 7-81 explains how to apply a background image to a table. You can also apply a background image to a cell.

To insert an image into a cell, follow these steps.

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Cell Properties**.
4. In the **Background Image** field, click the ellipsis button () to open the Library. From there, select an image for the cell’s background. See Also: "Library Folder" on page 8-1
5. Click **Update**.

Note that when you apply a background image to a cell

- If the cell is larger than the image, the image repeats until it fills the cell.
- If the cell is smaller than the image, the top left corner of the image appears in the top left corner of the cell. The rest of the image fills as much of the cell as possible.
- Make sure the image does not obscure a user's ability to read the cell text (if any exists).

Deleting a Background Image

1. Place the cursor within the table.
2. Right click the mouse.
3. Select **Set Cell Properties**.
4. Delete the value in the **Background Image** field.
5. Click **Update**.

Spanning Rows or Columns

You can create a table cell that stretches across more than one row or column. In the following table, notice how the "Sports Teams" row spans three columns.

Sports Teams		
City	**Baseball Team**	**Hockey Team**
Boston	Red Sox	Bruins
New York	Yankees	Rangers
Chicago	White Sox	Black Hawks

You can also create a column that spans several rows, as illustrated below. Notice that Boston spans three rows.

Colleges	
City	Name
Boston	Boston College
	Northeastern University
	Boston University
New York	Columbia University

Spanning More than One Row or Column

To have a table cell span more than one row or column, follow these steps.

1. Place the cursor in the cell that will span rows or columns.
2. Right click the mouse.
3. Click **Merge Cells Horizontally** or **Merge Cells Vertically** from the menu.

- **Merge Cells Horizontally** merges the cell in which the cursor resides with the cell to its right.
- **Merge Cells Vertically** merges the cell in which the cursor resides with the cell below.

Note: You can also merge cells on the Table Design tab of the Table Wizard.

Effect of Spanning a Cell

When you set a cell to span rows or columns, eWebEdit400 does not remove the cells that are in the way. Instead, it moves those cells across or down to the next available position.

For example, the following table has two rows and two columns.

A	B
C	D

If you set cell A to span two rows, note that cell C moves across to make room for cell A. This action pushes cell D to the next column.

<table>
<tr><td rowspan="2">A</td><td>B</td><td></td></tr>
<tr><td>C</td><td>D</td></tr>
</table>

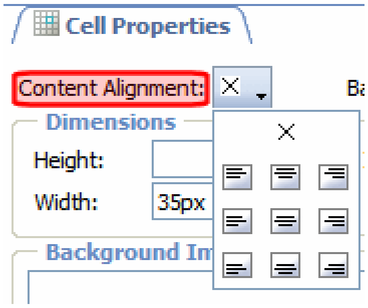
Aligning Text Within a Cell

Within a cell, you can specify how your text aligns horizontally and vertically.

You have nine choices for specifying the horizontal and vertical alignment of a cell, illustrated below.

To set cell alignment, follow these steps.

1. Place the cursor in the cell that you want to edit.
2. Right click the mouse.
3. Click **Set Cell Properties**.
4. The Cell Properties dialog appears.
5. Click the down arrow to the right of **Content Alignment**.



6. Click your alignment choice.
7. Click **Update**.

Splitting a Cell

You can divide a cell into two. If you split a cell, each cell occupies one half the size of the original cell.

Row before split

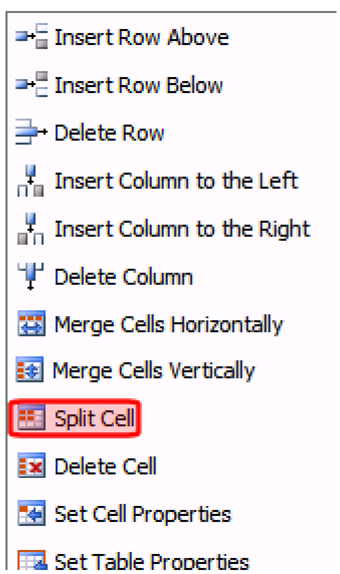
A	B

Row after split

A1	A2	B

To split a table cell into two cells, follow these steps.

1. Place the cursor in the cell that you want to split.
2. Right click the mouse.
3. Click **Split Cell** from the menu.



4. Two cells now appear where only one appeared before.

Merging Two Cells

You can merge two cells into one. If you merge two cells, the new cell contains all of the information from both. The new cell's width or height equals the sum of the two cells that were merged.

Cells Before Merge

A	B

Cell After Merge

AB

The above example shows a horizontal merge. You can also merge cells vertically.

To merge two or more cells, follow these steps.

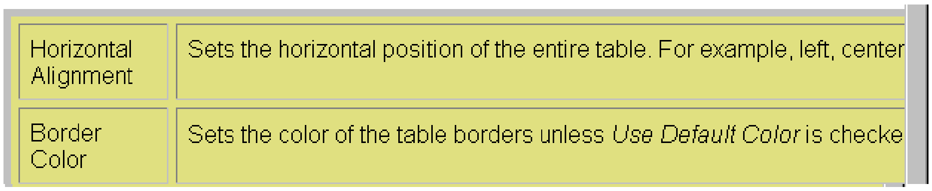
1. Place the cursor in the left or upper cell.
2. Right click the mouse.
3. Click **Merge Cells Horizontally** or **Merge Cells Vertically**.

Word Wrap

Word Wrap is a text formatting feature of cells. It causes text to move down to the next line when the width of the characters on a line equals the column width. For example, if you set column width to 50%, with word wrap turned on, a table looks like this.

Horizontal Alignment	Sets the horizontal position of the entire table. For example, left, center, right.
Border Color	Sets the color of the table borders unless *Use Default Color* is checked.

If you turn Word Wrap off for the same table, you get this result.



Horizontal Alignment	Sets the horizontal position of the entire table. For example, left, center
Border Color	Sets the color of the table borders unless *Use Default Color* is checke

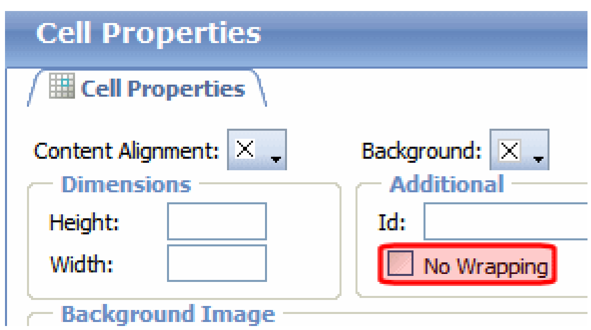
If Word Wrap is turned off, text stays on one line until the user entering table text presses <Enter>. That keystroke causes text to move down to the next line.

By default, all cells have the Word Wrap feature turned on.

Turning Word Wrap On and Off

To turn Word Wrap on or off for a cell, follow these steps.

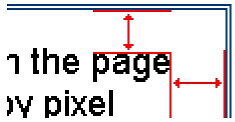
1. Place the cursor in the cell that you want to edit.
2. Right click the mouse.
3. Click **Set Cell Properties**.
4. The Cell Properties dialog box appears.
5. To turn off Word Wrap, click the **No Wrapping** checkbox.



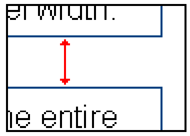
6. Click **Update**.

Setting Cell Padding and Spacing

Cell *padding* is the space between a cell's data and its border.



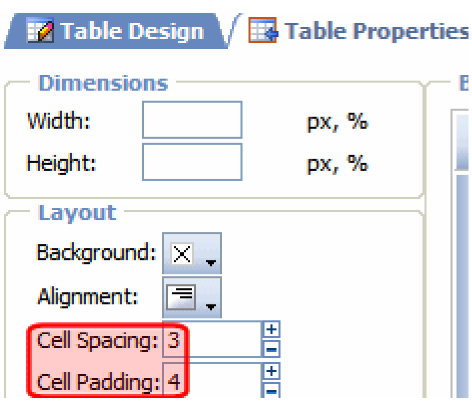
Cell *spacing* is the space between a cell and surrounding cells.



Assigning Cell Padding and Spacing

To assign cell padding and spacing to your table, follow these steps.

1. Place the cursor in the table.
2. Right click the mouse.
3. Click **Set Table Properties**.
4. The Table Properties dialog appears.
5. Click the **Table Properties** tab.
6. In the **Cell Padding** and **Cell Spacing** fields, enter the number of pixels.



7. Click **Update**.

Editing HTML Content

Ektron CMS400.NET HTML content can be in any of several statuses, as described in "Content Statuses" on page 7-133. You can only edit content for which you have permission and in one of the following statuses:

- published
- checked in
- checked out by you
- submitted for your approval

Note: If you check content out, you, a member of the Administrators group or a user assigned the folder admin role must check it in before other users can edit it.

Note: Editing content is a privilege granted by the system administrator. If you do not see an Edit option on the dropdown menu, you do not have permission to do so.

See Also:

- "Translating Content to Another Language" on page 7-112
- "Editing an Office Document" on page 7-427
- "Editing a Managed File" on page 7-437

Finding Content

Much of your work involves editing existing content or creating new content. Ektron CMS400.NET provides three methods for finding content to be updated. You can use whichever method is easiest.

- Navigate through your Web site to the content you want to edit
- Find the content through the *Workarea*, which resembles Windows Explorer and helps you find content by navigating through a folder tree. See Also: "The Workarea and Smart Desktop" on page 4-1
- Use the Search button (), which appears on many screens. When clicked, a screen prompts you to enter keywords and then finds content containing the keywords.

Steps in Editing HTML Content

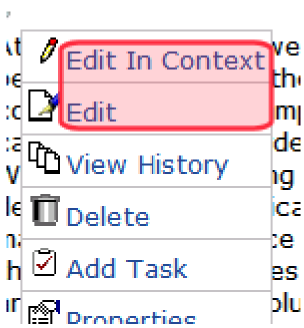
There are several ways to edit content.

- from a web page after you log in (See Also: "Editing Content from a Web Page" on page 7-106)
  - Edit
  - Edit in Context
- from the Ektron CMS400.NET Workarea (See Also: "Editing Content from the Workarea" on page 7-110)

Each is explained below.

Editing Content from a Web Page

There are two options for editing content from a Web page, illustrated below.



This table compares the editing options.

	Edit in Context Option	Edit Option
How editor is displayed	Within the page you are viewing	In new window
Editing functions	Only a few	Complete set

	Edit in Context Option	Edit Option
What you can update	Content only	Content plus all editor tabs (Summary, Metadata, etc.)
Types of content available	HTML only	HTML HTML forms XML Smart Forms
What you can do after editing	Submit/Publish only	Check in or Submit/Publish
Available from	Web Site Content Menu	Web Site Content Menu and Web Site Server Control Menu See Also: "The Web Site Content Menu" on page 7-4
For more information see	"Edit in Context" on page 7-107	"Edit Option" on page 7-109

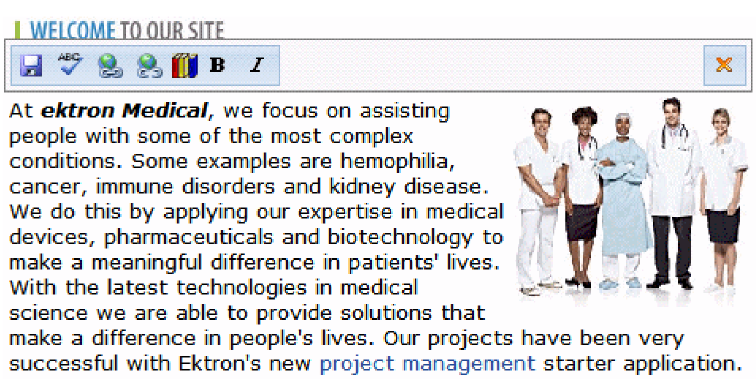
Edit in Context

The Web Site Edit in Context option offers content authors quick access and editing within a page. But it has a limited set of editing functions (listed below). See Also: "Editing Content from a Web Page" on page 7-106

To Edit in Context from a Web page, follow these steps.

Prerequisite: You must have permission to edit the content.

1. Sign in to a Web site.
2. Browse to the content you want to edit.
3. Click Edit in Context from the menu.
4. The content opens within the page, as shown below.



5. Use the following table to help you edit and save the content.

Toolbar button/ menu option	Description	For more information, see
	Save changes and submit content to the approval chain Note: Unlike other edit options, the check-in button is not available.	"Approve/Decline One Content Item" on page 5-35
	Undo checkout, discard your edits, and close the editor	
	Spell check	"Checking Spelling" on page 7-36
,	Add/remove a hypertext link	"Using Hyperlinks" on page 7-55
	Insert library item	"Adding a Library File to Content" on page 8-18
,	Apply bold or italic formatting	
Right click menu options		
	Cut selected text	" Cut" on page 7-24
	Copy selected text	" Copy" on page 7-24
	Paste text	" Paste" on page 7-24
	Paste text from Word	"" on page 7-25
	Paste plain text	"" on page 7-25
	Set Image Properties (appears when you select an image)	"Editing an Image's Properties" on page 7-40

Note:

Note:

Note:

Note:

Note:

Note: * System administrators can remove toolbar buttons by editing the `C:\Program Files\Ektron\CMS400v8x\workarea\ContentDesigner\configurations\InterfaceEditInContext.aspx` file.

Note: * The content block server control's `Suppresswrappertags` property must be set to `false`.

Edit Option

The Web Site Edit option offers content authors full access to all editing functions.

To access the Edit Content screen from a Web page, follow these steps.

1. Sign in to the Web site.
2. Browse to the content you want to edit.
3. Click Edit from the menu.
4. The Edit Content in Folder screen appears. One of two editors may appear. See Also: "Ektron CMS400.NET Editors" on page 7-20

   From here, you can

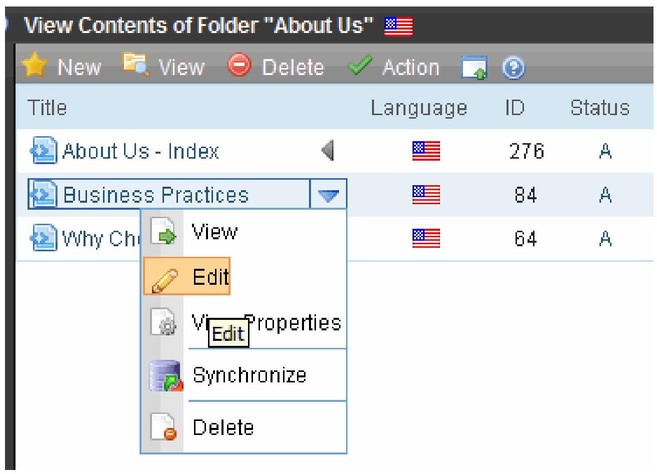
   - edit content
   - create or edit a summary
   - specify metadata for the content
   - enter or update a comment
   - enter or update start and end dates
   - review and update Web Alert information (To learn more, see "Web Alert Feature" on page 20-1)
   - if aliasing is enabled and you are an alias administrator, an Alias tab appears (To learn more, see "Manual Aliasing" on page 10-27)
   - assign or change available templates (To learn more, "Creating/Updating Templates" on page 7-184)
   - assign taxonomy categories (To learn more, see "Taxonomy" on page 9-200)
   - save changes
   - check in content
   - submit content for approval
   - publish content to the Web site
   - access the library
5. Edit the content. See Also: See "Toolbar Buttons" on page 7-23

   Or, you can choose a toolbar option or tab from the top of the Edit Content window. These options are described in "Buttons on the Add Content Screen" on page 7-18 and "Tabs on the Edit Content Screen" on page 7-18.

Editing Content from the Workarea

To access the Edit Content screen from the Workarea, follow these steps.

1. Access the View Content screen for the folder that contains the content you want to edit, as described in "Viewing Content" on page 7-9.
2. Select View > Language then the language whose content you want to view.
3. Hover the cursor over the triangle ( ) and click.
4. Select Edit from the menu.



5. The editor opens with the content block inserted. One of two editors may appear. See Also: "Ektron CMS400.NET Editors" on page 7-20
6. From the Edit Content window, you can
   - edit content
   - create or edit a summary
   - specify metadata for the content
   - enter or update a comment
   - enter or update start and end dates
   - review and update Web Alert information (To learn more, see "Web Alert Feature" on page 20-1)
   - review and update templates (To learn more, see "Creating/Updating Templates" on page 7-184)
   - review and update categories (To learn more, see "Taxonomy" on page 9-200)
   - save changes
   - check in content
   - submit content for approval

- publish content to the Web site
- access the library

7. Make the necessary edits to the content.

   Or, you can choose a toolbar option or tab from the top of the Edit Content window. These options are described in "Buttons on the Add Content Screen" on page 7-18 and "Tabs on the Edit Content Screen" on page 7-18.

Translating Content to Another Language

Note: The following procedure only works with HTML or XML content. You cannot translate other file types as described below.

Use this procedure when you want to initialize a new foreign language content item with content from a source language. This copying should facilitate the translation.

For example, an editor is translating content from French to German. The editor copies the French edition to new content whose language is German. As the editor translates the French edition into German, he deletes the French content. Any images in the content would usually remain, and all formatting (tables, bullets, etc.) is retained.

Note: Ektron CMS400.NET also has a Language Export feature copies content into XLIFF files for submission to a translation agency. For more information, see "Using the Language Export Feature" on page 14-13.

To copy content into new content block of a different language, follow these steps.

1. Go to the View Content screen for the content you want to translate. See Also: "Viewing Content" on page 7-9
2. Use the **Add:** dropdown list in the upper right corner to select the language into which you want to translate the content.

3. The Edit Content screen appears with original language content.
4. Translate into the new language then delete the original content.

   If desired, you can click the Translate button ( ). If you do, a new screen prompts you to identify the original language, new language, and a glossary. Then, the content is translated. If you like the translation, click **Paste Content**, and the translated content replaces the original.

   Once the translated content is inserted into the editor, you can edit it as needed.
5. When you save the content, it is saved as the edition of that content in the selected language. It has the same content ID number as the original content but a different language identifier.

Moving or Copying Content

You can *move* content from any folder to any other folder. Or, you can *copy* content from one folder to another. At the end of both procedures, a copy of the content resides in the new folder. Moved content retains the original ID number, while new content gets the next available ID number.

When copying, you *leave* the content in its original folder, while moving *deletes* the content from the original folder. Other than that difference, the procedure for performing both actions is virtually identical.

Who Can Move or Copy Content?

- members of the Administrators user group
- users assigned in the Roles > Folder Specific > Folder User Admins screen
- users assigned in the Roles > Folder Specific > Move or Copy screen

See Also: "Defining Roles" on page 15-32; "Guidelines for Using the Folder-User Admin Role" on page 15-37; "Move or Copy" on page 15-36

Impact of Content Status on Moving and Copying

Your ability to move and copy content is affected by the content's status, as described below.

Action	Content Status
Move	Approved, Checked in
Copy	Approved

What is Moved Or Copied?

When content is moved or copied, the following changes are made.

- The content inherits permissions and the approval chain from the new folder.
- The content's Quicklink is moved or copied in the library to the destination folder. However, the Quicklink remains the same (that is, the default template doesn't change). You can update this by editing the Quicklink. This procedure in "Updating Default Template for Multiple Quicklinks" on page 8-24.

Note: If the Link Management setting in the web.config file is set to `true`, you do not need to update the quicklink. Link Management automatically finds the correct template based on the current folder.

- If the new folder already contains content with the same title, Ektron CMS400.NET appends a number to the title to make it unique. For example: `ASP.NET Unleashed(2)`.
- The new folder's default template is assigned to the content
- Library image paths inside the content remain the same
- If the content's template is a Smart Form, it remains assigned even if the Smart Form is not assigned to the new folder

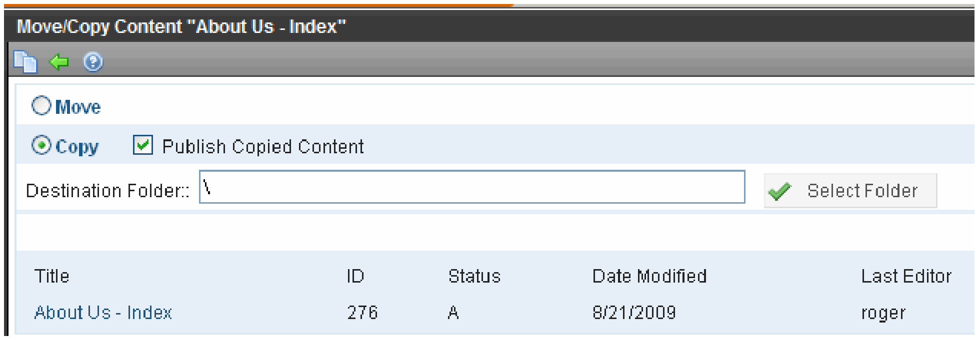
Moving Or Copying One Content Item

To move or copy content to another folder, follow these steps.

See Also: "Moving or Copying Content" on page 7-113

1. Access the View Content screen for the content you want to move or copy, as described in"Viewing Content" on page 7-9.
2. Click the Move/Copy Content button ().
3. The Move/Copy Content screen is displayed.
4. Select either **Move** or **Copy**.
5. If you choose **Copy**, and you want the content to be published as soon as the copying is complete, check **Publish Copied Content**.

   If you want the content status in the new folder to be checked in, uncheck the **Publish Copied Content** checkbox.
6. Enter the path to the destination folder. If you don't know the path, click **Select Folder** and navigate to the destination folder.



7. Click the Move/Copy Content button ( ).
8. A confirmation message is displayed.
9. Click **OK** to continue.
10. The content is moved or copied to the specified content folder. The destination folder appears with the new content.

Moving Or Copying Several Content Items

To move or copy several content items in the same folder at once, follow these steps.

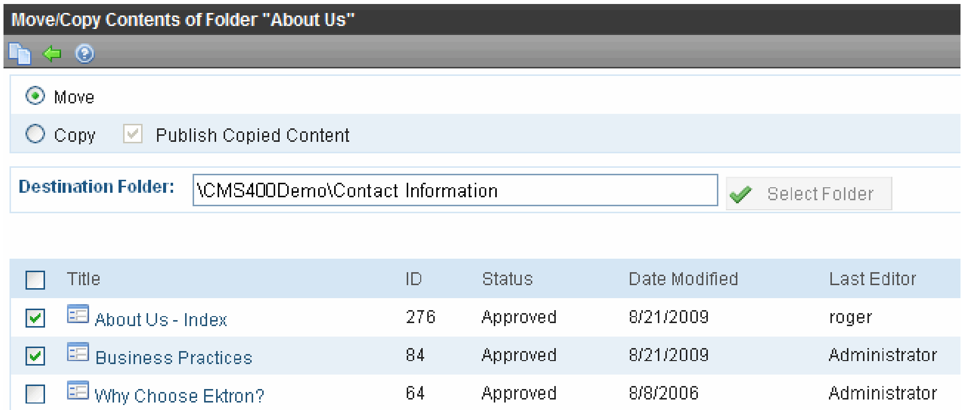
See Also: "Moving or Copying Content" on page 7-113

1. Navigate to the folder that contains the content you want to move or copy.
2. Click **Action** > **Move/Copy Content**.
3. The Move/Copy Contents of Folder screen is displayed.
4. Select either **Move** or **Copy**.
5. If you choose **Copy**, and you want the content to be published as soon as the copying is complete, check **Publish Copied Content**.

   If you want the content status in the new folder to be checked in, uncheck the **Publish Copied Content** checkbox.
6. Enter the path to the destination folder. If you don't know the path, click **Select Folder** and navigate to the destination folder.
7. Check the boxes next to the content that you want to move or copy.

Note: Check off the box in the header cell to select all or deselect all eligible content.

8. Choose the content folder to move or copy the selected content from the drop down list.



9. Click the Move/Copy Content button ( ).
10. A confirmation message is displayed.
11. Click **OK**.
12. The content is copied or moved to the destination folder.

Viewing and Restoring Previous Content

Past versions of published content are available unless your system administrator purged them. Your ability to view a content item's history is determined by your user privileges.

After viewing previous versions of content, and comparing any two versions, you can replace the current version with any previous one.

Note: The Purge History feature deletes historical versions of content according to user-defined criteria. Therefore, some previous versions may be unavailable. See Also: "Purge History" on page 5-21

The View and Restore features are explained through the following subtopics.

Accessing Content History

By default, all users can view the history of Ektron CMS400.NET content. You can access content history from two places:

- The Workarea's View Content page
- A Web page

Once you access the history, the functionality is identical.

The following sections explains how to access the content history from both places.

Accessing the Content History from the Workarea

To access the history from the Workarea, follow these steps.

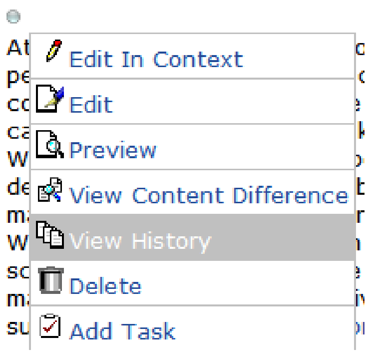
1. Navigate to the View Content page for the content whose history you want to view.
2. Click the item whose history you want to view.

3. The View Content Screen appears.
4. Click the View History button ( ).

Accessing the Content History from a Web Page

To access the history for content from a Web page, follow these steps.

1. Sign in.
2. Browse to the content whose history you want to view.
3. Click the View History menu option.



4. The Content History window opens.

The Content History Window

The View Content History window lists every version of the content available in Ektron CMS400.NET. The window displays the following information for each version.

- version number See Also: "The Content Version Number" on page 7-119

- a green circle indicates a version that was published. Versions without a green circle indicate content that was checked-in but not published.
- date and time version was checked in or published
- title of content
- last user who edited content
- comments entered by user to describe nature of changes made

To view any version, click its title. When you do, the Content History window appears for that content.

The Content Version Number

Ektron CMS400.NET assigns a unique number to each saved version of a content block. The number is increased by one tenth if the content is checked in but not published. If the content is published, the next whole number is assigned.

For example, if the current version is 1.0 and you check in that content, the new version is 1.1. If the next editor publishes it, the new version is 2.0.

If content versions are purged, the numbering scheme restarts with the remaining content.

The Detail History Window

After viewing the View Content History window, you can click any version to see the detail for it. The detailed History window has two sides:

- The left side redisplays information from the content history window. See Also: "The Content History Window" on page 7-118
- The right side displays the selected version of the content. After viewing a version of content, you can perform these actions on it.

Action	Button	Description	More Information
View Difference		Compare historical version to current version	"Comparing Versions of Content" on page 7-120
Restore		Restore historical version of content	"Restoring a Previous Version" on page 7-128
Remove XSLT *XML Content Only*		Remove XSLT applied to XML content	"Removing Applied XSLT" on page 7-129

Comparing Versions of Content

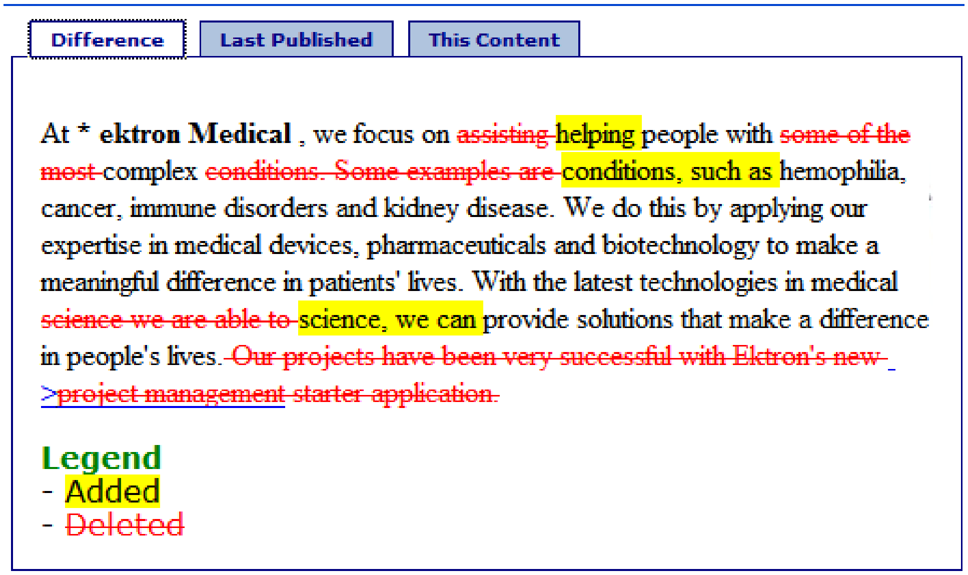
There are two versions of this procedure. You may need to consult your system administrator to determine the correct procedure for you.

If the Ektron CMS400.NET server is	And your client is	See
32 bit	32 bit	"The View Content Difference Screen" on page 7-120
64 bit	32 bit	"The View Content Difference Feature" on page 7-122 Note: This procedure was the only one prior to 7.5.2. It downloads an ActiveX control to your computer.
64 bit	64 bit	The View Content Difference feature is not available

The View Content Difference Screen

Note: Use this procedure if both your computer and the Ektron CMS400.NET server are 32 bit.

The View Content Difference screen highlights changes to selected content. Below is an example of the View Content Difference screen, showing the default tab, **Difference**.



Each tab is explained below.

Tab	Shows this content
Difference	Both versions: ■ content that only appears in the version on the **This Content** tab is high-lighted in yellow ■ content that only appears in the currently published version is red ■ unchanged content is black
Last Published	Currently-published.
This Content	The version you are comparing the currently-published content against.

Warning! If there is no difference between the versions, you see **Content is Identical**.

The View Content Difference feature is explained through the following topics.

- "When Can I Compare Content?" on page 7-121
- "Accessing the View Content Difference Feature" on page 7-122

When Can I Compare Content?

The View Content Difference feature is available when

- you are viewing a version of content
- a staged version of that content is available (See Also: "Staged Content" on page 7-139)

Learn About Accessing the View Content Difference Feature

Accessing the View Content Difference Feature

To Access the View Content Difference feature, follow these steps.

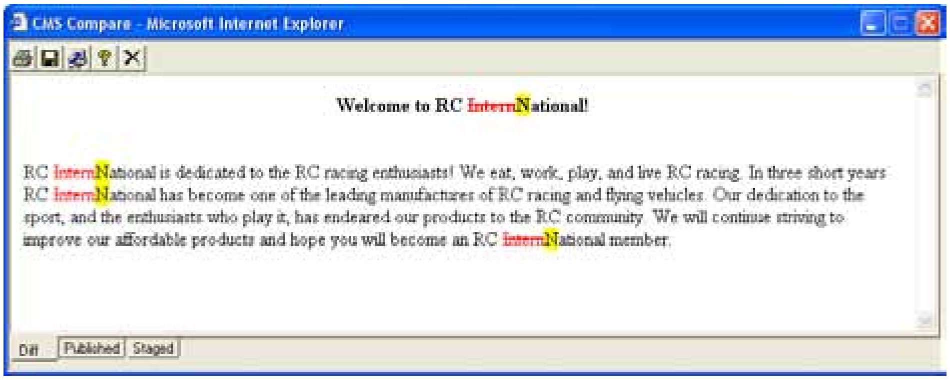
1. Navigate to the content whose versions you want to compare.
2. Click View Properties.
3. Click the History button ( ). The View Content History screen appears. See Also: "Comparing Versions of Content" on page 7-120
4. Click a version that you want to compare with the most recently published version.
5. Click the View Content Difference toolbar button ( ).

The View Content Difference Feature

Note: Use this procedure if your computer is 32 bit, and the Ektron CMS400.NET server is 64 bit.

The View Content Difference feature highlights changes that were made to selected content. Below is an example of the View Content Difference screen, showing two versions of content. The changes are indicated by

- redlining deleted content
- highlighting in yellow added content



Within the View Content Difference feature, you can perform several tasks, as well as view different versions of the content separately, or compared.

The View Content Difference feature is explained through the following topics:

- "When Can I Compare Content?" on page 7-121
- "The Compare Content Window" on page 7-123
- "First Use of the View Content Difference Feature" on page 7-127

When Can I Compare Content?

The View Content Difference feature is only available when

- you are viewing an historical version of content
- a staged version of the content is available (See Also:)

The following table explains when you can use the feature, and which versions are compared.

Content Status	Compares current published version with
Published	Historical version stored in the content history area
Checked-In	Most recently checked-in version
Submitted	Submitted version
Pending Start Date	Scheduled version pending start date
Checked Out	Not available

If content can be compared with another version, the View Difference button ( ) appears in the content history area or the Web page view.

The Compare Content Window

Note: The first time the View Content Difference feature is opened, a simple installation program runs. See Also: "First Use of the View Content Difference Feature" on page 7-127.

The Compare Content window consists of the following:

- "Toolbar" on page 7-124
- "Content Area" on page 7-126

■ "View Tabs" on page 7-127

Each area is explained below.

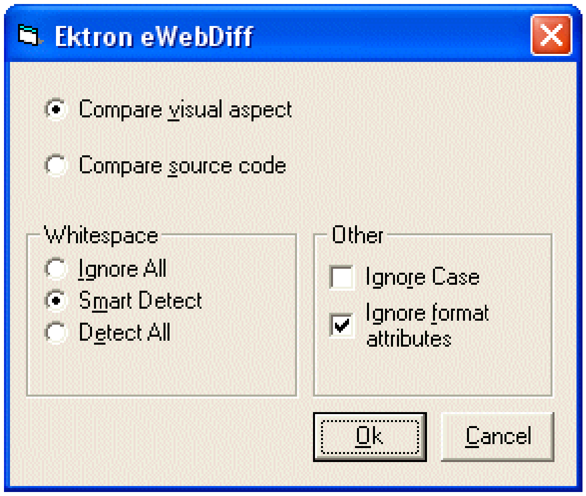
Toolbar

The content comparison toolbar has five buttons, explained below.

Button	Name	Description
	Print	Sends content to local or network printer. Note: This option prints the currently displayed content, whether it is the compared, published, or staged content.
	Save	Saves a copy in HTML format on your local machine or network. When saved as a physical file, the HTML may be edited. However, the changes are not saved to the Web Server. Note: The save option saves the version of the content you are viewing.
	Setup	Opens setup dialog box to configure the settings. Typically, only an administrator would use this. For more information, see "Setup" on page 7-125.
	Help	Displays additional information about the compare feature.
	Exit	Closes the window.

Setup

Click the **Setup** button ( ) to open the setup dialog box. Typically, a system administrator would edit these settings.



You can change the setup options to better suit your needs. The following table explains each option.

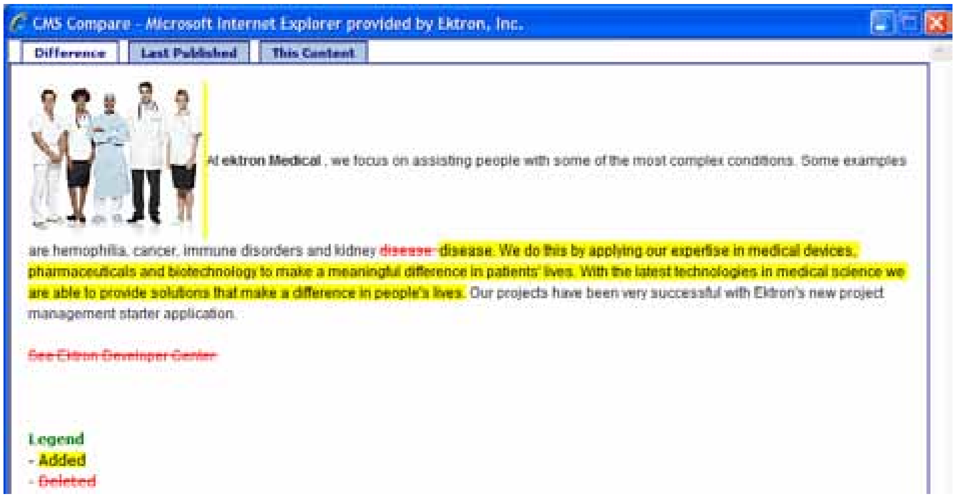
Option	Description
Compare Options	
Compare visual aspect	Compares content as it would appear on a Web page.
Compare source code	Displays compared content as source HTML.
Whitespace Options	
Ignore All	Blank (whitespace) characters are ignored.
Smart Detect	One or more consecutive whitespace characters are treated as a single separation sequence. That is, multiple whitespace characters are ignored.
Detect All	Blank (whitespace) characters are treated as any other character.
Other Options	
Ignore Case	Determines whether comparison is case sensitive. For example, if you check this box, the strings “Bob” and “BOB” are not highlighted because their only difference is the case of the characters.

Option	Description
Ignore Format Attributes	Determines whether comparison ignores changes in text-formatting attributes (HTML Visual Analysis only).

After updating setup information, click **OK** to save changes.

Content Area

The content area displays the content comparison.



The following table describes the change indicators.

Symbol	Example	Content state
Plain black text	Trinitys new pipe and	Unchanged
Yellow highlighted text	Our dedication to the	Added
Red, struck-through text	~~dedicated to the RC~~	Deleted

View Tabs

When viewing content in the View Content Difference feature, there are three view modes, explained below.

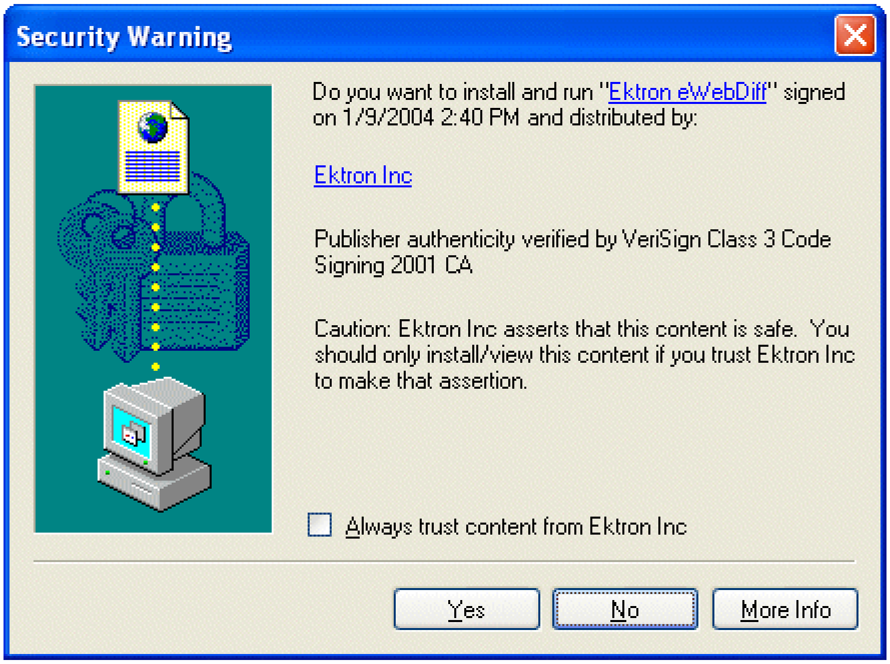
View	Description
Diff	Compares published version of content to staged version
Published	Displays currently published version
Staged	Displays the staged version of content. See Also: "Staged Content" on page 7-139

To switch between views, click the corresponding View tab.

First Use of the View Content Difference Feature

The first time the View Content Difference screen is used on a client machine, a simple installation program is performed.

Click **Yes** when the following screen appears.



When the installation program completes, close and reopen the View Content Difference feature.

Actions are explained below.

Restoring a Previous Version

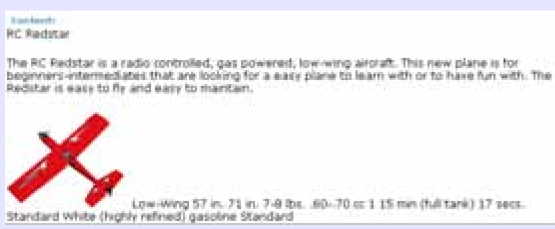
Note: The ability to restore content is a privilege granted by the system administrator. If you do not see a Restore button () on the View Content History screen, you do not have permission to do so.

1. Open the content folder that contains the content.
2. Click the content item.
3. Click the History toolbar button ().
4. Select an historical version of the content that you want to restore.
5. Click the Restore button ().
6. The content history window closes, and you return to the View Content page or the Web page, with the content in a checked in status.
7. If desired, check out the content to make additional changes.
8. Select the workflow to perform on the content.
9. When the historical version is placed in the approval chain and approved, it is published to the Web site.

Removing Applied XSLT

You can only remove an applied XSLT when viewing historical versions of XML content. If you remove the applied XSLT, you can view the content without the irrelevant XML tags.

The following table compares the views.

<table>
<tr><td>With XSLT</td><td>
</td></tr>
<tr><td>Without XSLT</td><td>
</td></tr>
</table>

Deleting Content

Note: The ability to delete content is a privilege granted by the system administrator. If you do not see a Delete option on the View Contents of Folder screen, you do not have permission to do so.

Note: It is good practice to check for broken quicklinks before deleting content. See "Link Checking" on page 7-132.

The Delete command lets you permanently delete obsolete content from your Web site.

There are two ways to delete content.

- A folder-level Delete option (Delete) removes several content items from the current folder. This option only deletes Approved content. For more information, see "Deleting Several Content Items in a Folder" on page 7-131.
- Depending on the content's status and your permissions, you may be able to delete one item at a time. The options for doing so are
  - a **Delete** option when viewing content from a Web page
  - a **Delete** menu option that appears after selecting content on the View Contents of Folder screen

For more information, see "Deleting a Single Content Item" on page 7-130.

Like publishing, deleted content must proceed through the approval chain before it is removed. If you are the last approver in the approval chain, the content is deleted immediately. See Also: "Approve/Decline One Content Item" on page 5-35

Deleting a Single Content Item

To delete one content item, follow these steps.

Deleting One Content Item from a Web Page

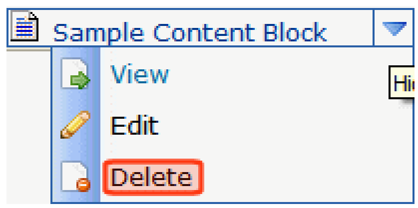
To delete content from a Web page, follow these steps.

1. Sign in.
2. Browse to the content you want to delete.
3. Click the **Delete** menu option.
4. The View Content screen for the selected content appears. (See "Viewing Content" on page 7-9.)

5. Click the Delete button ( ).
6. A confirmation message appears.
7. Click **OK** to delete the content.

Deleting One Content Item from the Workarea

1. Access the View Contents of Folder screen for the content you want to delete, as described in "Viewing Content" on page 7-9.
2. Hover the cursor over the triangle ( ).
3. Select **Delete** from the dropdown menu.



Note: If you do not see **Delete**, either you lack permission to delete the content, or its status makes it ineligible for deleting.

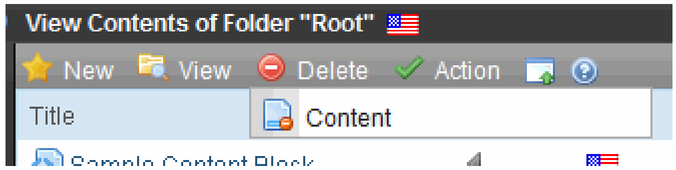
4. A confirmation message appears.
5. Click **OK** to delete the content.

Deleting Several Content Items in a Folder

On the View Contents of Folder screen, you can delete several Approved content items at once. To do so, follow these steps.

Note: If you are working with an eCommerce catalog entry, you can only delete it if it is not on an order nor checked out.

1. Navigate to the folder that contains the Approved content you want to delete.
2. Hover the cursor over the Delete menu (Delete).
3. Select **Content** from the dropdown menu.



4. Check boxes next to Approved content items you want to delete.

Note: Check the box in the header cell to select all or deselect all.

5. Click the Delete Content button ( ).
6. A confirmation message appears.
7. Click **OK** to continue.

Link Checking

The link checker button locates all content with a link to the displayed content. This feature is useful if you decide to delete content. You can use this to remove links that will not work after the deletion.

1. Access the View Content screen for the content you want to execute the link checker for, as described in "Viewing Content" on page 7-9.
2. Click the Link Search button ( ).
3. A screen displays each content item with a link to the current content.
4. Click the content title to access the View Content screen for the selected content.
5. Remove or change the Quicklink.

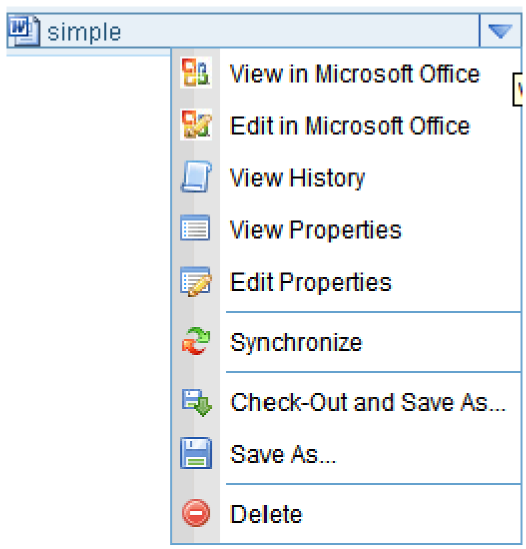
Content Statuses

The table below describes all possible content statuses. The rest of this appendix explains each status in more detail.

Letter	Meaning	Content state	More Information
A	**Approved**	Through the workflow and published on the Web site.	"Approved Content" on page 7-134
O	**Checked Out**	Currently being edited. Has not been checked in.	"Checked Out Content" on page 7-137
I	**Checked In**	Checked in for other users to edit.	"Checked-In Content" on page 7-135
S	**Submitted for Approval**	Saved and submitted into the approval chain. See Also: "Approval Chains" on page 5-28	"Submitted Content" on page 7-138
M	**Marked for Deletion**	Requested for deletion.	Marked for Deletion Content
P	**Pending Go Live Date**	Approved but the Go Live date hasn't occurred yet.	"Pending Start Date Content" on page 7-139
T	**Awaiting Completion of Associated Tasks**	Task(s) assigned to content are not complete	
D	**Pending Deletion**	Content was created with a future start date then checked in and deleted. This status only remains until the start date is reached. At that point, the content is deleted.	

Approved Content

Approved content is live on the Web site. From the web page, you can see your choices of actions you can perform on the content from the dropdown menu illustrated below.



When content is approved, you can perform the following actions on it, depending on your permissions.

.

Button	Dropdown Menu Option	Description	For more information, see
	Check out and Save as	Check content out and save on your computer	"Checking Out, Saving, and Replacing an Office Document" on page 7-430
	Save as	Save copy of file to your computer	"Saving an Office Document" on page 7-432
	Edit or Edit in Office	Check out the content to change it	■ "Editing Content from a Web Page" on page 7-106 ■ "Edit in Context" on page 7-107

Button	Dropdown Menu Option	Description	For more information, see
			■ "Edit Option" on page 7-109 ■ "Editing Content from the Workarea" on page 7-110
	Edit Properties	Edit content's summary, metadata, schedule, comment, etc.	■ "Working with Content Summary" on page 7-142 ■ "Working with Meta-data" on page 7-146 ■ "Scheduling Content to Begin and End" on page 7-195
	View, View in Office, or View Properties	View all information about content	"Viewing Content from the Workarea" on page 7-10
	Delete	Submit a request to delete the content. If you are the last or only approver, the content is immediately deleted. See Also: "Example of an Approval Chain" on page 5-37	"Deleting Content" on page 7-130

Checked-In Content

A checked-in content item is one to which changes were made, after which it was checked in instead of being submitted or published. When content is checked in, it is accessible to all users who have permissions to edit it. They can check it out and change it.

Keep in mind that the content seen on the template is not the same as the content in the editor view.

See Also: "Example of an Approval Chain" on page 5-37

Each option you may perform on checked-in content is described below.

Button	Name	Description	For more information, see
	Check out and Save as	Check content out and save on your computer	"Checking Out, Saving, and Replacing an Office Document" on page 7-430
	Save as	Save copy of file to your computer	"Saving an Office Document" on page 7-432
	Edit or Edit in Office	Check out the content to change it.	- "Editing Content from a Web Page" on page 7-106 - "Edit in Context" on page 7-107 - "Edit Option" on page 7-109 - "Editing Content from the Workarea" on page 7-110
	Edit Properties	Edit content's summary, metadata, schedule, comment, etc.	- "Working with Content Summary" on page 7-142 - "Working with Metadata" on page 7-146 - "Scheduling Content to Begin and End" on page 7-195
	View, View in Office, or View Properties	View all information about content	"Viewing Content from the Workarea" on page 7-10
	Delete	Submit a request to delete the content. If you are the last or only approver, the content is immediately deleted. See Also: "Example of an Approval Chain" on page 5-37	"Deleting Content" on page 7-130
	Submit/Publish	Submit content into approval chain. If you are last approver in the approval chain, the publish button/option appears. If you click it, the content is immediately posted to Web site.	"Approval Chains" on page 5-28

Checked Out Content

If content has a red border, it was checked out by a user other than you. (If you checked it out, the border is green.) While in this status, other users are prevented from editing it.

The content remains checked out until it is checked in by the user who checked it out or a system administrator. Only the user who checked out the content can edit it.

Each option you may perform on checked-out content is described below.

Button	Name	Description	For more information, see
	Check In	Check in content. Only appears to user who checked content out.	"Check in" on page 5-10
	Force Check In	Only appears if user is a member of the Administrator group and content is checked out. Allows the admin to check in content even though he is not the one who checked it out.	
	Request Check In	Allows any user to send an email to the user who checked out content. The email asks the check-out user to check in the content.	
	Save as	Save copy of file to your computer	"Saving an Office Document" on page 7-432
	Edit or Edit in Office	Check out content to change it. (Only available to user who checked content out.)	■ "Steps in Editing HTML Content" on page 7-106 ■ "Editing a Managed File" on page 7-437 ■ "Editing an Office Document" on page 7-427
	Edit Properties	Edit content's summary, metadata, schedule, comment, etc.	

Button	Name	Description	For more information, see
	View, View in Office, or View Properties	View all information about content	"Viewing Content from the Workarea" on page 7-10

Submitted Content

A yellow border shows that a user submitted the content into the approval chain. The border remains yellow until the content is published or declined. While the content is in the approval chain, no user can check it out.

See Also: "Example of an Approval Chain" on page 5-37

Each toolbar button is described below.

Button	Name	Description
	Approve	Approve and publish the content to the Web site. Note: Only the last approver in the chain has this option. See Also: "Example of an Approval Chain" on page 5-37
	Decline	Refuse to publish the submitted content, and change its status to checked-in. Note: Only members of the approval chain have this option. This button rejects the changes and keeps the current version live on Web site. The approver is prompted to enter a reason for the decline. After the decline option is completed - The author who made the change is notified by email - The content is removed from the Approval Chain If an author updated content then submitted it for approval, the updated content remains in the file. If you do not want it to remain, choose the **Edit** option. Approvers are prompted to publish or decline content changes as well as requests to delete content.
	Edit	Check out the content and edit it. Only the user who submitted the content has this option. Note: If you edit the content, you need to resubmit it to the approval chain.

Button	Name	Description
	View, View in Office, or View Properties	View all information about content

(continued in Marked for Deletion Content)

Pending Start Date Content

Content that is pending a Go Live date has been approved, but its start date and time have not occurred yet.

Button	Name	Description
	Edit	Check out the content and edit it. Only the user who submitted the content has this option. Note: If you edit the content, you need to resubmit it to the approval chain.
	View, View in Office, or View Properties	View all information about content

Staged Content

A staged version of content is one that is not published. It can be content that is checked in, or content that is approved with a pending a start date.

Staging lets you make changes to content, while keeping it from the Web site until you are ready to publish it.

See Also: "After you select the content, you have the following options." on page 7-11; "Content Statuses" on page 7-133; Workflow in

Content Properties

This section explains the properties of Ektron CMS400.NET content, such as the summary, metadata, and the ability to schedule start and end dates.

Content Properties

Working with Content Summary

A summary provides a short description of content to supplement the title when a list of content items appear on a Web page. You create a summary when creating or editing content. Then, your Web site developer can create Web pages that display just the title and summary to attract readers to the full story.

A good example is a news Web site, which lists titles and summaries of top stories (illustrated below)

TOP STORIES

Ektron Named a Rising Star (08-15-2003)

August 15, 2003, Amherst, New Hampshire, USA —
Ektron, Inc., an innovator in Web content management and authoring, has been named a Rising Star as part of the prestigious New England Technology Fast 50 Program.

Ektron Launches International Distribution Program *(08-08-2003)*

August 8, 2003, Amherst, New Hampshire, USA —
Ektron, Inc., an innovator in dynamic Web content authoring and management with over 350,000 users, today announced the launch of its international distribution program.

Like content, summaries can include images as well as different font styles and sizes. This chapter explains how to create summaries and how they can help navigation on your site. Your system administrator determines how and where to display summaries on your site.

See Also:

- "Automatic Creation of a Summary" on page 7-143
- "Creating a Summary for New Content" on page 7-143
- "Creating a Summary for Existing Content" on page 7-144
- "Editing a Summary" on page 7-145
- "ListSummary Server Control" on page 9-270

Automatic Creation of a Summary

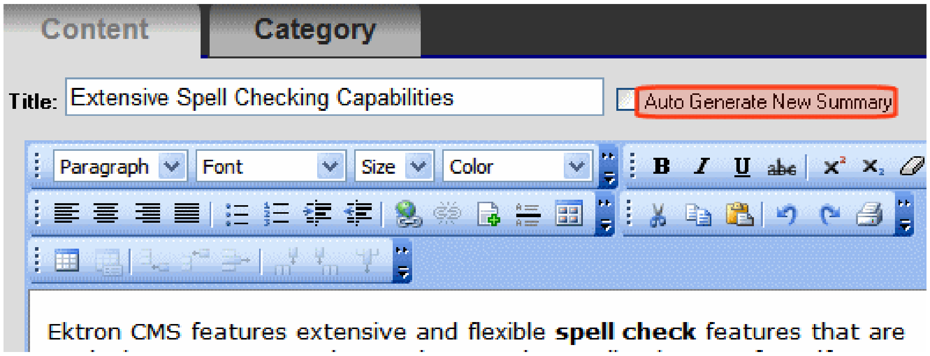
Ektron CMS400.NET automatically generates a summary for new content if none exists. To do this, it checks the summary when new content is published. If the summary is blank, Ektron CMS400.NET copies the first 40 words of the content to the summary.

After the content is published, you can update or delete the summary. If it is deleted, the summary remains blank and is never again automatically generated for that content item.

You can disable this feature in Ektron CMS400.NET if desired. See "Automatically Recreating a Catalog" on page 9-10.

Membership User Summary Editing

If a membership user edits content and wants to update the summary, he can automatically copy the first 40 words of the content into the summary. To do this, the membership user checks the **Auto Generate New Summary** field on the membership editing screen (shown below).

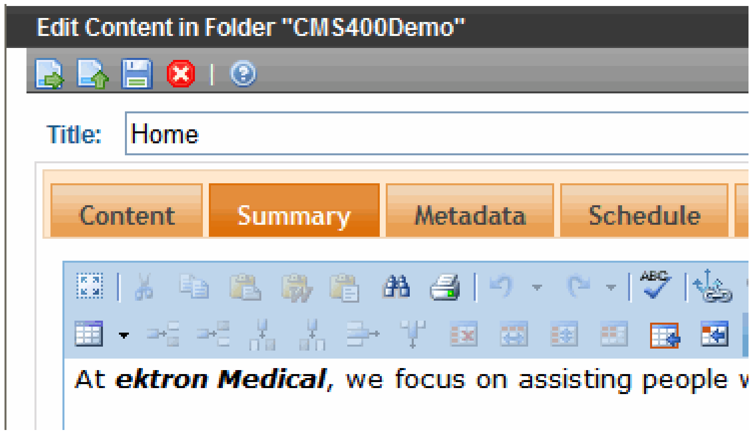


There is no limit on the number of times a membership user can automatically generate a new summary.

Creating a Summary for New Content

1. Navigate to the folder in which you want to create the content.
2. Click **New** then pick the content type from the dropdown menu.
3. The Add Content screen appears.
4. Insert a **Title** and content. See Also: "Adding HTML Content" on page 7-15

5. Click the **Summary** tab.



6. Enter summary information for the content. The summary can include images, files, and hyperlinks. Its length can be restricted by your system administrator in the configuration setup file.
7. When done, click the appropriate button.

Creating a Summary for Existing Content

1. Navigate to the folder that contains the content.
2. Hover the cursor over the content, click the triangle ( ), and select **Edit** or **Edit Properties** from the dropdown menu.
3. The View Content screen appears.
4. Click the **Summary** tab to enter or edit summary information for the content. The summary can include images, files, and hyperlinks. Its length can be restricted by your system administrator in the configuration setup screen.
5. When done, click the appropriate button.
6. The View Content page reappears.

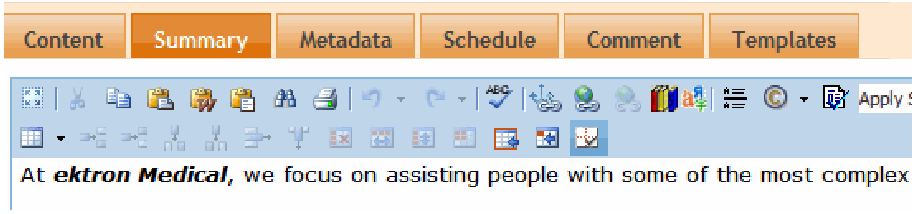
Note: When you enter or edit existing content's summary, its status changes to checked out. After you create the summary, click the Check-In button to check the content in. From that point, you need to submit or publish it.

Editing a Summary

Note: You can only edit the summary of content that is published, checked in, or checked out by you.

To edit a content's summary, follow these steps.

1. Access the View Content page for the content whose summary you want to edit, as described in "Viewing Content" on page 7-9.
2. Click the **Summary** tab.



3. The Edit Summary window opens.
4. Click the Edit button. The summary opens within the editor.
5. Make the necessary changes.
6. When done, click the appropriate button.
7. The View Content page reappears.

Note: When you edit an existing content summary, it goes into a checked out state. After creating the summary, check the content back in. From that point, you must submit it or publish it.

Working with Metadata

Metadata is information about a content item, such as its title and language. Ektron CMS400.NET provides extensive and flexible support for metadata, which it uses in both standard and innovative ways.

This section explains the types of metadata available, and procedures for working with metadata through the following subtopics.

Types of Metadata

The following kinds of metadata can be added to Ektron CMS400.NET content.

Metadata type	Description	For more information, see
Meta tag	Resides in a content item's source code, helping search engines find it. Note: You can use the SEO Control to identify how search engines evaluate your Web pages' metadata tags, and other search tools. See Also: "Using the Search Engine Optimization (SEO) Control" on page 21-515	"Meta Tags" on page 7-148
HTML tag	Information about the content used by a Web browser. For example, `<title>` identifies the content in the screen title, favorites list, and browser history.	"Title Tag" on page 7-149

Metadata type	Description	For more information, see
Searchable	Metadata that can be found by Ektron CMS400.NET's search. This kind of metadata can also be found using the Workarea Search screen.	"Searchable Metadata" on page 7-150; "Searching for Metadata" on page 9-52
Related content	A related content item, collection, List Summary, or library item that accompanies a content item on a Web page.	"Related Content Metadata" on page 7-151
Simple Dublin Core	A set of fifteen standard fields that cover the most useful information about content.	"Simple Dublin Core Metadata" on page 7-154
Content tags	Keywords that can be assigned to content and library items and allows for tag-based searching.	"Tags" on page 16-280
Image	Not part of a metadata definition; automatically appears for every content item and lets you assign an image to that content	"Assigning a Metadata Image to Content" on page 7-171

Best Practices

- When anyone creates a new Metadata definition, it is assigned the next available ID number. The ID numbers determine the order in which metadata definitions are arranged on the Folder Properties screen's Metadata tab.
- So, by planning ahead, you can enter metadata definitions in logical groupings, which will make it more intuitive for the person assigning the metadata to pick the correct ones.
- Metadata can be used as a search criterion to find content on your Web site. In order for this to work, the metadata definition name cannot include a space. So, it is a good idea to eliminate spaces from metadata definition names.

Meta Tags

The META element is an extensible container for use in identifying specialized document meta-information. Meta-information has two main functions:

- to provide a means to discover that a data set exists and how it might be obtained or accessed
- to document the content, quality, and features of a data set, indicating its fitness for use

(Above copied from `www.w3.org/MarkUp/html-spec/html-spec_5.html`.)

Example Meta Tags

```
<HTML>
<HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">
<meta name="robots" content="index, follow">
<meta name="revisit-after" content="15 days">
<META HTTP-EQUIV="imagetoolbar" CONTENT="no">
<Title>Ektron; Inc. - Web Content Management and Document Management with
scalable flexible and affordable authoring solutions.</Title>
<meta name="Keywords" content="document management web content management
content management cms">
<meta name="Description" content="Ektron's Web Content Management and
Document Management software products manage web content and documents with
WYSIWYG XHTML/HTML editors offering easy to use browser-based web authoring
and publishing solutions for web content management and document
management">
```

Creating and Deploying Meta Tag Definitions

1. While creating a metadata definition, enter the metadata name at the **Name** field. For example, **Description** and **Keywords**. See Also: "Adding a Metadata Definition" on page 7-156
2. Reply to the standard fields. See "Metadata Definition Fields" on page 7-158.
3. Respond to the additional fields for meta tags. See "Meta Tag Additional Fields" on page 7-159
4. Add the definition to all applicable folders. See "Assigning Metadata to a Folder" on page 7-165
5. Add the definition to applicable content within the folder. See "Adding Metadata to Content" on page 7-167
6. Add a Metadata server control to every Web form (.aspx page) on which the content will appear. See "MetaData Server Control" on page 7-171.

Title Tag

The title should identify the contents of the document in a global context. A browser may display the title of a document in a history list or as a label for the window displaying the document.

(Above text copied from www.w3.org/MarkUp/html-spec/html-spec_5.html.)

```
<HTML>
<HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">
<meta name="robots" content="index, follow">
<meta name="revisit-after" content="15 days">
<META HTTP-EQUIV="imagetoolbar" CONTENT="no">
<Title>Ektron; Inc. - Web Content Management and Document Management with
scalable flexible and affordable authoring solutions.</Title>
<meta name="Keywords" content="document management web content management
content management cms">
<meta name="Description" content="Ektron's Web Content Management and
Document Management software products manage web content and documents with
WYSIWYG XHTML/HTML editors offering easy to use browser-based web authoring
and publishing solutions for web content management and document
management">
```

Creating and Deploying Title Tag Definitions

1. While creating a metadata definition, enter **Title** at the **Name** field. See Also: "Adding a Metadata Definition" on page 7-156
2. Reply to the standard fields. See "Metadata Definition Fields" on page 7-158.
3. Respond to the additional field for HTML tags. See "HTML Tag Additional Field" on page 7-159.
4. Add the definition to a folder. See "Assigning Metadata to a Folder" on page 7-165.
5. Add the definition to content within the folder. See "Adding Metadata to Content" on page 7-167.
6. Add a metadata control to every Web form (.aspx page) on which this content will appear. See "MetaData Server Control" on page 7-171.

Creating and Deploying Search Tag Definitions

1. While creating a metadata definition, in the **Name** field, enter a description of the kind of data to be searched. (See examples circled above.) This title describes the search data on the

- **Metadata** tab of the Folder Properties screen
- **Metadata** tab of the View Content Screen

- Workarea search screen

Note: Searchable metadata field names should not include a space. If they do, the search cannot find the metadata.

See Also: "Adding a Metadata Definition" on page 7-156

2. Reply to the standard fields. See "Metadata Definition Fields" on page 7-158.
3. Respond to additional fields for Searchable Property definitions. See "Searchable Additional Fields" on page 7-160.
4. Add the definition to a folder. See "Assigning Metadata to a Folder" on page 7-165.
5. Add the definition to content within the folder. See "Adding Metadata to Content" on page 7-167.
6. The next time you visit the Workarea search screen, you will see the new field.
7. If you want site visitors to use this field when searching your Web site, ask your developer to set the `ShowExtendedSearch` property of the Search Server Control to **true**. This value enables the Web site search to find searchable metadata.

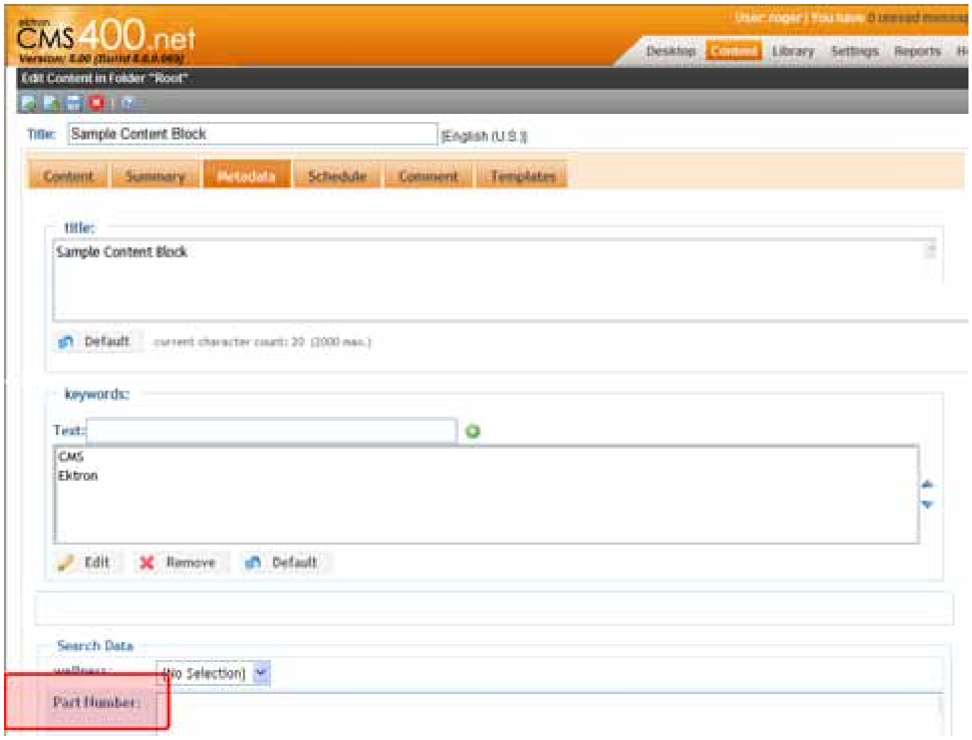
Searchable Metadata

This type of metadata allows content to be found by a search phrase that you add to the content's metadata. The content is typically found by both a Web site search as well as a Workarea search.

Note: When your system administrator sets up metadata, he determines whether or not is it "publicly viewable." If it is, the search field appears on the search screen that site visitors use along with the search screen in the Ektron CMS400.NET Workarea. If the data is not publicly viewable, it can only be found by the Workarea search.

For example, each document stored in the Document Management functionality has a unique part number. You want to let site visitors and Ektron CMS400.NET users locate the document by its part number.

First, your system administrator would add a custom metadata definition called **Part Number**, and specifies that only numbers can be inserted into the field. Then he adds that metadata def inti on to all folders that contain the documents. Finally, when you add a document, you click its **Metadata** tab, and insert the part number for the document (illustrated below).



Then, anyone visiting your Web site can find that document by its part number using your Web site's search screen.

See Also: "Searching for Metadata" on page 9-52

Related Content Metadata

You can associate the following types of content with a content item.

- a content item
- a collection
- a list summary
- a menu
- a user
- one of the following types of library items
  - image
  - hyperlink
  - file

Next, you can set up a Web page so that whenever the source content item appears, the related information appears next to it.

For example, your Web site sells motorcycle helmets. On a page that shows a particular helmet, the left column lists a collection of motorcycle drivers who wear that helmet. Another example might be showing the profile of a user when a certain content item is displayed.

Related Content vs. MetadataList Server Control

This capability is similar to the MetadataList Server control. The difference is that MetadataList shows a link to *every* content item with a selected term in the keywords or title. Also, a MetadataList is associated with a Web form (.aspx page), not a content item.

Related content lets you connect a content item with several types of related content (see list above), and is associated with a content item, not a web form. For example, you can display a library image of the company logo on a page whenever content in a certain folder appears. For content in a different folder, a different logo could appear.

Creating and Deploying Related Content Definitions

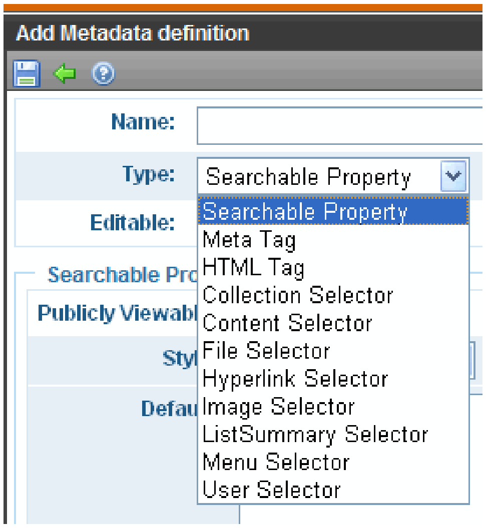
1. While creating a metadata definition, in the **Name** field, enter a title for this kind of data. This title describes the metadata on the

- **Metadata** tab of the Folder Properties screen
- **Metadata** tab of the View Content screen

   See Also: "Adding a Metadata Definition" on page 7-156

2. Reply to the standard fields. See "Metadata Definition Fields" on page 7-158.

   The **Type** must end with the word **Selector**. Choices are highlighted below.



For example, if you choose **ListSummary Selector**, a specified List Summary will appear on the page along with its associated content item.

Your choices are

- Collection Selector
- ListSummary Selector
- Content Selector
- Image Selector *(associates a library image with content)*
- Hyperlink Selector *(associates a library hyperlink with content)*
- File Selector *(associates a library file with content)*
- Menu Selector
- User Selector

3. Add the metadata definition to all appropriate folders. See "Assigning Metadata to a Folder" on page 7-165

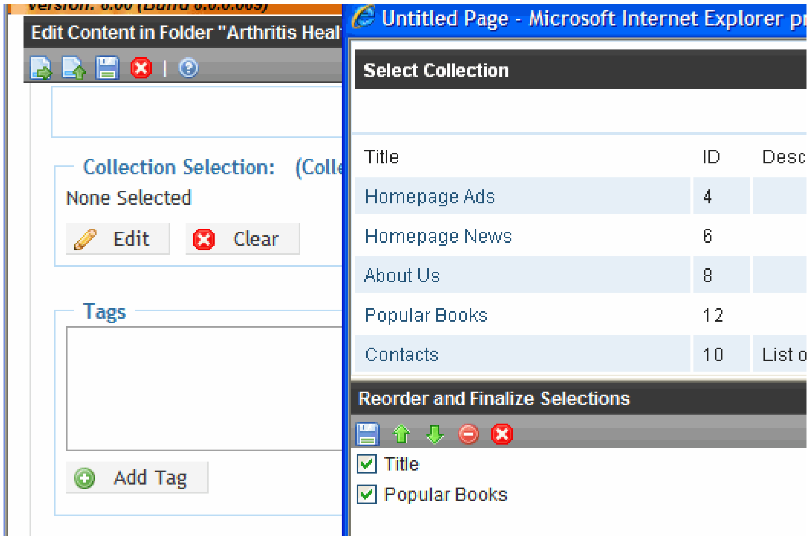
4. For each content item with which you want to associate related content, access its **Metadata** tab and identify the related item(s).

Warning! If you are using **Collection Selector** type, only users with permission to work with collections can select a collection. Also, if you are using **Image, Hyperlink or File Selector** type, only users with permission at least read-only Library permissions can select a library item. See Also: "Folder Permissions" on page 5-43.

For example, a collection of pages describes popular books. You want this collection to appear whenever a medical topic is being viewed.

To set this up, you would

- edit the medical content item
- click its **Metadata** tab
- find the metadata definition for the collection
- click **Change**
- select the Popular Books



5. Have your Web developer add code to each page on which the related item appears. To learn how to do this, access the developer sample page (`http://localhost/cms400developer/developer/default.aspx`) and read the **Metadata** > **Meta Associations** description.

Note: To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`.

Simple Dublin Core Metadata

Simple Dublin Core is a set of fifteen standard names for metadata fields designed to cover the most useful items of information on a document. From the Dublin Core site FAQ: “Dublin Core metadata provides card catalog-like definitions for defining the properties of objects for Web-based resource discovery systems.” For more information, refer to the Usage Guide: http://www.dublincore.org/documents/usageguide/.

By using the Metadata Server Control, you automatically create seven of the fifteen Dublin Core metadata fields. These fields are automatically filled with the information from the equivalent Ektron CMS400.NET property. Below is a list of the seven fields and their Ektron CMS400.NET equivalent. For more information on the Metadata Server Control, see "MetaData Server Control" on page 7-171.

Dublin Core Field Name	Ektron CMS400.NET Property
DC.title	Content block title
DC.description	Plain text version of a content summary
DC.contributor	Content block last editor name
DC.date	Content block last edit date
DC.format	“text/html”
DC.identifier	URL of current page (from ASP.NET Server.Request object)
DC.language	CMS language cookie / current site language, expressed as a .NET System.Globalization Culture Name

Creating the Additional Eight Fields

To fully comply with the Simple Dublin Core metadata element set, the administrator must create the remaining eight Dublin Core fields as standard CMS400.NET Metadata definitions and apply them to all CMS400.NET folders. Next, CMS users complete the appropriate values for each content block.

Warning! When creating the Dublin Core metadata fields in the Metadata section of the Workarea, you do not need to create the first seven fields in the table above. In addition, the names of the fields you create must match the names below. For example, in the name field, enter “DC.subject”. The DC identifies the metadata as Dublin Core metadata.

The remaining eight Simple Dublin Core fields are described below:

Note: These descriptions are from the Dublin Core Metadata Initiative site. For a more detailed description, visit http://www.dublincore.org.

- **DC.subject** - The topic of the content of the resource. Typically, a Subject is expressed as keywords, key phrases, or classification codes that describe the topic of the resource.
- **DC.type** - The nature or genre of the content of the resource. Type includes terms describing general categories, functions, genres, or aggregation levels for content.
- **DC.source** - A reference to a resource from which the present resource is derived. For example, DC.source=”Image from page 54 of the 1922 edition of Romeo and Juliet”
- **DC.relation** - A reference to a related resource.

- **DC.coverage** - The extent or scope of the content of the resource. Coverage typically includes spatial location (a place name or geographic co-ordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity). Examples: DC.coverage=”1995-1996”, DC.coverage=”Boston, MA”, DC.coverage=”17th century” or DC.coverage=”Upstate New York”.
- **DC.creator** - An entity primarily responsible for making the content of the resource.
- **DC.publisher** - The entity responsible for making the resource available.
- **DC.rights** - Information about rights held in and over the resource. Typically, a Rights element contains a rights management statement for the resource, or reference a service providing such information.

Working with Metadata Definitions

Note: Only members of the Administrator User Group and those defined in the Manage Members for Role: Metadata-Admin screen can view, add, or edit metadata definitions. See Also: "Using the Roles Screens" on page 15-33

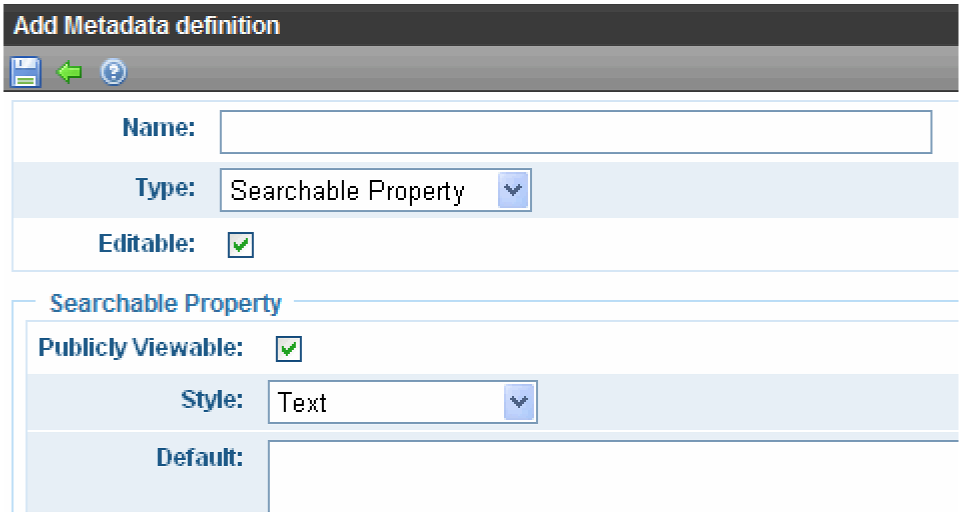
Procedures for creating, updating and deleting metadata definitions are explained in the following sections.

Adding a Metadata Definition

Use the Add Metadata Properties screen to define metadata (such as keywords and title). You can define as many instances of metadata as you wish.

If your site supports multiple languages, you create metadata definitions for each supported language.

See Also: "Working with Metadata" on page 7-146

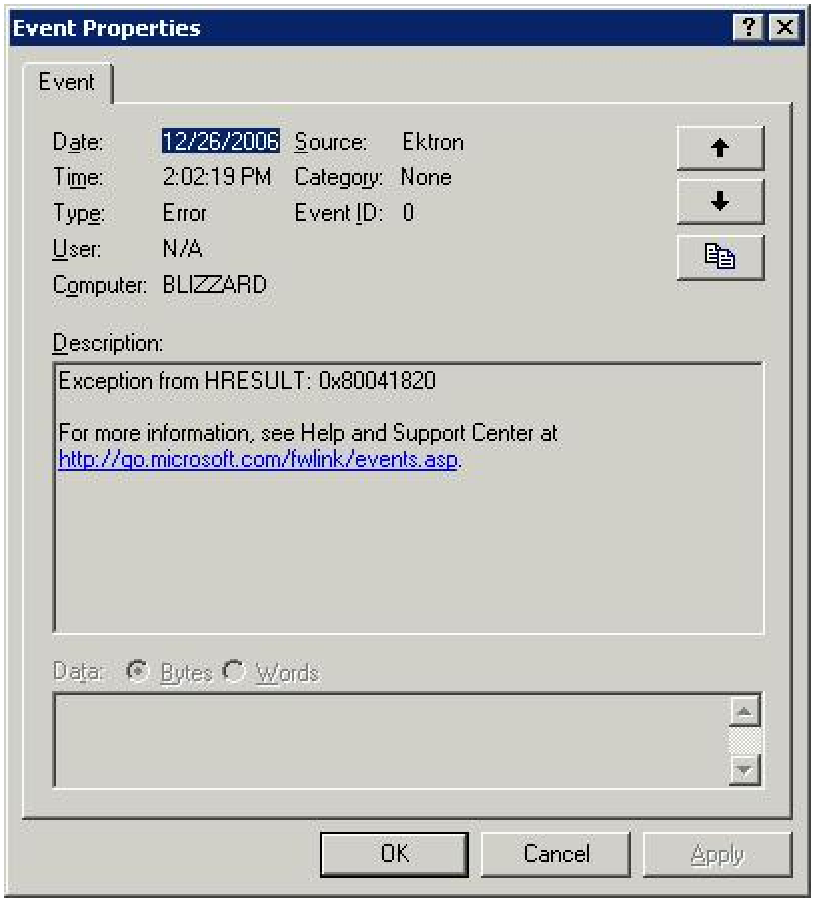


To define a metadata definition, follow these steps.

Warning! After creating a definition, you must assign it to folders whose content should use it. You do this via the folder's properties. See "Assigning Metadata to a Folder" on page 7-165.

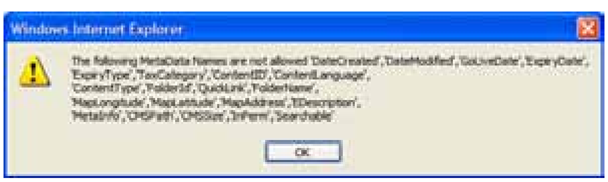
1. From the Workarea's left frame, click **Settings** > **Configuration** > **Metadata Definition**.
2. The View Metadata Definitions screen appears.
3. Select the language for the metadata you are about to define. This metadata will be available only to content in this language.
4. Click the Add Metadata Definition button ( ).
5. The Add Metadata Definition screen appears. Using the following table, add the needed information.

After you create a metadata definition, you may see the following error in the Windows Event Viewer Log.



To learn more about this problem and how to resolve it, see the following Microsoft KB article: http://support.microsoft.com/kb/310680.

Metadata Definition Fields

Field	Description
Name	Enter a name to identify this metadata. Note: Searchable metadata field names should not include a space. If they do, the search cannot find the metadata. Ektron CMS400.NET reserves a list of names that you cannot use. If you enter one of them, the following error message appears when you try to save the definition. 

Field	Description
Type	From the drop-down list, select whether this tag is - a searchable property - See Also: "Searchable Additional Fields" on page 7-160 - an HTML tag (for example, `<title>`) - See Also: "HTML Tag Additional Field" on page 7-159 and "Related Content Metadata" on page 7-151 - a Meta tag (`<meta>`) - See Also: "Meta Tag Additional Fields" on page 7-159 and "Related Content Metadata" on page 7-151 - Collection Selector, ListSummary Selector, Content Selector, Image selector, Hyperlink Selector, File Selector - See Also: "Related Content Metadata" on page 7-151
Editable	Check this box if you want to allow users to edit the contents of the metadata when creating or editing the metadata's content. Uncheck this box if you want uniform metadata text for each content item that uses this metadata.

HTML Tag Additional Field

See Also: "Related Content Metadata" on page 7-151

Field	Description
Default Text	Enter default content for the HTML tag. For example: `content="document management web content management content management cms"`

Meta Tag Additional Fields

Note: For background information about metadata, see http://www.w3.org/TR/REC-html40/struct/global.html#edef-META.

See Also: "Related Content Metadata" on page 7-151

Field	Description
Style	Select from the drop-down list to indicate whether you want the style to be **name** or **http-equiv**. For more information, see http://www.w3c.org/TR/REC-html40/struct/global.html#h-7.4.4.2
Remove Duplicates	Check this box to remove duplicate words or phrases from the metadata.
Case Sensitive	Check this box to remove duplicates only if the letters and case of each letter match.
Separator	Enter a character to separate the metadata values. The default is a semicolon (;).
Selectable Metadata	Check this box to force users to select from the options specified in the **Allow Selectable Text** and **Default Text** fields. If you do not check this box, users can create their own metadata.
Allow Multiple Selections	Check this box to let users select multiple metadata values instead of one. If multiple values are allowed, use the separator character to delimit them. If this box is not checked, all values appears in a drop-down list, and the user selects the correct one. This field is only active if the **Selectable Metadata** box is checked.
Allowed Selectable Text	Enter standard metadata that can be selected by users. Separate each option by the separator specified for the metadata definition. This field is only active if the **Selectable Metadata** box is checked.
Default Text	Enter default content for the metadata tag.

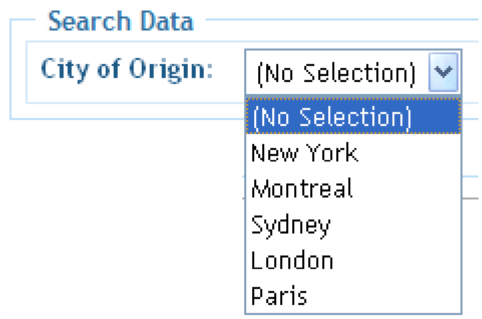
Searchable Additional Fields

Field	Description
Publicly Viewable	If you check the box, site visitors can find the metadata value when searching your Web site. Otherwise, site visitors cannot find the metadata value. Note: Regardless of whether this is checked, this metadata value can be found using the Workarea's Search Content Folder screen. Only logged-in users can access the Workarea.

Field	Description
Style	Select the style of the response field from these choices (available in a dropdown list). You are specifying the *kind* of information that a user adding searchable properties to content will enter to describe the data. Later, anyone using the search can search on that information. See Also: "Assigning Metadata to a Folder" on page 7-165 - **Text** - The user enters free text to describe the content. - **Number** - The user enters a number to describe the content. - **Byte** - 1 byte. 0 through 255 (unsigned) - **Double** - 8 bytes. -1.79769313486231570E+308 through -4.94065645841246544E-324 † for negative values; 4.94065645841246544E-324 through 1.79769313486231570E+308 † for positive values - **Float** - (single-precision floating-point) 4 bytes. -3.4028235E+38 through -1.401298E-45 † for negative values; 1.401298E-45 through 3.4028235E+38 † for positive values - **Integer** - 4 bytes. -2,147,483,648 through 2,147,483,647 (signed) - **Long** - 8 bytes. -9,223,372,036,854,775,808 through 9,223,372,036,854,775,807 (9.2...E+18 †) (signed) - **Short** - 2 bytes. -32,768 through 32,767 (signed) - **Date** - The user enters a date to describe the content. - **Yes or No** - The user answers yes or no to describe the content. For example, if the content describes automobile parts, the user could answer **yes** to include new and used parts or **no** to search for new parts only. - **Select from a list** - The user picks a from a list to describe the content. For an illustration of this style on the Edit Content screen/Searchable Properties tab and the Web site search screen, see "Select from a List" on page 7-161. - **Multiple selections** - The user selects an item from a dropdown list. For an illustration of this style on the Edit Content screen/Searchable Properties tab and the Web site search screen, see "Multiple Selections" on page 7-162. See Also: "Converting the Style of a Metadata Definition" on page 7-162
Default	If desired, enter the most common response to this definition. The default value is automatically applied to all existing content within folders to which this definition is assigned. While editing content that uses this definition, a user can accept the default value or change it. See Also: "Effect of a Default Value on Required Metadata" on page 7-167

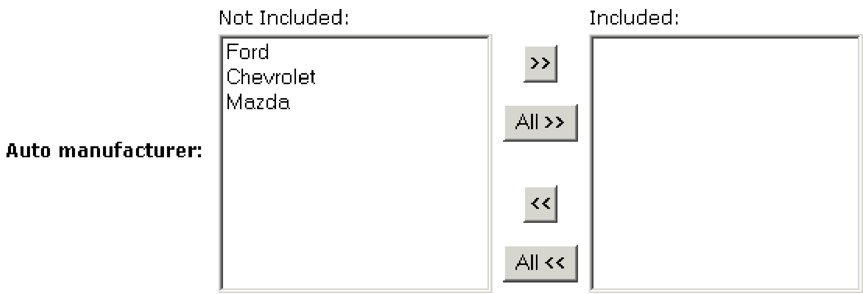
Select from a List

Appearance on Edit Content Screen > Metadata Tab



Multiple Selections

Appearance on Edit Content Screen > Metadata Tab



Converting the Style of a Metadata Definition

This section explains how Ektron CMS400.NET handles changing the style of a searchable property type of metadata. For example, you create a definition to collect **Part Number**. Originally, the style is text, but you later decide its style should be number.

When you change the style of searchable property type metadata, Ektron CMS400.NET attempts to maintain any data stored in content blocks that use the definition. For example, if the data style was number and you change it to text, the number stored for that metadata definition is converted to text and maintained in all content that uses it.

However, sometimes Ektron CMS400.NET cannot maintain the data when you change the style. For example, if you change a metadata definition style from number to date, Ektron CMS400.NET cannot convert those styles. In this case, any data stored in metadata definitions is lost.

The following table illustrates all conversion scenarios and how Ektron CMS400.NET handles each one. It indicates whether data is maintained after you convert from a data style in the left column to a style to its right.

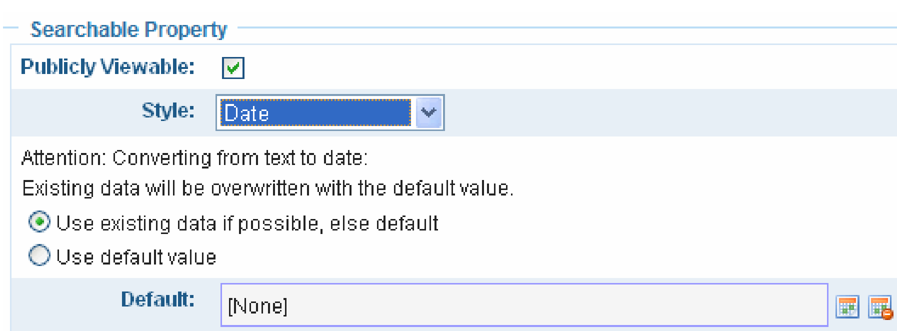
	Text	Number	Date	Boolean	Single Select	Multiple Select
Text	-	OK	OK	NO	NO	NO
Number	OK	-	NO	NO	NO	NO
Date	OK	NO	-	NO	NO	NO
Boolean	OK	NO	NO	-	NO	NO
Single Select	OK	NO	NO	NO	-	OK
Multiple Select	OK	NO	NO	NO	NO	-

Table legend

- **OK** - Data is maintained
- **NO** - Data is lost during conversion

When you change the style of a metadata definition, the screen often gives you these choices:

- Use existing data if possible, else default
- Use default value



Following these choices is a field that lets you define a default value. If you want to simply replace any existing data, select **Use default value** and enter the new value in the **Default** field.

If the data is convertible (according to the table above), and you want to maintain existing data if possible, select **Use existing data if possible, else default**. Then, enter a default value below. If the existing data cannot be maintained, the default value replaces it.

Viewing Metadata Definitions

You may view any metadata definition. To do so, follow these steps.

1. From the Workarea's left frame, click **Settings** > **Configuration** > **Metadata Definition**.
2. The View Metadata Definitions screen appears.
3. Select a language from the drop-down list.
4. Click the Metadata definition you want to view.
5. The View Metadata Definition screen appears. From here, you can edit and delete this definition.

See Also: "Metadata Definition Fields" on page 7-158

Editing a Metadata Definition

Note: You cannot edit the definition for the following Ektron standard metadata.
MapLatitude, MapLogntitude, MapAddress, MapDate

To edit a metadata definition, follow these steps.

1. Access the View Metadata Definition screen whose definition you want to edit, as described in "Viewing Metadata Definitions" on page 7-164.
2. Click the Edit button ( ).
3. The Edit Metadata Definition screen is displayed.
4. Make the necessary changes to the definition.

See Also: "Metadata Definition Fields" on page 7-158

5. Click the Update button ( ).

What Happens When a Metadata Definition is Edited?

If you create a metadata definition, assign it to a folder, then users insert metadata information into their content, the collected information takes on the characteristics of the metadata definition. For example, if the metadata is **title** and its type is **HTML tag**, this is how it appears in the Web page's source code.

```
<title>CMS Developer</title>
```

If you later change its type to **Meta**, the following effects occur:

- metadata to which the definition has *already been assigned* maintains the previous style definition. For example, `<title>CMS Developer</title>`.
- when you create a *new* content item that uses the metadata definition, its metadata takes on the new style. For example, `<meta name="title" content="CMS developer">`.

Deleting a Metadata Definition

You can remove metadata definitions that are no longer used from the Ektron CMS400.NET site. When you delete a definition, it is removed from every content item that uses it.

To delete a definition, follow these steps.

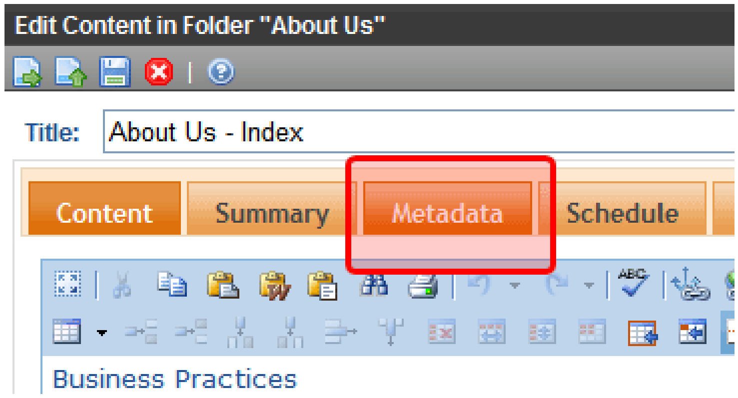
1. Access the View Metadata Definition screen for the definition, as described in "Viewing Metadata Definitions" on page 7-164.
2. Click the Delete button ( ).
3. A confirmation message is displayed.
4. Click **OK**.
5. Another confirmation message is displayed.
6. Click **OK**.

Assigning Metadata to a Folder

After creating a metadata definition (see "Adding a Metadata Definition" on page 7-156), assign it to folders whose content will use it.

On each folder's properties screen, you determine which metadata definitions can be used.The section of the folder properties screen used to assign metadata appears below. Only metadata definitions whose **Assigned** box is checked can be completed by users working with content in the folder.

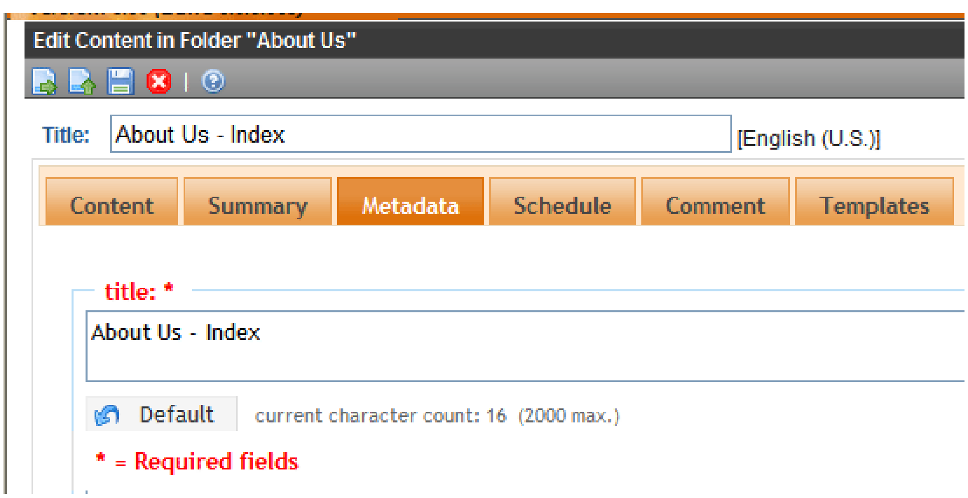
Then, while creating or updating content, the user can insert the metadata information via the Metadata tab (illustrated below).



Requiring Users to Enter Metadata

You can determine that a metadata value *must* be inserted before content can be saved (see the **Required** checkboxes in the illustration above). This occurs both when new content is added and existing content is edited.

If you set a kind of metadata to be required, its label is red and includes an asterisk (*) on the **Metadata** tab of the Edit Content screen, as shown below.



If the user does not complete a required metadata field, a message informs him that it must be completed before he can save the content.

Effect of a Default Value on Required Metadata

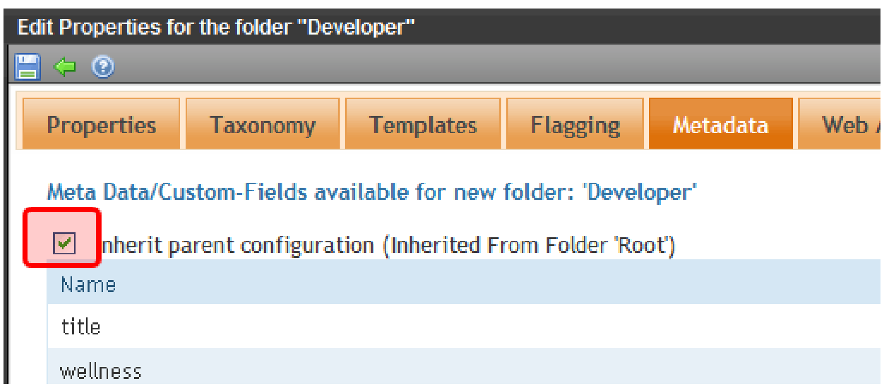
A default value can be defined when creating or editing a field within a metadata definition. See Also: "Adding a Metadata Definition" on page 7-156

If a default value is defined for a required metadata field, the default value is used when the user saves the content. In this case, the user is not prompted to enter a value because the default value is sufficient.

Inheritance of Metadata by Folder

Each folder can inherit metadata fields from its parent folder or have a unique set of them. The information includes the kinds of metadata that are *assigned* and which of those are *required*. For example, you could assign the top folder (Content) all metadata definitions, while you assign the Contacts folder (directly below it) none.

On every folder's **Metadata** tab, use the **Inherit Parent Configuration** check box (illustrated below) to determine if metadata definitions are the same as the parent folder or unique.



By default, **Inherit Parent Configuration** is checked, which means that all folders inherit metadata definitions from the root folder (Content).

When you uncheck **Inherit Parent Configuration**, you can change the settings as desired. All inherited values appear by default (that is, **Assigned** and **Required** boxes are either checked or unchecked).

Adding Metadata to Content

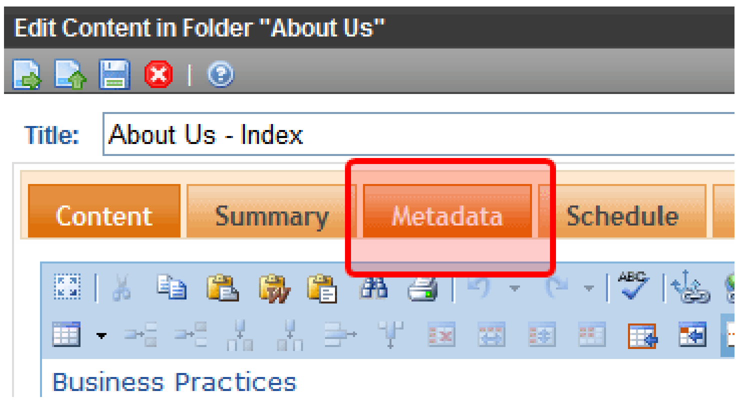
When a user creates or updates content, he can define its metadata within the assignments specified for its folder.

Default metadata values are applied without user intervention.

To enter or edit content's metadata, follow these steps.

Warning! You may only edit metadata of content that is published, checked in, or checked out by you.

1. Access the Edit Content screen for the content whose metadata you want to enter or edit, as described in "Editing HTML Content" on page 7-105.
2. Click the **Metadata** tab.



3. The Edit Metadata screen opens with the current metadata displayed. In order to add metadata to content, an administrator *must* have created definitions for it in the language of the content.

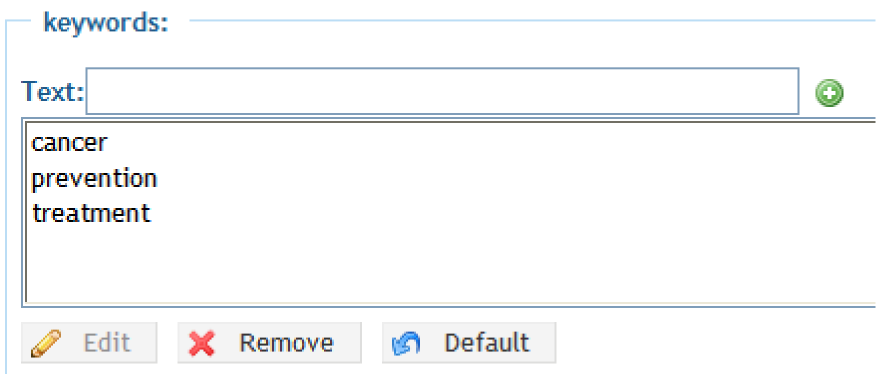
Note: Your system administrator determines the appearance of the Metadata screen.

4. Edit the metadata. Note that

- Required field labels are red and marked with an asterisk (*). You must place at least one response in such fields before you can save the metadata.
- Your system administrator may prevent you from editing a field. In this case, the field has a gray background, and you cannot place the cursor there.
- Fields may appear in two columns. In this case, the system administrator provides a list of terms that you can apply to the content. You can select terms from the list or enter free text.

One column is labeled **Not Included** and the other **Included**. Move terms between lists by clicking the **Add** and **Remove** buttons.

- You may see a list of terms in one box, and a field labeled **Text** above it.



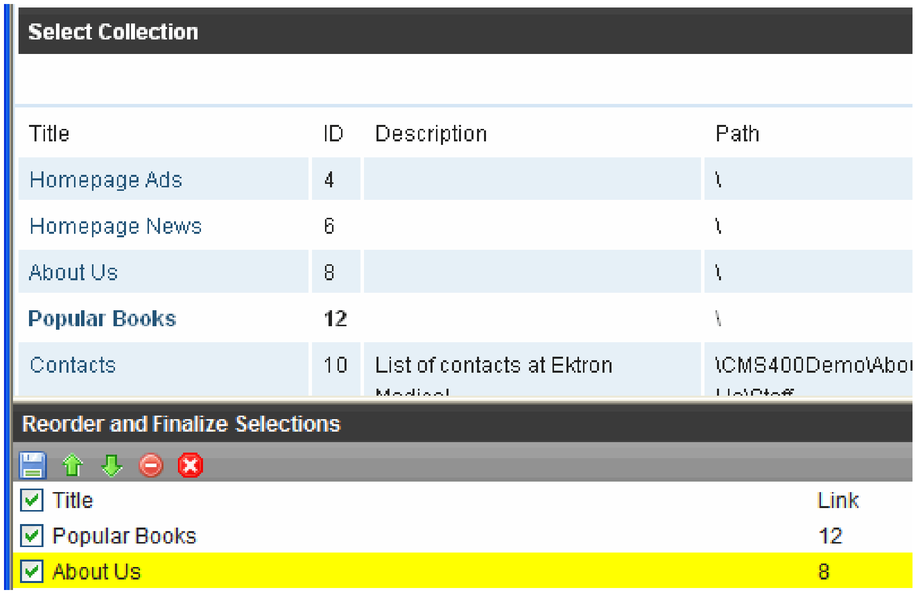
With such a list, you can

- add a new term by typing it into the **Text** field and clicking
- remove any term by selecting it and clicking **Remove**
- modify any term by selecting it. It appears within the **Text** field, where you can change it. Then, press the **Edit** button.
- restore the terms to their default settings by pressing the **Default** button
- change the sequence of terms by selecting one then pressing the up and down arrows ( )

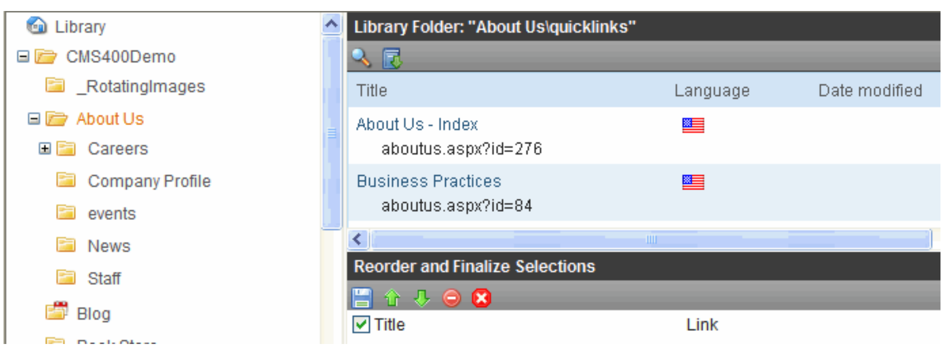
- If *related content* metadata is available for the content, its name appears followed by **None Selected (ID) Change Clear**.

Click **Change** to display a window of choices. For example, if the related content type is a collection, all collections appear in the popup. Select the appropriate data for this content.

Selected items appear in the bottom of the screen. You can reorder them by selecting an item then clicking the up and down arrows. To remove items from the bottom of the screen, select them and click the delete ( ) button.



If the related content type is either content item or library image, hyperlink, or file, the following window appears when you click **Change**.



Use this screen to identify the related content. To do this,

- Select a folder from the left frame
- Double click the related-content item from the top right frame
- The item appears in the lower right frame
- When all items are in the lower right frame, click the Save button ( ) directly below **Select Metadata**

- If default metadata is defined for a specific data type, you can click the **Default** button at the bottom of each field to restore it.
- Below each field is a **Characters Left** field, which counts the number of metadata characters. You cannot exceed the maximum (500 characters).

5. Click the Save button ( ).

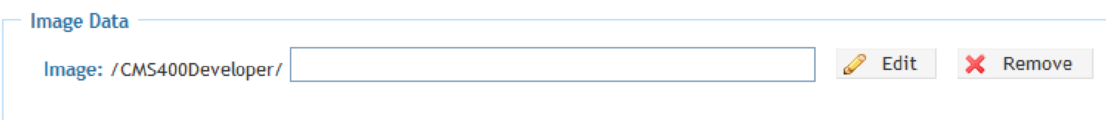
6. The View Content screen reappears.

The content is now in a checked out state to you. For the changes to take effect on the Web site, check in the content and submit it to the approval chain.

See Also: "Approval Chains" on page 5-28

Assigning a Metadata Image to Content

You can assign an image to any content item's metadata. It is a standard field automatically available to every content item. It is not a definition in the Metadata fields.



Use the **Image** field to identify an image that can be retrieved by Ektron Markup Language's (EKML) `[$Image]` and `[$ImageThumbnail]` variables. See Also: "Ektron Markup Language" on page 21-414.

An example of using Image data is a list summary that includes a photo of every item on the list. For example, your site promotes a soccer team. The list summary shows every player on the team. To the left of each player's name is a thumbnail of his image.

MetaData Server Control

The Metadata server control lets you add the metadata from content blocks to a Web page. This lets developers add metadata quickly without having to type it in. You can add metadata from a single content block, multiple content blocks, or by dynamically passing a content ID from a URL.

This subsection contains the following topics:

MetaData Server Control vs. MetaDataList Server Control

With the MetaData server control, you add metadata from content blocks to your Web page. With the MetaDataList server control, you create a list of content blocks to display on your site, based on the Metadata in each content block. For Information on the MetaDataList server control, see "MetaDataList Server Control" on page 7-175.

MetaData Server Control Properties

The Metadata server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DefaultContentID	The content block ID from which the server control gets the metadata. If you want to add metadata from several content blocks, set this property to 0 (zero) and use the `DefaultItemList` property to identify the content blocks. If you don't know the ID number of the content block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DefaultItemList	A bracket separated list of content block IDs from which to get metadata. The DefaultContentID property must be set to 0 (zero) to add IDs to the list. DefaultItemList [92][12][4][7] You can also specify metadata keys for each content block. To	String

Property	Value	Data Type
	assign metadata keys to a content ID, add a semicolon after the ID and add the name of the key. For example, DefaultItemList [30][10;Title][23;Title;Description] This allows you to select which metadata for each content block is added to the page.	
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically.	String
GenerateDublinCore	When enabled, this property automatically creates seven of the Simple Dublin Core metadata fields from standard CMS400.NET system properties. The default is false. **True** = Generate Simple Dublin Core metadata fields **False** = Do not generate Simple Dublin Core metadata fields The seven fields and how they are associated with the CMS400.NET properties is explained in "Using the Simple Dublin Core Metadata Standard" on page 7-173	Boolean
Hide	Used to hide a Metadata server control in design time and run time. **True** = Hide Metadata server control **False** = Show Metadata server control	boolean
Language	Set a language for viewing form content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Using the Simple Dublin Core Metadata Standard

See Also: "Simple Dublin Core Metadata" on page 7-154.

To generate Dublin Core metadata, set the `GenerateDublinCore` property to True. This creates seven of the fifteen Dublin Core metadata fields. These fields are automatically filled with the information from the equivalent Ektron CMS400.NET property. Below is a list of the seven fields that are created and their Ektron CMS400.NET equivalent property.

Warning! These seven Dublin Core fields are automatically populated with information from their equivalent Ektron CMS400.NET property.

Dublin Core Field Name	Ektron CMS400.NET Property
DC.title	Content block title
DC.description	Plain text version of a content block teaser (summary)
DC.contributor	Content block last editor name
DC.date	Content block last edit date
DC.format	"text/html"
DC.identifier	URL of current page (from ASP.NET Server.Request object)
DC.language	CMS language cookie / current site language, expressed as a .NET System.Globalization Culture Name

To fully comply with the Simple Dublin Core metadata element set, the administrator must create the remaining eight Dublin Core fields as standard CMS400.NET Metadata fields and apply them to all CMS400.NET folders. Next, the CMS users must fill in the appropriate values for each content block.

For information on the remaining eight Simple Dublin Core fields, see "Simple Dublin Core Metadata" on page 7-154.

Using the MetaData Server Control

These steps show how to use the MetaData server control.

1. Drag a MetaData server control into a template.

2. Set the properties of the Metadata server control. This will create the following HTML in the HTML body.

```
        <cms:MetaData id="MetaData1" runat="server"
DefaultContentID="12"></cms:MetaData>
```

   Or if you are using multiple content block IDs In the DefaultItemList, the following HTML will be created.

```
        <cms:metadata id="MetaData1" runat="server"
DefaultItemList="[12,7,4]"></cms:metadata>
```

3. Click on the HTML tab and copy that line from the <body> tag into the <head> tag.

```
<HEAD>
    <title>WebForm5</title>
    <cms:MetaData id="Metadata2" runat="server" DefaultContentID="12"></cms:MetaData>
    <meta name="GENERATOR" content="Microsoft Visual Studio .NET 7.1">
    <meta name="CODE_LANGUAGE" content="Visual Basic .NET 7.1">
    <meta name="vs_defaultClientScript" content="JavaScript">
    <meta name="vs_targetSchema" content="http://schemas.microsoft.com/intellisense/i
</HEAD>
<body>
    <form id="Form1" method="post" runat="server">
    </form>
</body>
```

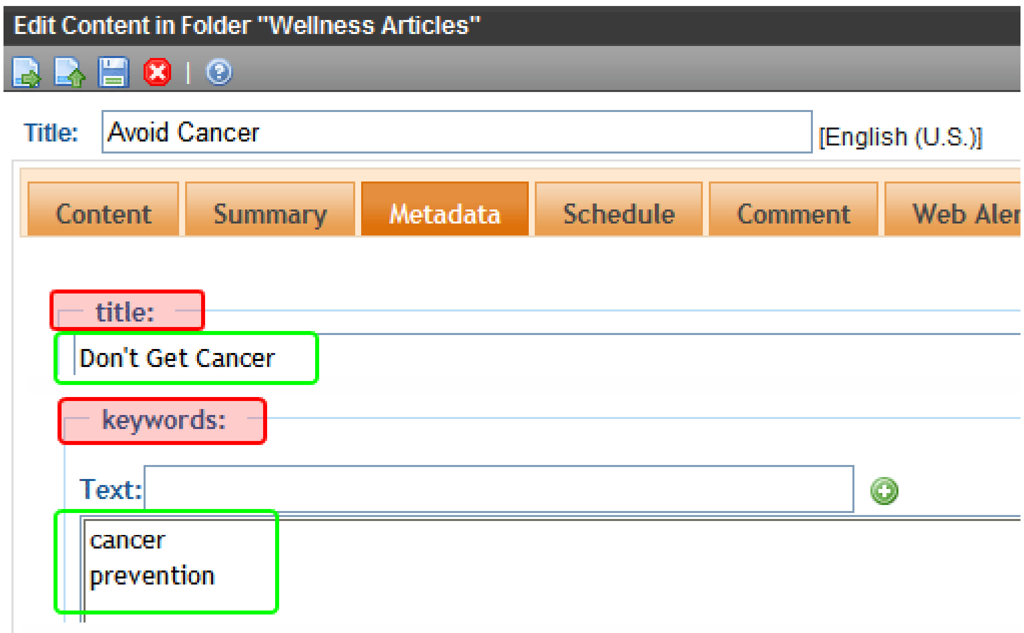
4. Save the Web form and rebuild the solution.
5. Open the Web page in the browser.
6. Right click on the Web page and click **View Source**. Look in the head tag. The meta tags from the content block are added to the page.

The metadata information added is shown below.

```
WebForm5[1] - Notepad
File Edit Format View Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML>
  <HEAD>
    <title>WebForm5</title>
    <title>CMS Developer</title>

    <meta name="keywords" content="CMS400; .NET; CMS">
    <meta name="description" content="CMS400 developer section">

    <meta content="Microsoft Visual Studio .NET 7.1" name="GENERATOR">
    <meta content="Visual Basic .NET 7.1" name="CODE_LANGUAGE">
    <meta content="JavaScript" name="vs_defaultClientScript">
    <meta content="http://schemas.microsoft.com/intellisense/ie5"
name="vs_targetSchema">
  </HEAD>
```

MetaDataList Server Control

Use the MetaDataList server control to create lists based on Keyword Names and Keyword Values contained within the metadata of content. In the example below, KeyWord names are circled in red, and KeyWord values are circled in green.



The list can display the information as a list of hyperlinks. You can choose, based on properties you set, to display the summary and how to order the display. For general information Metadata, see "Working with Metadata" on page 7-146.

This subsection contains the following topics:

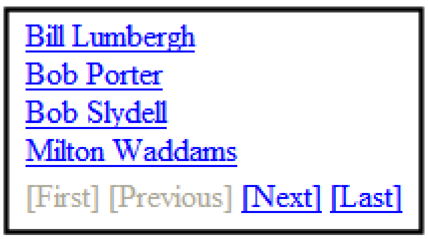
- "MetaData Server Control vs. MetaDataList Server Control" on page 7-172
- "MetaDataList Server Control Properties" on page 7-176
- "Retrieving the XML Structure of a MetadataList" on page 7-183

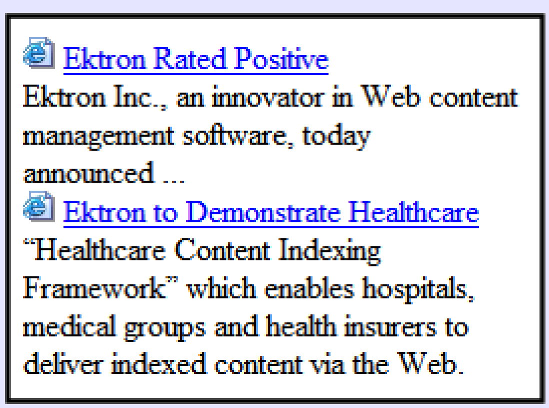
MetaDataList Server Control Properties

The MetaDataList server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

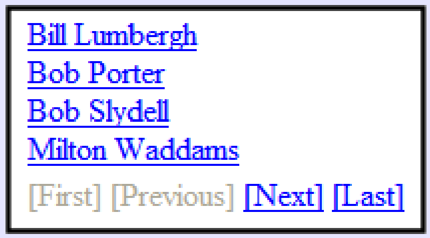
Property	Value
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9 Data Type: String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31 **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled. Data Type: Double
ContentType	Select a type of content for this control. Choices are: • All Types • Content • Forms • Archive_Content • Archive_Forms • Assets • Archive_Assets • LibraryItem • Multimedia • Archive_Media • NonLibraryContent • DiscussionTopic To learn about archived content, see "Setting Archive Options" on page 7-198. Data Type: Ektron.Cms.Controls.CmsWebService.CMSContentType
DisplayXslt	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every content block in the folder See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary. See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page Data Type: String

Property	Value
	Warning! If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Displayxslt` property value is ignored.
EnablePaging	This property, in conjunction with the `MaxNumber` property, lets site visitors view an unlimited number of content items while controlling the amount of screen space. To accomplish this, the content display is limited to the number set in the `MaxNumber` property. If you set this property to **true**, and the number of content items exceeds the `MaxNumber` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below. Data Type: String  So, for example, if specified metadata is found in 9 items and the `MaxResults` property is set to 3, the screen displays only the first three items. When the site visitor clicks **[Next]**, he sees items 4, 5 and 6, etc. **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled. Data Type: Boolean

Property	Value
ExactPhrase	Determines whether the KeyWordValue needs to match the metadata value exactly. For example, if “site” is the KeyWordValue, the title of a content block is “Welcome to the site” and ExactPhrase is set to **true**, you would not see the content block in the metadata list. This is because “site” does not equal “Welcome to the site”. **True** = Match the exact phrase **False** = Doesn’t need to match exact phrase Data Type: Booolean
FolderID	The folder ID from which content is retrieved. At the `Recursive` property, you determine if content in this folder’s subfolders is also retrieved. Data Type: Long
GetHtml	Set to **True** if you want to display the content (html body) for all content to appear on this metadata list. For example, you want to display content inside a Web server control such as a GridView. Data Type: Long
Hide	Used to hide a metadata list in design time and run time. **True** = Hide metadata list. **False** = Show metadata list. Data Type: Boolean
IncludeIcons	Choose whether to display icons next to the metadata list’s links. **Warning!** This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. Data Type: Boolean 

Property	Value
KeyWordName	KeyWordName represents a metadata definition, that is, the container for the KeyWordValues. Examples of a KeyWordName are **Keywords** and **Title**. To view an illustration of the relationship between KeyWordName and KeyWordValues, see "MetaDataList Server Control" on page 7-175. If you are authenticated, you can click the ellipsis button and select from a list of existing metadata definitions. See "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9. For information on creating metadata definitions, see "Working with Metadata Definitions" on page 7-156. Data Type: String
KeyWordValue	Enter the values associated with the KeyWordName. Only content whose metadata (defined at the `KeyWordName` property) matches this value appears on the metadata list. Examples of a KeyWordValue are "home; page; company." To view an illustration of the relationship between KeyWordName and KeyWordValues, see "" on page 7-175. Note: The character that separates multiple items is defined at the `KeyWordValueSeparator` property. Note: At the `KeyWordValueMatchAll` property, you determine if all metadata definition values must match or any one of them. Data Type String
KeyWordValue MatchAll	This property is only used if you enter more than one keyword value. If you do, and only want content to appear on the metadata list if *all* values entered at the KeyWordValue field match its metadata values, enter **true**. If metadata can appear on the list as long as *any value* defined at the KeyWordValue field matches the selected metadata value for a content item, enter **false**. **Example:** KeyWordValue for **Title** (assigned for this server control): home; page; company. Metadata values for a content item's **Title** metadata definition field: software; ektron; company. If `KeyWordValueMatchAll = true`, content does not appear on metadata list because some items do not match. If `KeyWordValueMatchAll = false`, content item appears on metadata list because one item (company) matches. Data Type: Boolean
KeyWordValueSeparator	Enter the character used to separate the list of keyword values. An example is a semicolon(;). Data Type: String

Property	Value
Language	Set a language for viewing the MetaDataList. This property shows results in design-time (in Visual Studio) and at run-time (in a browser). Data Type: Integer
LinkTarget	Defines the way a link acts when a link is clicked. Choices are: **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned BASE target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting. Data Type: ItemLinkTargets
MarkupLanguage	Identify the template markup file that controls the display of the metadata list. For example, mymetadatalistmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\` *`siteroot`* `\workarea\customfiles\markup\mymetadatalist.ekml`. See Also: "Ektron Markup Language" on page 21-414 and "metadatalist.ekml" on page 21-465 **Note**: If you enter a valid EkML file, the `DisplayXslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True. Data Type: String

Property	Value
MaxNumber	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter zero (0). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, set the `EnablePaging` property to **true**. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below.  Data Type: Integer
OrderBy	The order of the list to be returned. - **Title** - The title of the content block - **ID** - The content block ID number - **Date Created** - The date the content block was created - **Date Modified** - The date the content block was last modified - **LastEditorLname** - The last editor's last name - **LastEditorFname** - The last editor's first name Data Type: Ektron.Cms.Controls.CmsWebService.ContentOrderBy
Recursive	Whether to search sub-folders of the identified root folder. The starting folder is identified in the `FolderID` property. Data Type: Boolean
SortOrder	Choose the order direction of the list, Ascending or Descending. Data Type: String
SuppressWrapperTags	This property is set to `false` because Ajax uses `<div>` tags to rewrite the region around the tag. You *cannot* change the value to `true`. Data Type: Boolean

Property	Value
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag. Data Type: String

Retrieving the XML Structure of a MetadataList

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a MetadataList server control onto it.
3. Set the `KeyWordName` and `KeyWordValue` properties.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to **MultiLine**.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
   ```
   Textbox1.Text = Metadata1.XmlDoc.InnerXml
   ```
7. Build the project.
8. View the Web form in a browser.
9. The XML structure of the MetadataList appears in the textbox.

For an additional example, see the MetadatList XML page on the CMS400Developer samples page. It is located at:

In a browser:

```
http://<site root>/CMS400Developer/Developer/MetaDataList/MetadataListXML.aspx
```

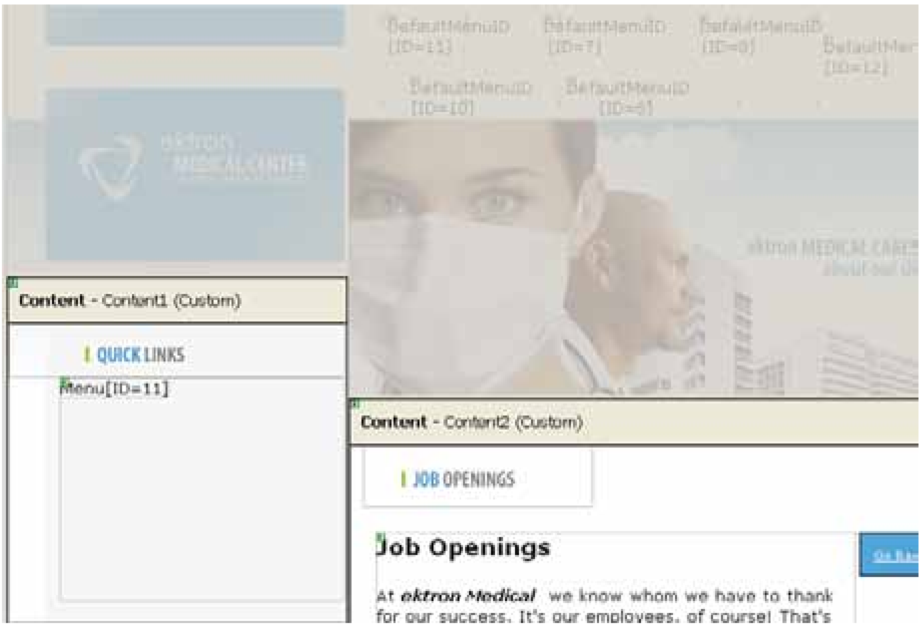
In the source code:

```
<site root>/CMS400Developer/Developer/MetaDataList/MetadataListXML.aspx and
MetadataListXML.aspx.vb
```

Creating/Updating Templates

During the setup of your Ektron CMS400.NET Web site, templates are created for your Web pages. A template typically includes page headers and footers as well as placeholders for content, forms, summaries, calendars, collections, or other page elements.

A template included with Ektron's sample site appears below. Notice that the top of the screen contains headers that appear on several pages. Other areas contain links to Ektron CMS400.NET objects, such as menus and text. The developer can easily modify the content inside these areas.



Note: To learn more about creating templates, see "Setting Up a Template" on page 21-4. Another good resource is the Ektron technical article "Templating in CMS400.NET" (http://dev.ektron.com/articles.aspx?id=6724).

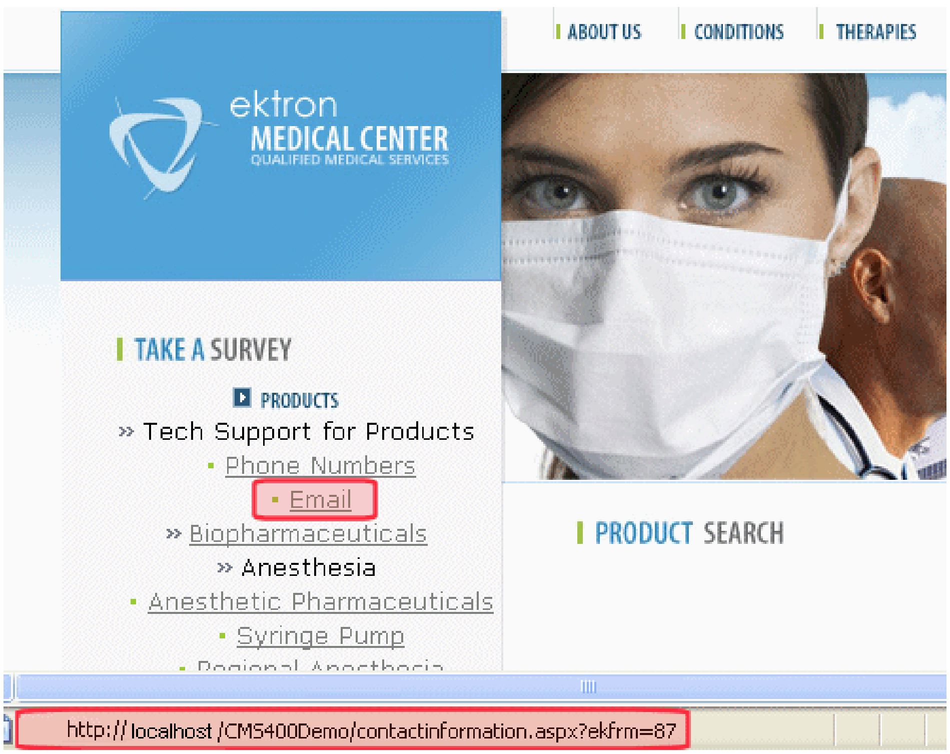
Templates are more fully explained through the following topics.

- "How Templates are Used" on page 7-185
- "Declaring Templates" on page 7-185
- "Inheritance of Folder Templates" on page 7-187
- "Assigning Templates to Folders" on page 7-188
- "Assigning Templates to Content" on page 7-190

How Templates are Used

Except for your Web site's home page, all pages on your site are made accessible by *hyperlinks*. Hyperlinks can appear within content. They are also used to link content items from list summaries, menus, and collections.

The template is a key component of the hyperlink definition -- it defines the template in which to display the content. As seen in the example below, when the user selects **Email**, that content item (ID 87) will display within the `contactinformation.aspx` template.



Declaring Templates

After creating your templates, declare them within Ektron CMS400.NET. To do this, go to the Active System Templates screen, available from **Settings** > **Configuration** > **Template Configuration**.

From this screen, you can add new templates, or delete or update existing ones.

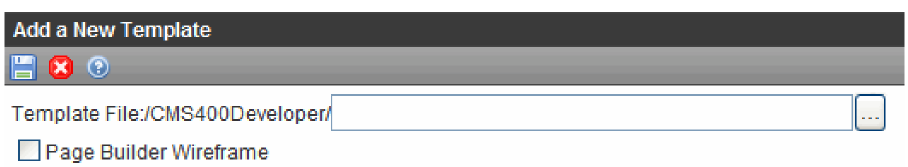
Note: Only members of the Administrators group and users defined in the Manage Members for Role: Template Configuration screen have permission to add, delete or update templates. See Also: "Defining Roles" on page 15-32

See Also:

- "Creating/Updating Templates" on page 7-184
- "Adding a New Template" on page 7-186
- "Deleting a Template" on page 7-186
- "Updating a Template" on page 7-187

Adding a New Template

To add a new template, click the Add button ( ). The Add a New Template screen appears.



Enter the path to the new template and click the Save button ( ).

Deleting a Template

To delete a template, click Delete next to the template.

You can only delete a template if it is not assigned as any folder's default template. If you choose a template that is assigned as a default, a screen tells you why you cannot delete it and lists the folders for which it is the default.

If you delete a template that is not used as a default but is applied to content, that content's template is changed to its folder's default template.

Updating a Template

Use the **update** command to change all references from an old to a new template. For example, your old template is named MyTemplate.aspx. You can want to replace all references to it to Updatetemplate.aspx.

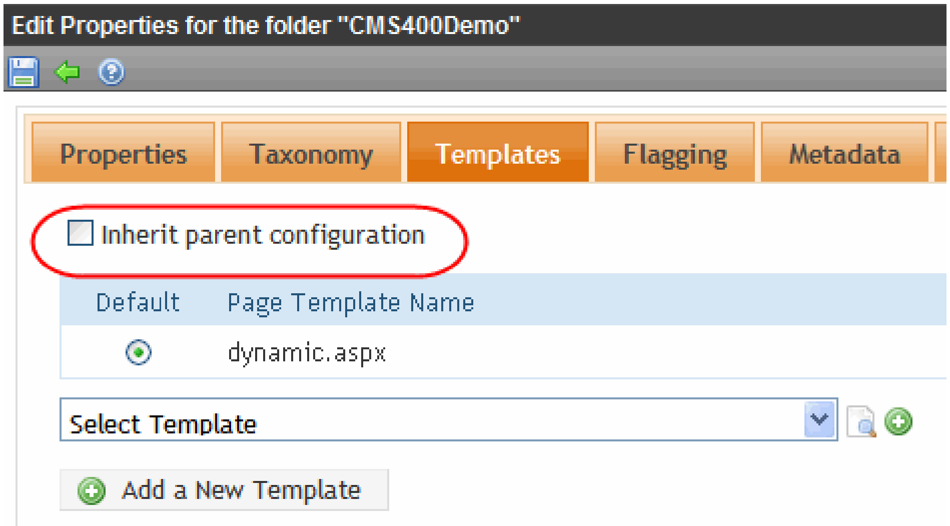
To do this, follow these steps.

1. Click Update next to the template.
2. A new screen appears.
3. Enter **Updatetemplate.aspx**.
4. Click the Save button ().

Inheritance of Folder Templates

By default, all folders below the root folder inherit a template from their parent. However, you can override the default and assign a unique set of templates to any folder. See Also: "Creating/Updating Templates" on page 7-184

Before you can change a folder's template assignment, you must break inheritance from the parent folder. To do this, go to the Edit Folder Properties screen and uncheck the box next to **Inherit Parent Template Configuration** (illustrated below). See Also: "Editing Folder Properties" on page 5-17



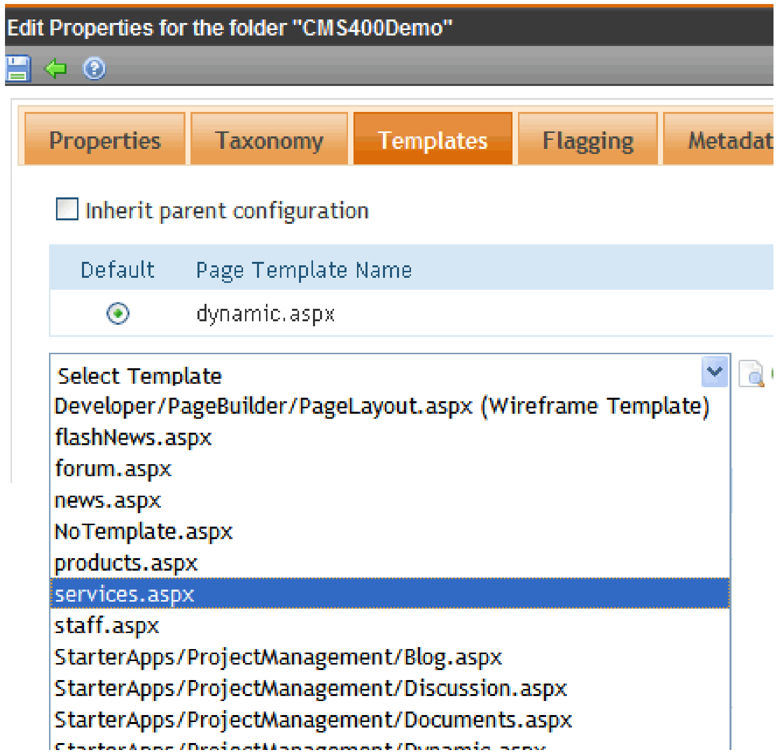
Each folder must have at least one template. Also, one template must be chosen as the default.

If the folder's default template is changed, all existing template assignments remain. However, any new content added or moved into the folder will assume the new default template.

Assigning Templates to Folders

If you break template inheritance, all inherited templates are initially assigned to the folder. You can then remove unwanted templates or add new ones.

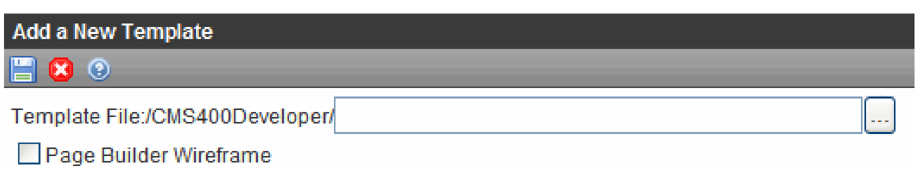
All available templates appear in the template dropdown list (illustrated below). Select any that you want to be available from the folder and click **Add**.



The list of available templates is managed through the ActIve System Templates screen. See Also: "Declaring Templates" on page 7-185

Adding a Template to a Folder

To add a new template, click the Add button ( ). The Add a New Template screen appears.



Enter the path to the new template and click the Save button ( ).

Removing a Template from a Folder

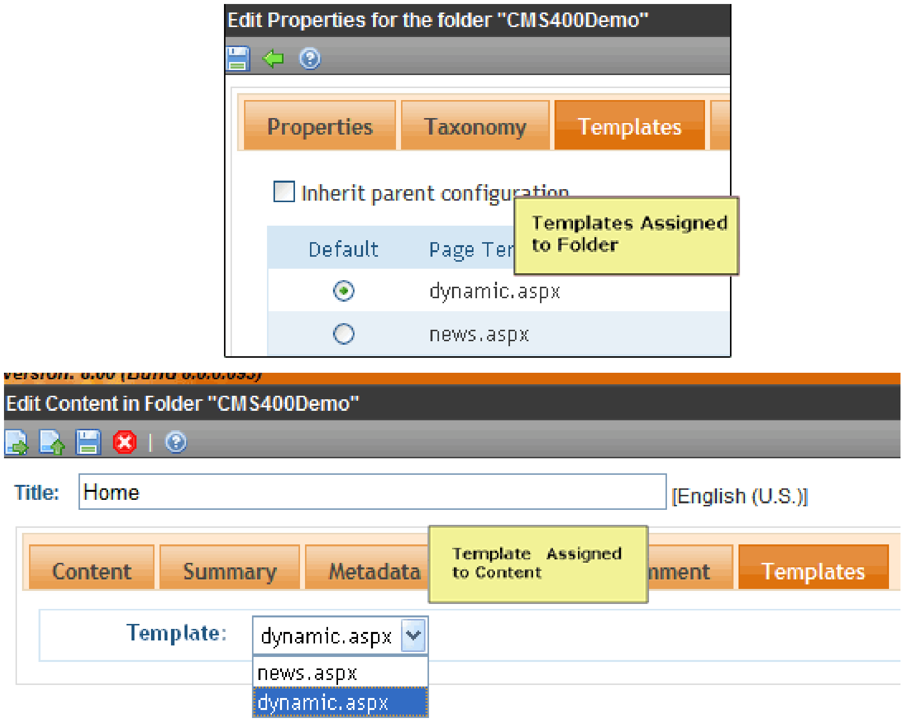
- If you try to delete a template that is the default for a folder, you are notified that you must assign a new default to that folder before you can delete it.

- If you try to delete a template that is assigned to a content block, you are notified via the following message **If you wish to continue and delete this template, the above content will be set to their parent folder's default template. Do you wish to continue?**

Assigning Templates to Content

A folder's default template is automatically applied to all content in the folder. However, you can change a content item's template to any of those assigned to the folder.

This relationship is illustrated below.



To change the template applied to a content item, edit that content, and go to the **Templates** tab as shown above. Then, select a template to apply to the content.

As explained in "How Templates are Used" on page 7-185, the template assigned to the content will be used whenever a hyperlink is created to it.

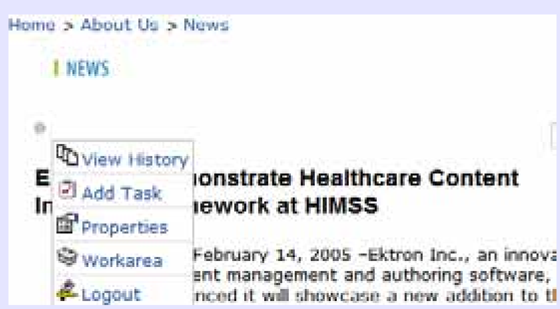
Private Content

Private content is only available to CMS users or membership users with at least Read-Only permissions for its folder. Those users must log in to work with the private content. Unauthorized site visitors cannot see it.

Note: All members of the Administrators group have access to private content, even if they are not granted permission on the View Permission for Folder screen.

You can designate a folder to be private. In that case, all content in it and its subfolders is private (if they inherit permissions). Alternatively, you can designate specific content items as private.

To demonstrate private content, the following table shows how a user's status affects the display of content in three scenarios.

Scenario	Private Content Web Page
Site visitor	
Logged in user with read-only permission	

Scenario	Private Content Web Page
Logged-in user with edit permissions	 Note: You can determine the appearance of the menu shown above. See "Changing the Appearance of the Web Site Content Menu" on page 7-7.

Making a Folder Private

Note: You can only set content to private when inheritance is broken. See Also: "Inheritance" on page 5-44.

To make a folder private, follow these steps.

1. In the Workarea, navigate to the folder that you want to make private.
2. Click **View** > **Properties**.
3. Click the View Permissions button ().
4. If necessary, uncheck the box that says **Allow this object to inherit permissions**. (Inheritance must be disabled before you can make the content private.)
5. Check the box that says **The content in this folder is private and can only be viewed by authorized users and members**.
6. A confirmation message is displayed.
7. Click **OK**.

All content in the folder is now private. As new content is added, it is automatically set to private.

Making Content Private

To make any content private, follow these steps. See Also: "Making Assets Private" on page 7-193

1. In the Workarea, navigate to the folder that contains the content you want to make private.
2. Click the content item you want to make private.
3. Click the View Permissions button ( ).
4. If necessary, uncheck the box that says **Allow this object to inherit permissions**. (Inheritance must be disabled before you can make the content private.)
5. Check the box that says **This content is private and is NOT viewable on the public Web site**.
6. A confirmation message is displayed.
7. Click **OK**.

The content is now private.

Making Assets Private

If assets are set to private, they are handled like other private content with one important exception: Unless you follow the procedure described below, anyone can access an asset by *typing the URL of the asset into the browser's address field*.

If a user attempts to access the asset in any other way (such as, linking to it from a Web page), the regular methods of making content private work. See "Making a Folder Private" on page 7-192 and "Making Content Private" on page 7-193.

To make assets private even if someone types their URL into the browser's address field, follow these steps.

Note: If site users receive a 404 Page Not Found Error when trying to view private assets, make sure you have completed all step below.

1. Open your Web site's web.config file, located in the site root folder.
2. Make sure the following line is uncommented.

```
<remove verb="GET,HEAD,POST" path="*"/>
```

3. Comment out the eight lines indicated below.

```
<httpHandlers>
<remove verb="GET,HEAD,POST" path="*"/>
<add verb="HEAD,OPTIONS,PROPFIND,PUT,LOCK,UNLOCK,MOVE,COPY,GETLIB,PROPPATCH,
MKCOL,DELETE,(GETSOURCE),(HEADSOURCE),(POSTSOURCE)" path="*"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<!--<add verb="GET,POST" path="*.doc"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.docx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.xls"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.xlsx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.ppt"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.pptx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.vsd"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.vsdx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>-->
```

Eight `add verb` statements in the middle are commented out.

4. Make sure the following line is uncommented.

```
<add verb="GET,HEAD,POST" path="*"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
```

5. Save web.config.

Scheduling Content to Begin and End

Scheduling lets you control when a version of content becomes visible on the Web site. Similarly, you can remove content on a predetermined date and time. When used together, a start and end date can relieve you of much work by managing how long a version of content is viewable on your Web site.

You can also set options for what happens to a content version upon reaching its end date.

How Does It Work?

When you create or modify content, you can select a “go-live” date and time. If you do, and the content makes it through the approval chain, Ektron CMS400.NET publishes the content to the live site at that time.

For example, your company is having a sale of the century in a month, and everything is ready except the announcement. You decide to update your Web site to let the public know about the sale. With this feature, you create the Web content now and set it to go live a week before the sale.

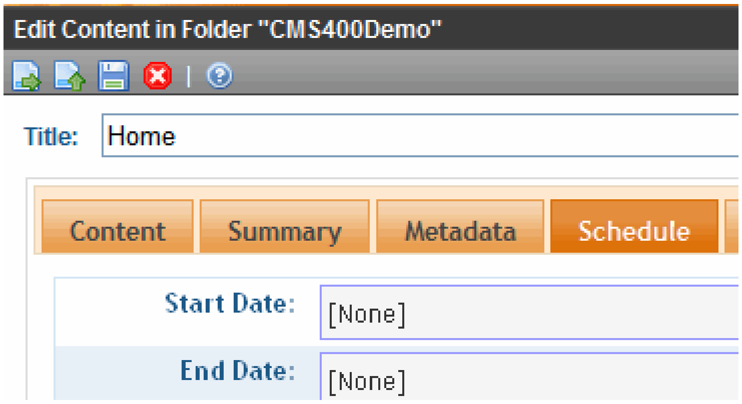
The Ektron Windows Service manages these changes to your site. See Also: "Ektron Windows Service" on page 19-13

This topic is explained through the following subtopics:

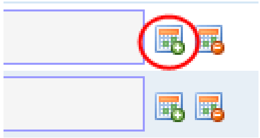
Setting a Start Date

To set a start date, follow these steps.

1. Access the editor by adding new content or editing existing content.
2. If adding new content, enter a title and the content.
3. Click the **Schedule** tab.



4. Click the calendar button next to the **Start Date** field.



5. A calendar pops up.
6. Select the date and time when this version of the content will become visible on the Web site.

7. Click the **Done** button.

8. The date and time appear in the **Start Date** field.

Note: When you select a time for content to go live, that time depends on the server's system clock. If the clock is incorrect, the content will not go live at the intended time.

What Happens After I Set a Start Date?

After you save the content, it appears on the Content Pending Start Date report, which helps you keep track of content with a future start date. See Also: "Content Pending Start Date Report" on page 7-716

After you set a go-live date and the content completes the approval chain, two scenarios may occur:

- The content is new
- The content already exists, and you are publishing a new version

Each scenario is now explained.

Setting the Go-Live Date on New Content

When you set a go-live date on new content, it becomes viewable on the specified date and time as long as it completes the approval chain. If a site visitor accesses the page that contains the content before then, he sees only the template.

If a logged-in CMS user browses your Web site, he sees a grey border around the content until the date specified. If he clicks within the grey border, he can use the Preview option to see the new content.

Setting the Go-live Date on Existing Content

When you set a go-live date for changes to existing content, and it completes the approval chain, a logged-in CMS user sees a grey border around the content until the date specified.

When you view content on the Web site, you see the previously published version. When the go-live date occurs, the new content replaces the previous version, and its status changes to Active.

Setting an End Date on Content

To set an end date for content, follow these steps.

1. Edit content. See "Editing HTML Content" on page 7-105.

2. Click the **Schedule** tab.
3. Click the calendar icon next to the **End Date** field.
4. A calendar pops up.
5. Select the date and time you want the content to be removed from the Web site.
6. Click the **Done** button.
7. The date and time appear in the **End Date** field

Note: When you select a time for content to go live, that time depends on the server's system clock. If the clock is incorrect, the content will not be removed at the intended time.

What Happens After I Set an End Date?

You have three choices for what to do with content when it reaches its end date. These are explained in "Setting Archive Options" on page 7-198.

If your choice means the content will not appear on the Web site, Ektron recommends having another content item ready to replace it. If not, and a site visitor visits the page containing the content, he sees the template without the content.

Appearance on Content Reports

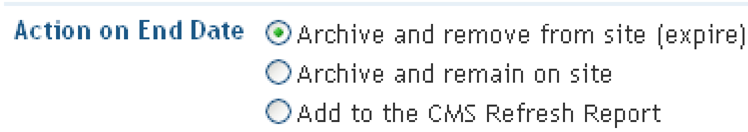
After content reaches its end date, it appears on the Expired Content report, which helps you track expired content. See Also: "Content to Expire Report" on page 7-719

The report lists all content whose end date will occur within a number of days that you specify.

Setting Archive Options

Use content's archive options to determine what happens upon reaching its end date/time. To be eligible for any option, the content must reach its end date/time, progress through its approval chain, and be published. Until those events occur, the content remains visible both within its content folder and on the site.

The archive options (illustrated below) appear below the **Start Date** and **End Date** fields on the content's **Schedule** screen.



Each option is explained below.

Archive Options

Option	Can site visitors view content upon expiration?	Can users view and edit content within Ektron CMS400.NET upon expiration?
Archive and remove from site (expire)	No	Yes, within its folder by clicking the **View > Archive Content** option. Archived content can be found via the Workarea Advanced search (if the **Archived** check box is checked).
Archive and remain on Site	- Content appears in a List Summary if the List-Summary control's `contentype` property is set to **Archive_Content**. - If content is an HTML form, the response page option appears. For example, if the form displays a message after the user completes it, that message appears. - Content is found by the search (Workarea and site) - Content is visible within its taxonomy display - Content is visible if site visitor enters exact path, such as `http://localhost/CMS400Developer/dynamic.aspx?id=1014&__taxonomyid=14`	Yes, within its folder by clicking the **View > Archive Content** option. Also, can be found via Basic Search and Advanced search (if the **Archived** check box is checked).
Add to CMS Refresh Report	Yes	Yes, in the active area of its folder and on the Refresh Report. See Also: "Refresh Reminder Report" on page 7-717

Restoring Content from Archived to Active State

To restore content from archived state to active, follow these steps.

1. Navigate to its folder.
2. Click **View** > **Archived Content**. (See "Setting Archive Options" on page 7-198).
3. Hover the cursor over the content, click the triangle ( ), and select **Edit** from the dropdown menu.
4. The Edit Content in Folder screen appears.
5. Click the **Schedule** tab.
6. Remove the **End Date** or change it to a future date.
7. Submit the content for publishing. When the content is published, it will no longer be archived.

Viewing Archived Content

The Archived content folder shows content in the selected folder whose end date has passed and which meets all other archiving criteria. These are explained in "Setting Archive Options" on page 7-198.

This content cannot appear on your Web site, although there are ways to reactivate it.

To return to the regular folder view, click **View** > **Content**.

See Also:

- "Deleting Several Content Items in a Folder" on page 7-131
- Accessing the Search Content Folder Screen

Displaying Content on your Web Site

Two Ektron CMS400.NET server controls are available to display HTML content on your Web site.

Server Control	Displays	More Information
ContentBlock	One content block	"ContentBlock Server Control" on page 7-201
ContentList	A comma-delimited list of content blocks	"ContentList Server Control" on page 7-210

ContentBlock Server Control

The ContentBlock server control displays a content block on an Ektron CMS400.NET Web page.

Ektron CMS400.NET has two types of content blocks:

- Static - displays one specified content block
- Dynamic - displays the content block of the ID passed through a URL parameter

In addition, a content block can contain XHTML or XML content.

For an example of using the ContentBlock server control programmatically, see "Using the ContentBlock Server Control Programmatically" on page 7-208

This section contains the following topics:

Static Content Block

A static content block displays one identified content block on a Web page. The following table explains how to complete the server control properties to insert a static content block on a Web page.

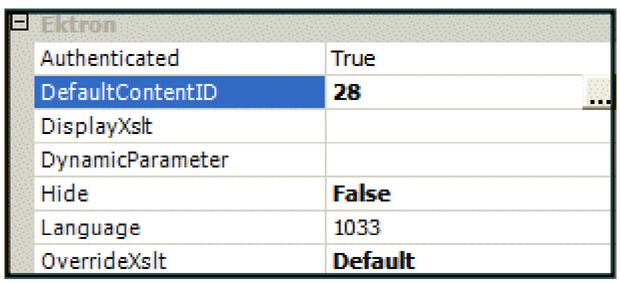
ContentBlock Server Control Properties

The following table explains the properties of the ContentBlock server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31.	Double
DefaultContentID	The ID of a content block that appears where you insert this server control. If you don't know the ID number of the content block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9 Note: If you identify a content block that displays an Office document which will be published as HTML, make sure the template sets `<span>` tags to display the content as a block.	Long
DisplayXslt	Ignore for a non-XML content block.	String
DynamicParameter	Select **None - Use Default**. This parameter is used for dynamic content blocks.	String
Hide	Used to hide a content block in design time and run time. **True** = Hide content block **False** = Show content block	Boolean

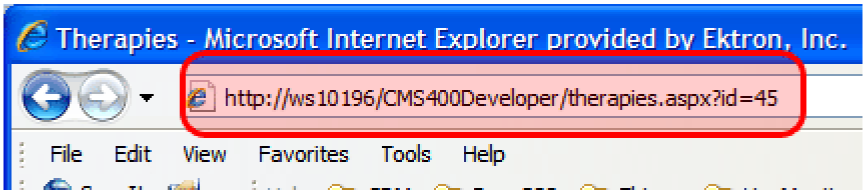
Property	Value	Data Type
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags. **Warning!** - If you want to let content authors edit this content using Ektron CMS400.NET's Edit in Context feature, this must be set to false.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String



In the above example, the server control retrieves content block id=28 and displays it in the browser.

Dynamic Content Block

Use a dynamic content block to display a content block whose ID is passed through a URL parameter. You would use this server control with a dynamic template.



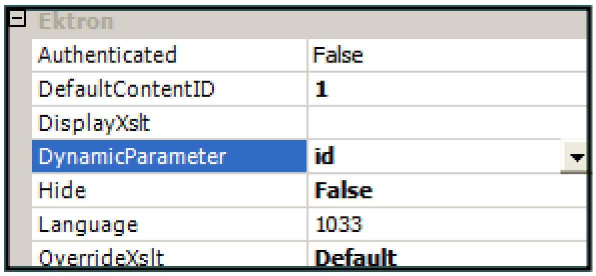
The following table explains how to complete the ContentBlock server control's properties to insert a dynamic content block on a template.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
DefaultContentID	The ID of a content block that appears where you inserted this server control if no other content block is identified, or is not available. If you don't know the ID number of the content block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DisplayXslt	Ignore for a non-XML content block.	String
DynamicParameter	Select **id**. When you do, this server control uses the content block passed as a URL parameter.	String
Hide	Used to hide a content block in design time and run time. **True** = Hide content block **False** = Show content block	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags. **Warning!** - If you want to let content authors edit this content using Ektron CMS400.NET's Edit in Context feature, this must be set to false.	Boolean

Property	Value	Data Type
WrapTag	Allows a developer to specify a server control’s tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

The following example shows how the ContentBlock server control can be used to pass the id as a URL parameter.



When a user clicks a link that passes the content block ID as a URL parameter, that content block appears. If that content block is not available, content block 1 appears.

XML Content Block

Use an XML content block to display an XML content block on an Ektron CMS400.NET Web page.

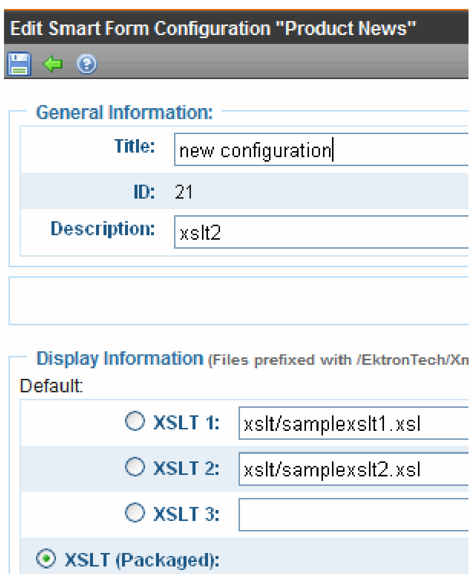
Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String

Property	Value	Data Type
CacheInterval	Sets the amount of time, in seconds, a server control's data is cached. The default is 0 (zero). For example, if you want to cache the data for five minutes, set this property to 300. See Also: "Caching with Server Controls" on page 21-31	Double
DefaultContentID	The ID of a content block that appears where you inserted this server control if no other content block is identified, or is not available. If you don't know the ID number of the content block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DisplayXslt	Specify an external XSLT file. See Also: "The OverrideXslt and DisplayXslt Properties" on page 7-207 **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicParameter	To make this content block dynamic, select **id**. When you do, this server control uses the content block passed as a URL parameter.	String
Hide	Used to hide a content block in design time and run time. **True** = Hide content block **False** = Show content block	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

The OverrideXslt and DisplayXslt Properties

The DisplayXslt property is optional. If used, it specifies an external XSLT file. If the DisplayXslt property is not defined, the OverrideXslt property specifies an XSLT identified in the Edit Smart Form Configuration screen. The following table provides more information about these properties.

To use this display XSLT	Enter this value for XSLT	Enter this value for Override XSLT
The default XSLT specified in the Edit Smart Form Configuration screen (illustrated below). Note that, in this example, the XSLT Packaged option is the default XSLT, since it is selected. XSLT Packaged is the XSLT from the Edit Smart Form Configuration screen (that is, the XSLT created in the Data Designer).  		Default
XSLT 1 from the Edit Smart Form Configuration screen		1
XSLT 2 from the Edit Smart Form Configuration screen		2
XSLT 3 from the Edit Smart Form Configuration screen		3

To use this display XSLT	Enter this value for XSLT	Enter this value for Override XSLT
An absolute or relative path to an XSLT file.	An external XSLT file not specified in the Edit Smart Form Configuration screen. For example `sample.xslt`	does not matter - if XSLT value exists, **OverrideXSLT** is ignored

See Also: "Working with Smart Forms" on page 7-2881

Retrieving the XML Structure of an XML Content Block

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a Content Block server control onto it.
3. Set the DefaultContentID to an XML content block.

Warning! This does not work with HTML content blocks, as there is no XML structure to output.

4. Drag and drop a Text box on the Web form.
5. Set the `TextMode` property to MultiLine.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
TextBox1.Text = ContentBlock1.EkItem.Html
```
7. Build the project.
8. View the form in a browser.
9. The XML structure of the content block appears in the text box.

Using the ContentBlock Server Control Programmatically

The following code will display a content block:

Note: Before adding these lines of code, you need to drag and drop a literal box on your Web form.

```
Dim MyContentBlock As New ContentBlock
MyContentBlock.DefaultContentID = 8
MyContentBlock.Page = Page
MyContentBlock.Fill()
Literal1.Text = MyContentBlock.EkItem.Html
```

To display a content block with the content block title, do the following:

Note: Before adding these lines of code, you need to drag and drop a two literal boxes on your Web form.

```
Dim MyContentBlock As New ContentBlock
MyContentBlock.DefaultContentID = 8
MyContentBlock.Page = Page
MyContentBlock.Fill()
Literal1.Text = MyContentBlock.EkItem.Title
Literal2.Text = MyContentBlock.EkItem.Html
```

Retrieving the XML Structure of a ContentList

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a ContentList server control onto it.
3. Add at least one content ID to the `ContentID` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to **MultiLine**.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = ContentList1.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.

The XML structure of the ContentList appears in the textbox.

For an additional example, see the ContentList XML page on the CMS400Developer samples page. It is located at:

In a browser:

```
http://<site root>/CMS400Developer/Developer/ContentList/ContentListXML.aspx
```

In the source code:

```
<site root>/CMS400Developer/Developer/ContentList/ContentListXML.aspx and
ContentListXML.aspx.vb
```

ContentList Server Control

The ContentList server control is used to display a list of content blocks on a Web page. In contrast to a List Summary, where content must be in a specified folder, the ContentList server control uses content from any CMS400.NET folder.

When added to a template and visited, a ContentList Summary looks like this.

Depending on the setting you choose for DisplayXslt, you can change the amount of information displayed for each content block. See Also: "DisplayXslt" on page 7-212.

There are two options for the ContentList server control to display a content list. First, by defining a content list in the metadata of a content block and using that content block's ID in the `DefaultContentID` property. See Also: "Using Metadata to Display an Associated Content List" on page 7-215.

Second, by adding a comma delimited list of content blocks to `ContentIds` property. See Also: "Using the ContentID Property to Display a Content List" on page 7-218.

Using the `DefaultContentID` and `MetaTag` process, an administrator typically sets up the Workarea portion of the process. Then a developer adds the server control to a Web form, assigns the ID of the content block and the metadata name to the appropriate properties. Because the content list in this process is assigned to a content's metadata, you can pass the content ID dynamically in a Web form and display a list for each content block you have defined.

Using the ContentIds process, a developer adds ContentList server control to Web form. Then, defines a list of content IDs in the `ContentIds` property. Once the server control is deleted or the list in the `ContentIds` property is deleted, It is not available and will have to be created again.

This subsection contains the following topics:

- "Using the ContentID Property to Display a Content List" on page 7-218
- "Retrieving the XML Structure of a ContentList" on page 7-209

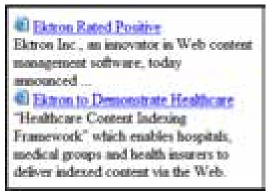
ContentList Server Control Properties

The ContentList server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
ContentIds	A comma delimited list of content block IDs. See Also: "Using the ContentID Property to Display a Content List" on page 7-218	String
DefaultContentID	Set content ID value. Once set, content IDs are generated from the MetaTag value for this content. See Also: "MetaTag" on page 7-214 "Using Metadata to Display an Associated Content List" on page 7-215	Long

Property	Description	Data Type
DisplayXslt	Determines how information on the page is displayed. **None** - databind only **ecmNavigation** - lists the title of each content block See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of each content block plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **ecmUnOrderedList** - sorts the list in no particular order. Shows the title and content summary **Path to Custom Xslt** - Enter the path to an XSLT that determines the display of the page **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Displayxslt` property value is ignored.	String
DynamicParameter	Uses the QueryString parameter to read a content ID dynamically. **None - Use Default** - use the default content ID list. **ID** - reads a content block's ID dynamically. **ekfrm** - reads a form block's ID dynamically.	String
GetHtml	Set to **True** if you want to retrieve and display content (html body) for all content blocks in the list summary. For example, to display content inside a web server control such as a GridView. **True** = Get and display HTML for each content block in the list summary **False** = Do not get and display HTML.	Boolean
Hide	Used to hide output of the content list in design time and run time. **True** = Hide results **False** = show results	Boolean

Property	Description	Data Type
IncludeIcons	Choose whether to display icons next to the content list's links. **Warning!** This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. 	Boolean
Language	Set a language for viewing the list summary. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	ItemLinkTargets

Property	Description	Data Type
MarkupLanguage	Identify the template markup file that controls the display of the content list. For example, mycontentlistmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `..\workarea\customfiles\markup\mycontentlistmarkup.ekml`. See Also: "Ektron Markup Language" on page 21-414 and "contentlist.ekml" on page 21-444 **Note**: If you enter a valid EkML file, the `DisplayXslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.	String
MetaTag	Specify a Metadata definition whose type is Content Selector. When you do, the associated list of content items will appear where you place the server control. **Warning!** You cannot insert other metadata types. This works with the `DefaultContentID` property. See Also: "DefaultContentID" on page 7-211 "Using Metadata to Display an Associated Content List" on page 7-215 For more information about using metadata to assign a list of related content to a content item, see "Related Content Metadata" on page 7-151.	String
OrderByDirection	Determines how to order content in the list. The sort field is determined by the `OrderKey` property. **ascending** - items are arranged A, B, C or 1,2,3. **descending** - items are arranged. Z,Y,X or 3,2,1. If sorting by date, descending puts the most recent first. When `ascending` is selected and the `Orderkey` property is set to `OrderOfTheIds`, the order of the IDs are preserved. When set to descending, the order is reversed. Datatype: Ektron.Cms.Controls.CmsWebService. ContentListOrderByDirection	

Property	Description	Data Type
OrderKey	Sort the list by one of these values: **Title** - the order of the content's title. **DateModified** - the last date the content was modified. **DateCreated** - the date the content was created. **LastEditorFname** - the last editor's first name. **LastEditorLname** - the last editor's last name. **OrderOfTheIds** - preserves the content ID order based on the list in the `ContentIds` property. Datatype: Ektron.Cms.Controls.CmsWebservices. ContentListOrderBy (must be one of the values)	
Random	Set to **True** if you want to randomly display one content block link from the content list. The content changes each time a user views the page. **True - randomly display one content block in the specified folder.** **False** - display the content list normally. Note: If you use a custom XSLT or EkML file, the type of content displayed can be manipulated. For example, if you use an EkML file that has the [$Html] variable in it, the actual content is displayed instead of a link. See Also: "Ektron Markup Language" on page 21-414 and "[$Html]" on page 21-429	Boolean
SuppressWrapperTags	This property is set to `false` because Ajax uses `<div>` tags to rewrite the region around the tag. You *cannot* change the value to `true`.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Using Metadata to Display an Associated Content List

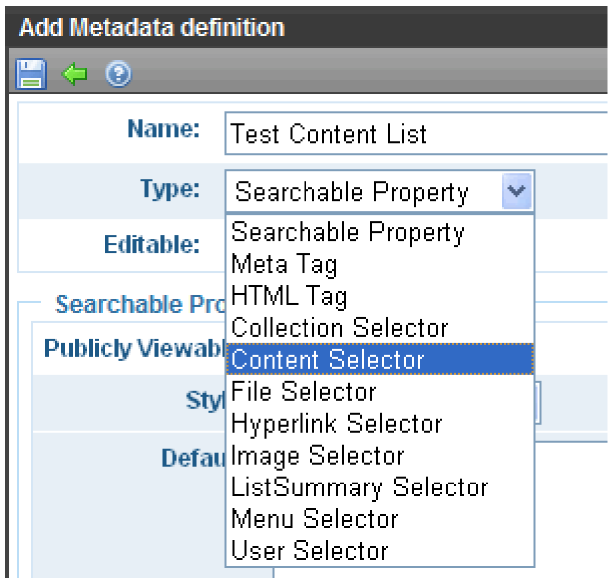
You can use the ContentList server control to display a list of content associated with a given content item. First, you define a content list in the metadata of a content block. Then, assign the ID of the content block to the `ContentID` property and specify a Metadata definition in the

MetaTag property. The ContentList server control pulls information defined in the metadata of the content to display the list of content.

The steps below show an example of using the DefaultContentID and MetaTag properties to create a content list.

1. In the CMS400.NET Workarea, create a metadata definition, in the **Name** field, enter a title of the data. This name is used in the MetaTag property for the server control.
2. Fill in all standard fields. See Also: "Metadata Definition Fields" on page 7-158

   The **Type** must be **Content Selector**.

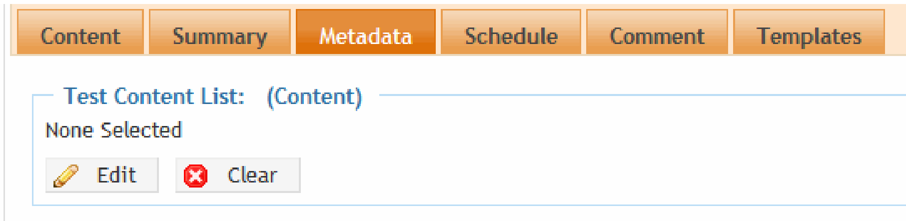


3. Add the definition to all appropriate folders. See Also: "Assigning Metadata to a Folder" on page 7-165
4. For each content item to which you want to associate related content, access its **Metadata** tab and identify the related item(s).

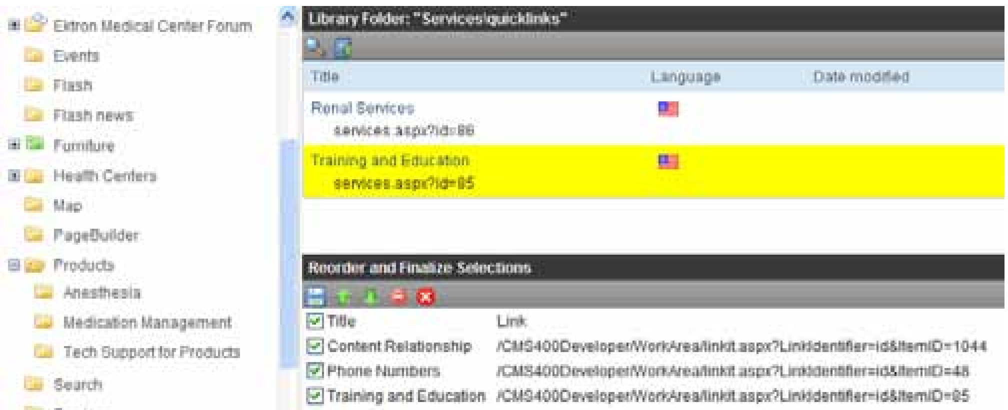
   For example, a list of content blocks associated with motorcycle helmets. You want this list to appear whenever a helmet is being viewed.

   To set this up, you would

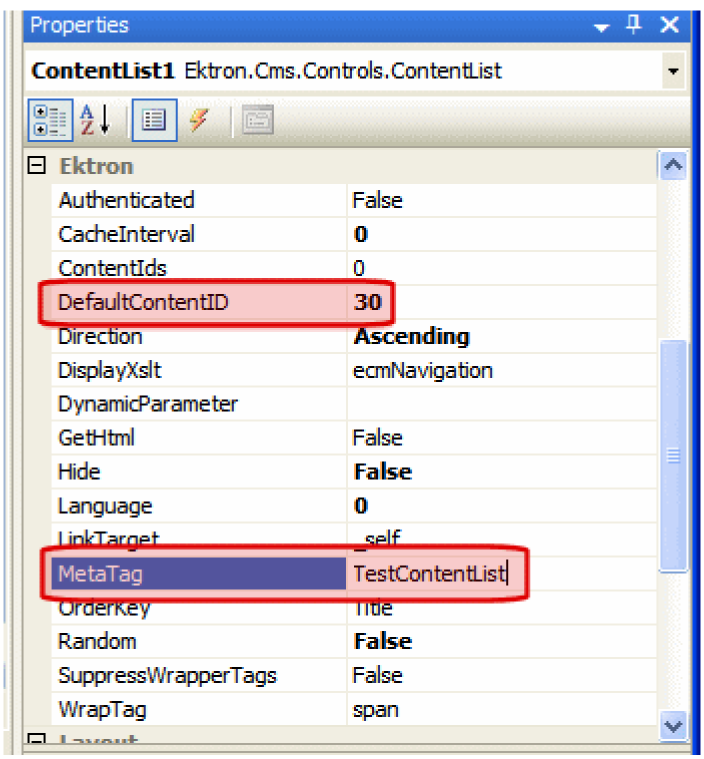
   - edit the content block
   - click its **Metadata** tab
   - find the metadata definition for the **Content List**
   - click the **Edit Button**



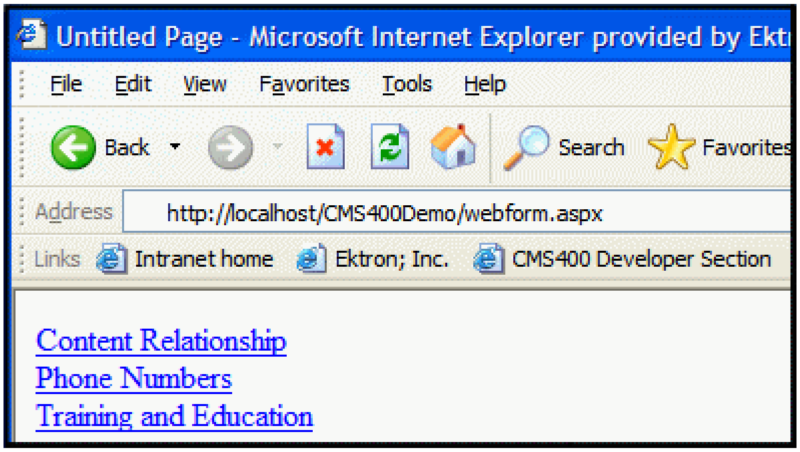
– select the content blocks to be in the list



5. On a Web form in Visual Studio, add the ContentList server control.
6. Set the `DefaultContentID` property to the content block's ID.
7. Add the name of the Metadata field in the Workarea to the `MetaTag` property.

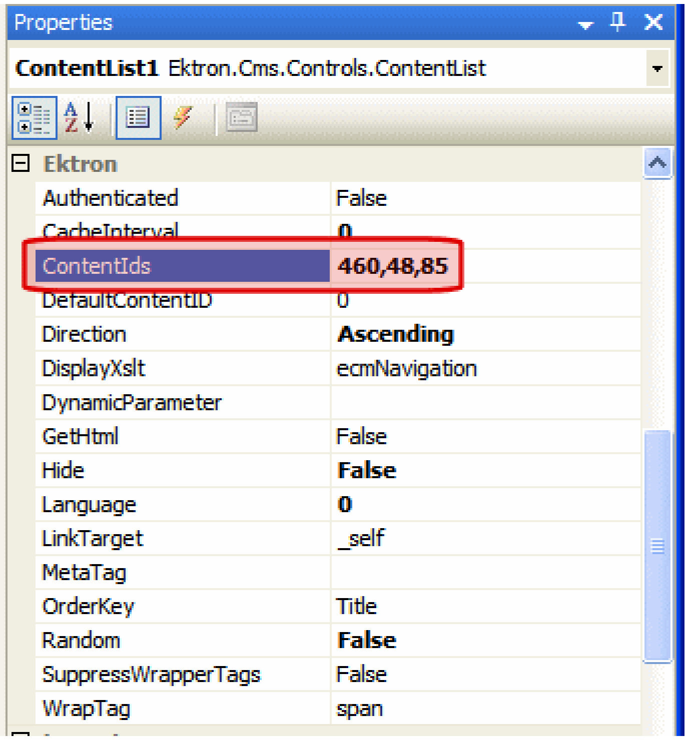


8. Set all other properties using the table in "ContentList Server Control Properties" on page 7-211.
9. Once the Web form is saved, navigate to the page and the content list is displayed.



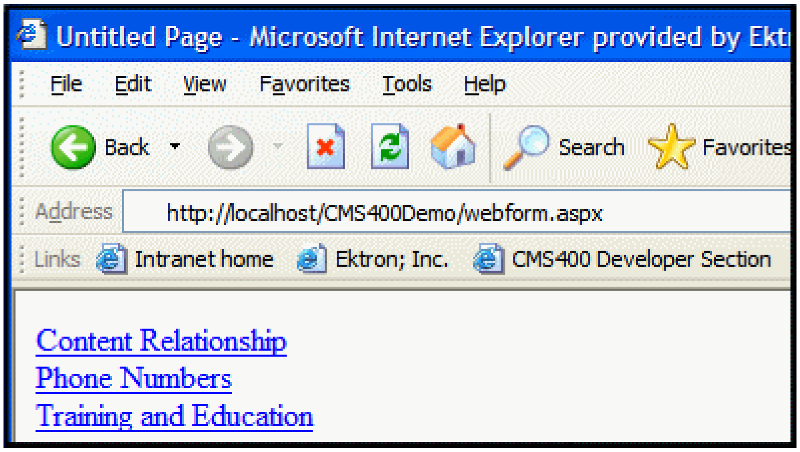
Using the ContentID Property to Display a Content List

1. On a Web form in Visual Studio, add the ContentList server control.
2. Add a comma delimited list of content IDs to the `ContentIds` property.



3. Set all other properties using the table in "ContentList Server Control Properties" on page 7-211.

4. Once the Web form is saved, navigate to the page and the content list is displayed.



Working with HTML Forms

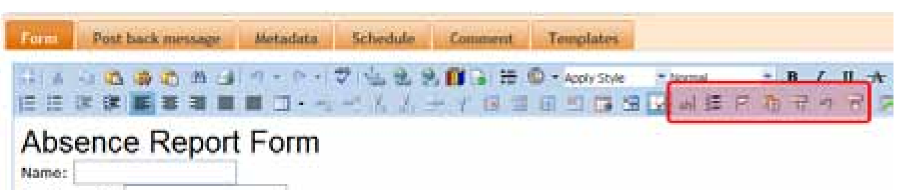
Note: This section explains how to create/edit HTML forms using eWebEdit400. If your editor is eWebEditPro+XML, see http://www.ektron.com/manuals/CMS400/v76/usermanual.pdf >"Working with HTML Forms."

Ektron CMS400.NET provides powerful online form capabilities, allowing you to create an online dialog with visitors. Now anyone in your organization – not just a developer or Webmaster– can create and deploy Web forms to capture visitor information. Support marketing strategies by getting feedback on their needs. Follow up on their interest in your products and services. Register people for events.

Form capabilities include

- Creating a form and its postback message
- Creating polls and surveys
- Adding validation criteria to form fields
- Automatically assigning tasks for follow-up activities to form submissions
- Reporting on form information
- Exporting results to Microsoft Excel

A sample form appears below. Toolbar buttons for working with forms are circled.



This chapter explains how to perform all form actions through the following topics.

Overview of Form Processing

Step	For more information, see
1. Create a form	"Creating a New Form" on page 7-222
2. Assign it to a Web page	"Implementing a Form on a Web Page" on page 7-253
3. Site visitor goes to your Web site and completes form. Form is mailed to an email address, saved to a database, or both.	
4. View submitted form data and download it to a spreadsheet.	"Viewing Form Reports" on page 7-262

Form Permissions

Folder Permissions

By default, form permissions are inherited from a form's folder. To customize permissions for any folder that contains forms, access the corresponding folder under Content and assign permission as described in "Setting Permissions for a Content Folder" on page 5-47.

Administrator Permissions

Similar to content, users in the administrator user group have full control over form features. You *must* be a member of the administrator group to:

- Add a form
- Edit a form
- Delete a form
- Assign content to a form

You may also perform all actions on a form's content.

User Permissions

Users who are not members of the administrator user group can add, edit, delete, and restore form content if granted these permissions for the content folder or item.

The Structure of Form Data

A form has the following components.

- **Form** (title, ID number, whether the form data is sent as email, and/or saved to a database, etc.)
- **Content** information (title, start and/or end date, status, postback message, etc.)
- **Form fields** (text field, password field, text area, hidden text, choices, checkbox, select list, calendar, submit button, etc.)

Creating a New Form

The screen you use to create a form follows five simple steps. After completing the steps, you have a new form that's ready to collect the information you need. To make the task easier, Ektron CMS400.NET provides sample forms that you can start with then customize.

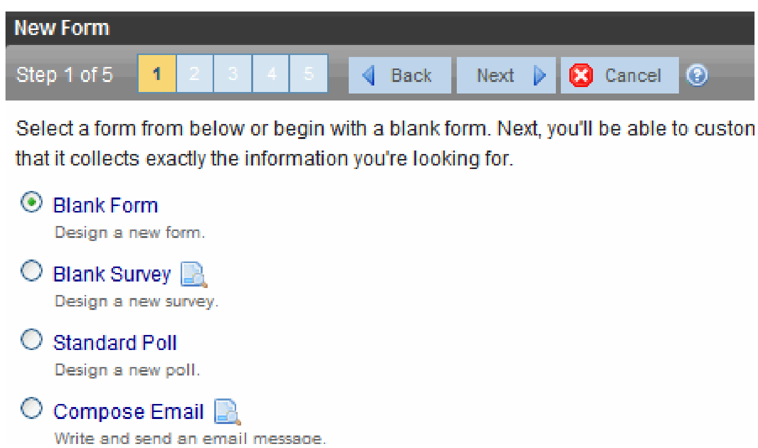
As explained in "Mailto or Database Form" on page 7-273, form data can be emailed and/or saved to a database. Forms created using the procedure described below are saved to a database by default, but not emailed. To change either setting, use the Edit Properties screen. See "Editing a Form's Properties" on page 7-273.

To create a new form, follow these steps.

Note: You can also create a new edition of a form in another language by copying an existing form and translating it. For more information, see "Translating Content to Another Language" on page 7-112.

Note: For the steps to create a new poll, see "Working With Polls" on page 7-275. For the steps to create a new survey, see "Creating a Survey" on page 7-279.

1. Consult with your Ektron CMS400.NET administrator about the folders in which you should create forms. See Also: "Forms Must Use Template with FormBlock Server Control" on page 7-281
2. From the **View** menu, click **Language**, and select the language in which to create the form.
3. Click the **New** menu > **HTML Form/Survey**.
4. The New Form screen appears.



Note: When you choose Standard Poll or Blank Survey, the number of steps in the Forms Wizard changes from five to four. This happens because the Assign Tasks step is removed. See Also: "Working With Polls" on page 7-275 and "Creating a Survey" on page 7-279.

5. Choose the form that you want to begin with. You can click the preview icon ( ) next to any sample form to see it before choosing it.

   Select a sample that most closely matches the form you want to create. After you create it, you can add fields, remove fields, modify possible responses, etc.
6. Click **Next**.
7. Enter or edit the form's **Title** and **Description**.

- **Title** - used to reference the form within the Workarea (required)
- **Description** - an extended description of the form

8. The next screen lets you assign a task to a user or user group. If you do, a task will be created every time a site visitor submits this form. See Also: "Assigning a Task to a Form" on page 7-260
9. A new screen lets you determine what happens after the site visitor completes the form. The choices are:

- **Display a message** - See "Composing the Postback Message" on page 7-224

Warning! If your form/survey/poll uses either **Redirect** option, your Web developer must use a FormBlock server control to display this form on a Web page. He cannot use a Poll Server Control when redirecting to an action page.

- **Redirect to a file or page - Identify a file or a page on your Web site that is launched when the visitor completes the form.**
  - An example of a file is a white paper (a common file format is .PDF) that a visitor requested
  - An example of a page is one that prompts the visitor to download your product
- **Redirect to form data to an action page** - See "Redirect to an Action Page and Forward Form Data" on page 7-226
- **Report on the form** - See "Making Form Results Available to Site Users" on page 7-227

10. Now that you have completed information about the form, you can enter the form's content. This procedure is described in "Creating a Form's Content" on page 7-228.

Composing the Postback Message

The postback message can contain text or graphics, just like any other HTML content. Typically, it acknowledges a site visitor's completion of the form.

For most sample forms provided, sample text appears in the editor. Modify it as you wish, using Ektron CMS400.NET's editor to change the style sheet class, insert library items, etc.

Inserting Fields into the Postback Message

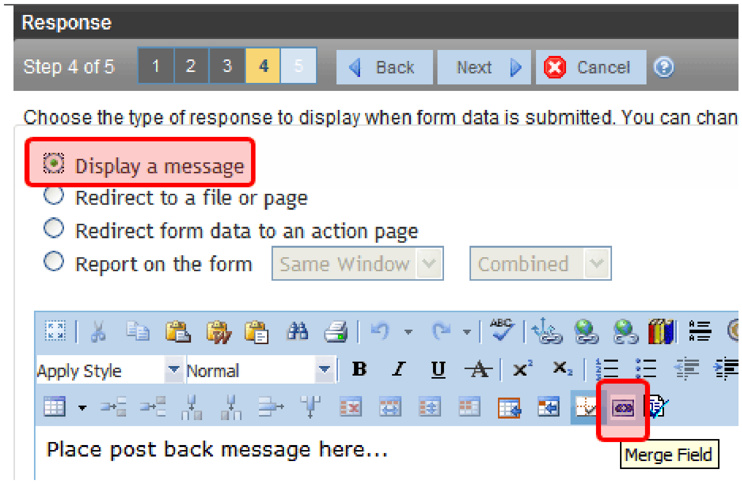
You can also insert fields into the Postback Message that retrieve form information.For example, your postback message may be

```
Thank you «Full Name» for completing the «[Form Title]».
```

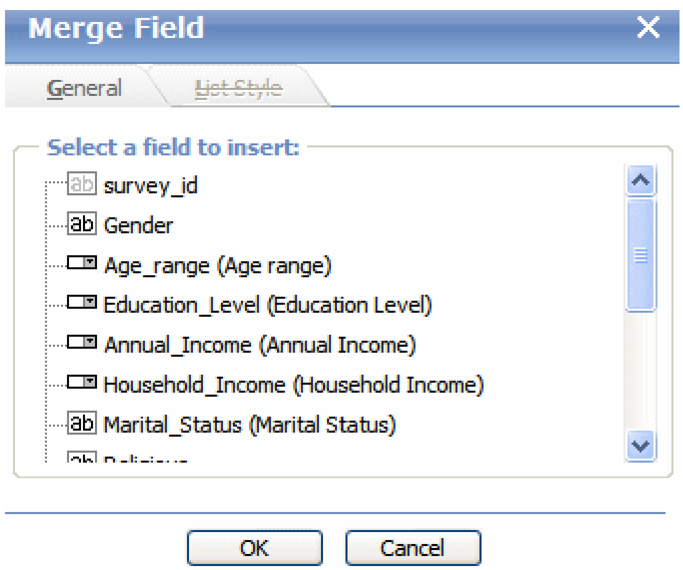
When the postback message appears, it looks like this.

```
Thank you Jay Kohler for completing the breakroom survey.
```

When you click the **Post back message** tab and select **Display a message**, the **Merge Field** button ( ) appears on the toolbar.



When you click that button, a dialog like the one below appears.



All form fields appear on the list. In addition, the list includes the following fields, which can retrieve form information into the postback message.

- Form title
- Form description
- Date submitted

Redirect to an Action Page and Forward Form Data

"Redirecting Submitted Form Data" on page 7-258 explains how your administrator sets up the action page. After your administrator follows that procedure, he identifies a folder and hyperlink that you use to select an action page.

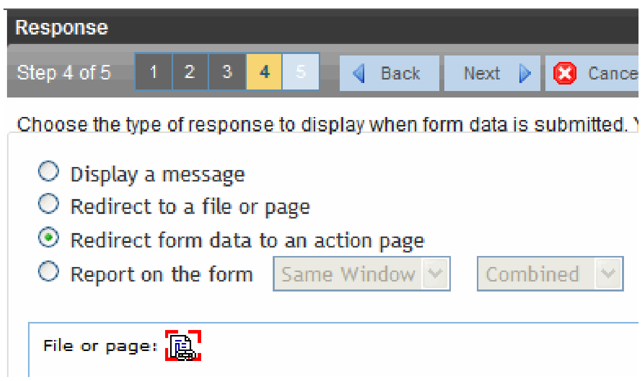
Warning! You must have the folder and hyperlink name from your administrator to complete this procedure.

To redirect submitted form data to an action page, follow these steps.

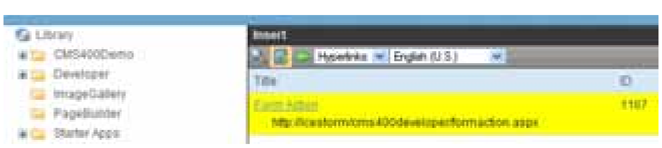
1. Go to the page on which you determine the form's response. If this is a new form, it is page 3 of the Forms Wizard.

   To modify an existing form, select the form's folder, then the form. Next, select Edit and click the **Post back message** tab.

2. Select **Redirect form data to an action page**.



3. Click the icon next to **File or page**.
4. The Hyperlink Manager dialog appears. Click the **URL** button.
5. The library appears. In the left panel, select the folder that contains the hyperlink.
6. In the right panel, select **Hyperlinks** from the file type dropdown.
7. Select the hyperlink whose name was given to you by your system administrator.



8. Click the insert button ( ).

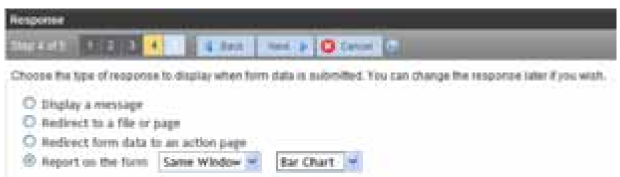
Making Form Results Available to Site Users

When you create polls and surveys, you can choose to display the results after a site visitors completes the form. The results can display in the same window or a new window. In addition, you can choose how to chart the data. For a description of chart types, see "Chart Types" on page 7-227.

To show site visitors poll/survey results, follow these steps.

1. Go to the page on which you determine the form’s response. If this is a new form, it is page 4 of the Forms Wizard.

   To modify an existing form, select the form’s folder, then the form. Next, select Edit and click the **Post Back Message** tab.
2. Select **Report on the form**.



3. Choose whether you want the results to appear in the **Same Window** or a **New Window**.
4. Choose the style of the report.

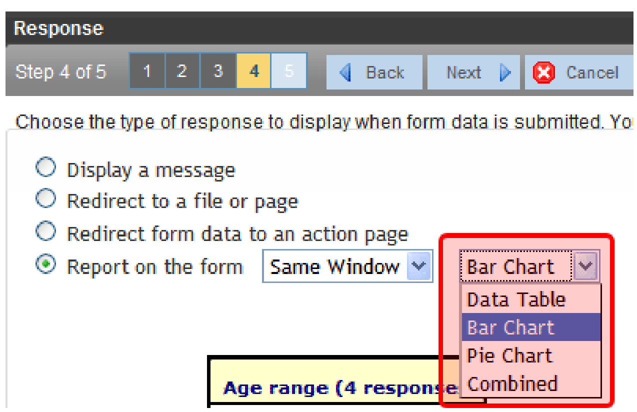
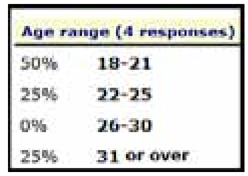
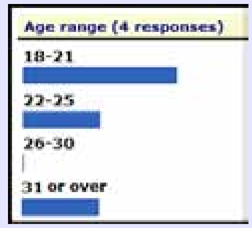
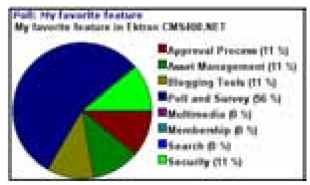
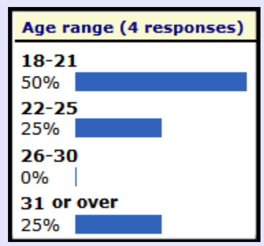


Chart Types

The following table describes the types of charts available.

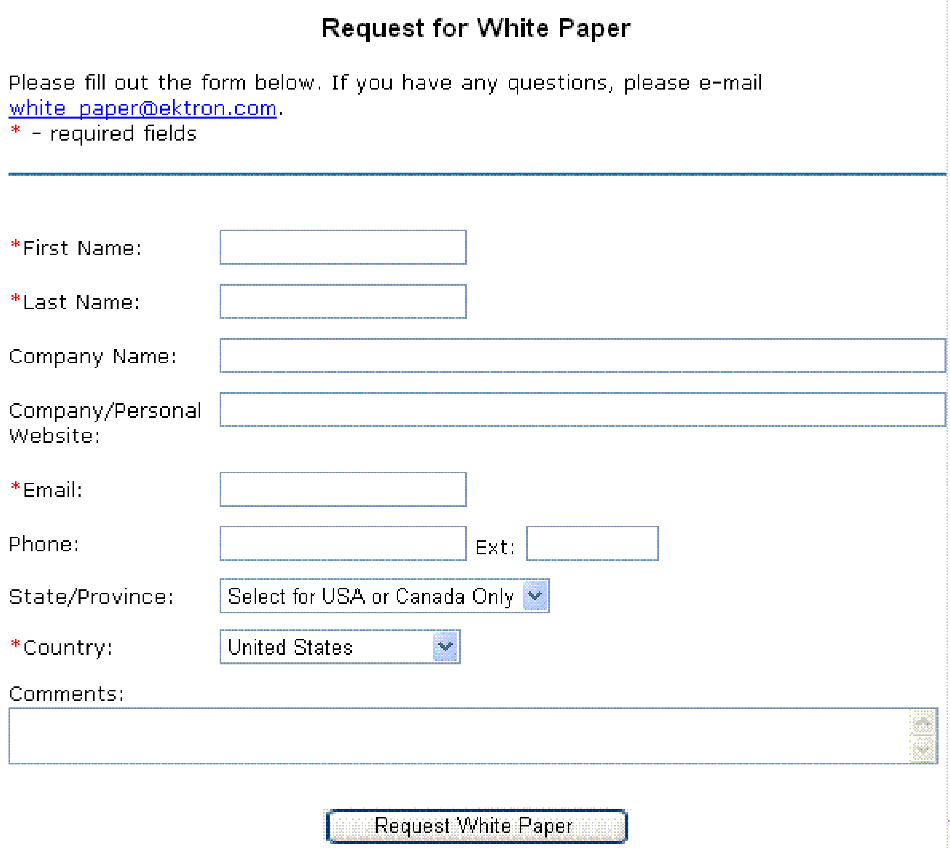
Chart Type	Description	Sample
Data Table	The poll or survey answers are displayed with the percentage of users who responded to each item.	
Bar Chart	The poll or survey answers are displayed with a bar graph. Use this chart type when you want a quick visual representation of the responses.	
Pie Chart	Displays a standard pie chart. Poll or survey answers are color coded, and the percentage of people who chose each answer is shown.	
Combined	Combines the Data Table and the Bar Chart.	

Warning! You cannot chart data entered into a text box. For example, if one choice in a poll is **Other**, and the survey has a text box for site users to enter additional information, the text in the box is not charted. However, the fact that a user chose **Other** is charted.

See Also: "The Structure of Form Data" on page 7-222

Creating a Form's Content

Here is an example of form content that you can create.



Note that some fields are required, and some provide a dropdown list of choices. You can learn how to create such a form by following the directions below.

The following topics explain how to create a form.

- "The Form Toolbar Options" on page 7-229
- "Form Validation" on page 7-232

The Form Toolbar Options

Creating form content is similar to creating standard content. (See "Adding HTML Content" on page 7-15). The big difference is a form toolbar (illustrated below), which lets you insert form elements.

When using the form toolbar, place the cursor where you want field. Then, click the appropriate toolbar button.

Adding a Field to the Screen

The final screen of the Forms setup lets you arrange a form that collects exactly the information you want. To create the form, insert *fields* that prompt a site visitor to enter information. Then, add a *button* that enables the user to submit data.

If you chose a sample form at the beginning of the Forms Wizard, the form includes fields. If you did not, the screen has only a **Submit** button.

TIP!

Note: In addition to inserting fields, you can add explanatory text, lines, images, etc. to the form. To lay out fields in columns, insert a table and place the fields within table cells.

The table below explains each field type you can enter.

Button	Inserts this kind of field	Description	For more information, see
	Checkbox	User's response is either checked or unchecked	"Inserting a Checkbox Field" on page 7-233
	Text	Free text field; user cannot format text	"Inserting a Text Field" on page 7-234
	Choices	Several choices appear on screen. User checks any number of appropriate responses.	"Inserting a Choices Field" on page 7-245
	Calendar	Lets user insert a date by clicking a calendar	"Inserting a Calendar Field" on page 7-248
	Insert Button	Button with no text. You can easily add text to it. When a site visitor completing the form presses this button, the data on the screen is submitted to your Web server.	"Inserting or Editing Buttons on the Form" on page 7-251
	Insert Reset	Button with **Reset** as its text. When a site visitor completing the form presses this button, the form's field values are set to their state when the form first loaded.	"Inserting or Editing Buttons on the Form" on page 7-251

Button	Inserts this kind of field	Description	For more information, see
	Insert Submit	Button with **Submit** as its text. When a site visitor completing the form presses this button, the data on this screen is submitted to your Web server.	"Inserting or Editing Buttons on the Form" on page 7-251

After you complete the form, you have the following options.

Button or Tab	Description
Postback Message	See "Composing the Postback Message" on page 7-224
Metadata	Edit the metadata for the form. See Also: "Working with Metadata" on page 7-146
Schedule	Assign start or end dates, or both, for when the form is published to Web site See Also: "Scheduling Content to Begin and End" on page 7-195
Comment	Enter history comment to indicate changes made to the form
Templates	The template assigned to the form. Technical note: HTML forms must reside in a folder whose template uses the FormBlock server control. See Also: "Creating/Updating Templates" on page 7-184
Category	Any taxonomy categories assigned to the content. See Also: "Taxonomy" on page 9-200
Web Alerts	Assign or update Web Alert information for the form. See "Web Alert Feature" on page 20-1.
Submit	Submit content into approval process.
Publish	Publish content to Web site. Note: If the content has any active tasks, a comments window pops up. You can insert comments to describe how approving or declining the content affects the task. Note: Only the last approver in the approval chain sees this button.
Check In	Save and check-in content. This button does not submit the content into the approval process, but rather lets other users change it.

Button or Tab	Description
Save	Save the content without submitting it into the approval process. If a user clicks save and then closes the editor, other users cannot edit the content.
Decline	This button appears if you are the next approver in the approval list. Click it to decline the changes made to the content. Note: If content has any active tasks, a comments window pops up. You can insert comments to describe how approving or declining the content affects the task.
Cancel	Close the editor without saving changes.

Next, click the Save and Submit or Publish button ( ). The form only appears on your Web site after it is published.

After you complete and save the form, it may need to go through the approval process. When that is complete, add it to the site by assigning it to a page template. See "Implementing a Form on a Web Page" on page 7-253.

Form Validation

You can apply validation rules to text or calendar field types. Validation rules ensure that the information entered by site visitors meets your criteria. For example, a validation rule specifies that a response to the **Telephone** field is 10 digits. If the response does not conform, an error message indicates the problem. The input must conform before the form can be submitted.

For a list of validation rule types, see "Validation Options" on page 7-237.

When Validation Rules are Applied

Validation rules are applied when a site visitor submits an entire form, not when the input is entered. If an invalid response is found, the error message that you define appears.

The site visitor must change his response to conform to the validation rule. When he does, the next field is checked and, if that is invalid, its error message appears, etc.

Note: If you want to change the visual indicator that a field's response is invalid, see the following Ektron CMS400.NET KB article: http://dev.ektron.com/kb_article.aspx?id=7070.

Note: If you apply validation rules to more than one field, include the field name in the error message. For example, enter **The name field only allows text**.

This is good practice because error messages only appear *after* a form is submitted. If the message does not identify the field, the user may not know which field needs correction.

Form Fields

You can insert the following types of fields onto an HTML form.

- "Inserting a Checkbox Field" on page 7-233
- "Inserting a Text Field" on page 7-234
- "Inserting a Choices Field" on page 7-245
- "Inserting a Calendar Field" on page 7-248

See Also: "Inserting or Editing Buttons on the Form" on page 7-251

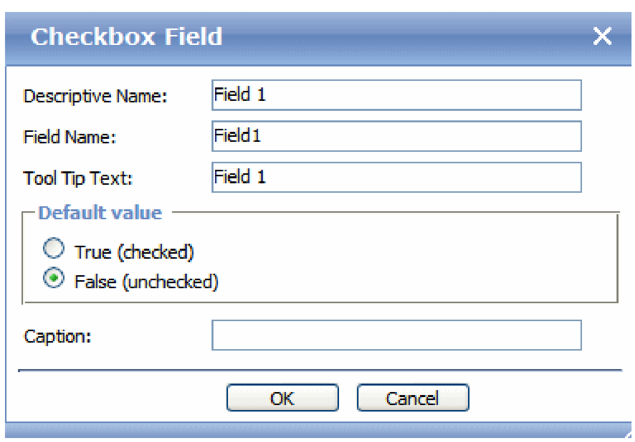
Inserting a Checkbox Field

A Checkbox field is one character wide and accepts one of two possible values: checked or unchecked. For example

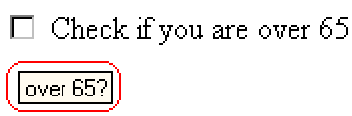
Check if you are over 65 ☐

To insert a checkbox field, follow these steps.

1. Place the cursor where you want the check box field to appear.
2. Click the Checkbox field button ( ).
3. The following dialog appears.



Fields on the Checkbox Dialog

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Descriptive Name</td><td>Enter a descriptive name for this checkbox.</td></tr>
<tr><td>Field Name</td><td>Enter a name for this checkbox. This text identifies the field in the database and in email (if the form is mailed).
Note: You cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;’"{}[]|‘~) into this field. If you do, they are replaced by underscores.</td></tr>
<tr><td>Tool Tip Text</td><td>Enter text that appears when a site visitor hovers the cursor over this field (circled in red below).

</td></tr>
<tr><td>Default value</td><td>If you want this field to be checked when the screen first appears, click True. Otherwise, click False.
A site visitor can change the default value while completing the screen.</td></tr>
<tr><td>Caption</td><td>Enter text to guide the user’s response to this field. The caption appears on the screen to the right of the checkbox.
To continue the above example, the caption would be Check if you are over 65.</td></tr>
</table>

Inserting a Text Field

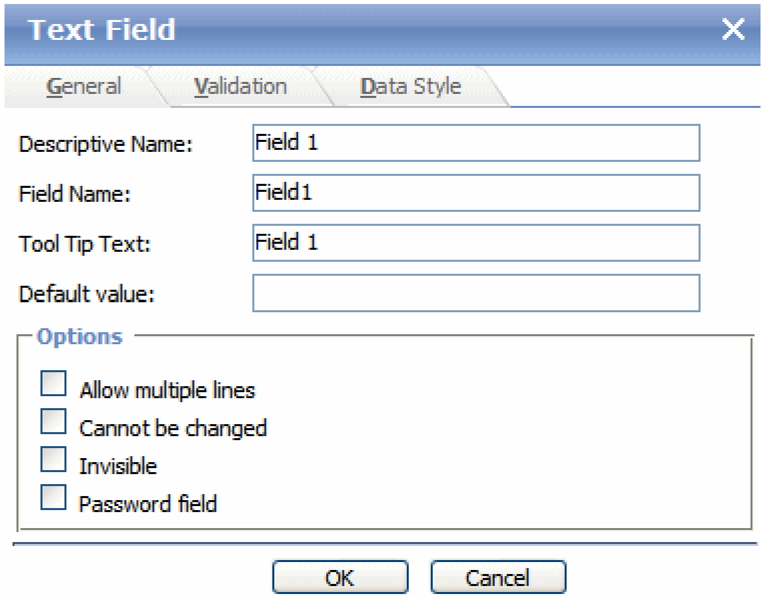
Use a text field when you want the user to enter a free text response, or to display text on the screen. There are many variations you can apply to such a field, such as

- a default value
- text can be read-only or hidden
- the field can expand to accommodate user input
- *validation*, requiring user input to meet criteria such as a non-negative whole number or a zip code

To insert a text field, follow these steps.

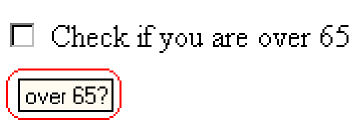
1. Enter a field label. For example, **Name**.
2. Place the cursor where you want the text field to appear.
3. Click the Text field button ().

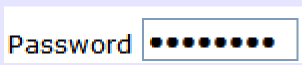
4. The following dialog appears.



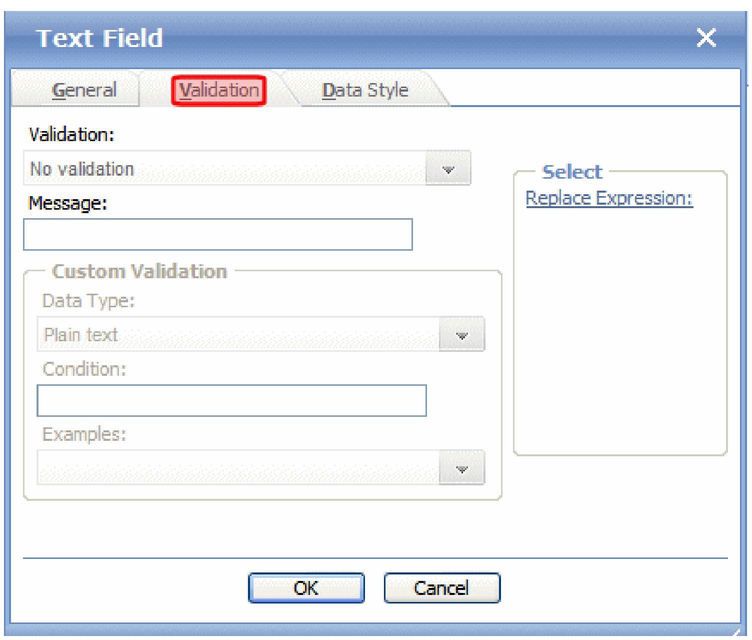
Fields on the Text Field Dialog - General Tab

Note: If you are using FireFox, you cannot enter text into a text field while creating or editing the form. If you need to prefill a text field with text, use the field's **Default Value** property.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Descriptive Name</td><td>Enter a description of the field. This text describes the field on form reports. See "Viewing Form Reports" on page 7-262.</td></tr>
<tr><td>Field Name</td><td>Enter a name for this field. This text identifies the field in the database and in email if the form is mailed.
Note: You cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|'~) into this field. If you do, they are replaced by underscores.</td></tr>
<tr><td>Tool Tip Text</td><td>Enter text that appears if a site visitor hovers the cursor over this field (circled in red below).

</td></tr>
<tr><td>Default value</td><td>If you want to set a default value for this field, enter it here. For example, if this field collects a city, and most users enter New York, enter New York as the value.
A site visitor can change the default value while completing the screen.</td></tr>
</table>

Field	Description
Allow multiple lines	Check this box if you want this field to scroll vertically to allow the person completing the form to enter as much text as needed. Note: This setting cannot be applied if this is a **Password field**.
Cannot be changed	Check this box to prevent the person completing this field from changing its content. For example, you want to display a license agreement. Below this field, you might place a check box prompting the site visitor to check it to indicate he has read the agreement. As another example, you could provide instructions for completing the screen.
Invisible	Check to make this field hidden. This option lets you store unseen information in each document. An example might be putting a version number on the form. If you apply this property to a form, the **Allow multiple lines** and **Cannot be changed** fields are automatically checked and cannot be unchecked. Also, the **Validation** tab is disabled.
Password field	Use a password field when you want the user to enter a password. A password is like a text field but the user's entry is disguised. This prevents an onlooker from seeing the password.  Passwords cannot exceed 18 characters.

Fields on the Text Field Dialog - Validation Tab



Field	Description
Validation	Select the kind of validation to apply to this field. See "Validation Options" on page 7-237 Your system administrator determines whether a user can save an invalid document.
Message	Enter text that appears on the screen if a site visitor's response violates the validation criterion. For example, if the validation criterion is telephone number, the error message could be **Please enter 7 or 10 digits**. It would appear if the user entered, for example, S061882. By default, the error message matches the selected validation criterion. Use this field to customize the text. Note: You can only enter double-byte characters if your Windows settings include that language. If you enter characters that are not in a language defined in your Windows settings, question marks (?) appear instead of the characters.
Custom Validation	See "Custom Validation" on page 7-240.

Validation Options

Note: Your Web developer can customize validation options. For details, see "Customizing Validation" on page -1211. However, the file that maintains custom validation is different for HTML forms: it is *siteroot/workarea*/ContentDesigner/ValidateSpace.xml.

Option	Characteristics of Valid Response	Used with text field	Used with calendar field
No validation	Response is not checked.	✓	✓
Cannot be blank	Response is required. The format of the response is not checked.	✓	✓
Allow Maximum of 1000 characters	Response cannot exceed 1000 characters. (Only available if text field is set to **Allow Multiple lines**.)	✓	
Minimum of 8 characters with at least one digit	Site visitor's entry must be at least 8 characters and include one digit. (Only available if text field is set to **Password field**.)	✓	

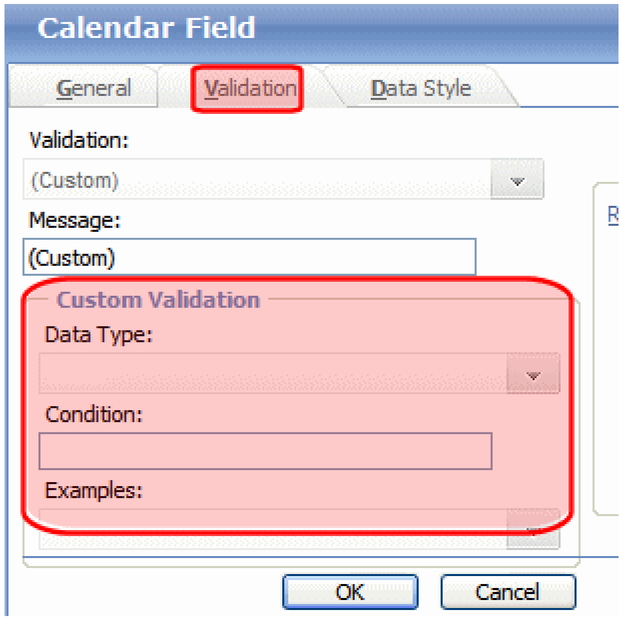
Option	Characteristics of Valid Response	Used with text field	Used with calendar field
Non-negative whole number or blank	A positive whole number *or* no response.	✓	
Non-negative whole number (required)		✓	
Decimal number or blank	A decimal number (for example, 12.345 or 12) or blank. A leading minus sign "-" is allowed. The decimal point must be a period (.), even in locales that normally use a comma (,). Note: Decimal numbers include whole numbers because the decimal point is implied. That is, 12 is 12.0000.	✓	
Decimal number required	A decimal number (it cannot be blank) of none, one, or two decimal places. A leading minus sign "-" is allowed. The decimal point must be period (.), even in locales that normally use a comma (,). Note: Decimal numbers include whole numbers because the decimal point is implied. That is, 12 is 12.0000.	✓	
Percent: (0-100) required	A whole number from 0 to 100. A response is required.	✓	
email address	*a@a*, where a is one or more characters.	✓	
email address required	*a@a*, where a is one or more characters. A response is required.	✓	
email address list	Several email addresses. Each address's format is *a@a*, where *a* is one or more characters. The user must separate each address with a semicolon (;).	✓	
email address list required	Several email addresses. Each address's format is *a@a*, where a is one or more characters. The user must separate each address with a semicolon (;). A response is required.	✓	

Option	Characteristics of Valid Response	Used with text field	Used with calendar field
Zip code (US)	5 (*nnnnn*) or 9 digits. If 9, a dash appears after the fifth (*nnnnn-nnnn*).	✓	
Zip code (US) required	5 (*nnnnn*) or 9 digits. If 9, a dash appears after the fifth (*nnnnn-nnnn*). A response is required.	✓	
Social Security (US)	Nine digits in this pattern: *nnn-nn-nnnn.*	✓	
Social Security (US) required	Nine digits in this pattern: *nnn-nn-nnnn.* A response is required.	✓	
Postal Code (Canada)	*ana nan*, where *a* is an alphabetic character and *n* is numeric.	✓	
Postal Code (Canada) - (required)	*ana nan*, where a is an alphabetic character and n is numeric. A response is required.	✓	
Social Insurance Number (Canada)	*A nine digit number in the format: nnnnnnnnn.*	✓	
Social Insurance Number (Canada) Required	A nine digit number in the format: *nnnnnnnnn.* A response is required.	✓	
Telephone number (US and Canada)	A seven or 10 digit number in the format *nnnnnnn* or *nnnnnnnnnn*. The site visitor can insert separator characters, such as dashes (-), between numbers.	✓	

Option	Characteristics of Valid Response	Used with text field	Used with calendar field
Telephone number (US and Canada) (required)	A seven or 10 digit number in the format *nnnnnnn* or *nnnnnnnnnn*. The site visitor can insert separator characters, such as dashes (-), between numbers. A response is required.	✓	
URL	A web site address.	✓	
ISBN	The International Standard Book Number (ISBN) is a 10-digit number that uniquely identifies books and book-like products published internationally. Every ISBN consists of ten digits. When printed, the ISBN number is preceded by the letters ISBN. The ten-digit number is divided into four parts of variable length, each part separated by a hyphen. The four parts of an ISBN are: ▪ **Group or country identifier** - identifies a national or geographic grouping of publishers ▪ **Publisher identifier** - identifies a particular publisher within a group ▪ **Title identifier** - identifies a particular title or edition of a title ▪ **Check digit** - the single digit at the end of the ISBN which validates it *(Above copied from www.isbn.org.)*	✓	
ISSN	The ISSN (International Standard Serial Number) is an eight-digit number which identifies periodical publications as such, including electronic serials. The ISSN takes the form of the acronym ISSN followed by two groups of four digits, separated by a hyphen. The eighth character is a control digit calculated according to a modulo 11 algorithm on the basis of the 7 preceding digits; this eighth control character may be an "X" if the result of the computing is equal to "10", in order to avoid ambiguity. *(Above copied from www.issn.org.)*	✓	

Custom Validation

The Text and Calendar field dialog's **Validation** tab features a validation area (illustrated below).



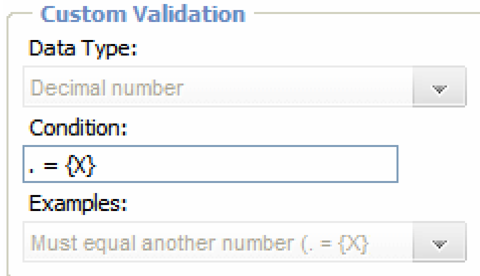
The validation feature can ensure the following aspects user input.

- The data type - the default types are
  - text
  - URL
  - whole number
  - decimal number
  - floating point number (Floating point includes scientific notation, so is appropriate for scientific numbers. Decimals usually suffice for business numbers.)
  - date (calendars only)
- The field value has one of the following relationships with another field, a number, or an expression. The default expressions are
  - between two values (either another field or a number that you specify)
  - less than
  - equal to
  - not equal to
  - maximum length (usually for text responses)

Note: Your Web developer can customize validation options. For details, see "Customizing Validation" on page 7-686. However, the file that maintains custom validation is different for HTML forms: it is siteroot/workarea/ContentDesigner/ValidateSpace.xml.

Your system administrator determines if a user can save the invalid data.

When the **Custom Validation** option is selected from the **Validation** field, the Custom Validation screen area becomes active.

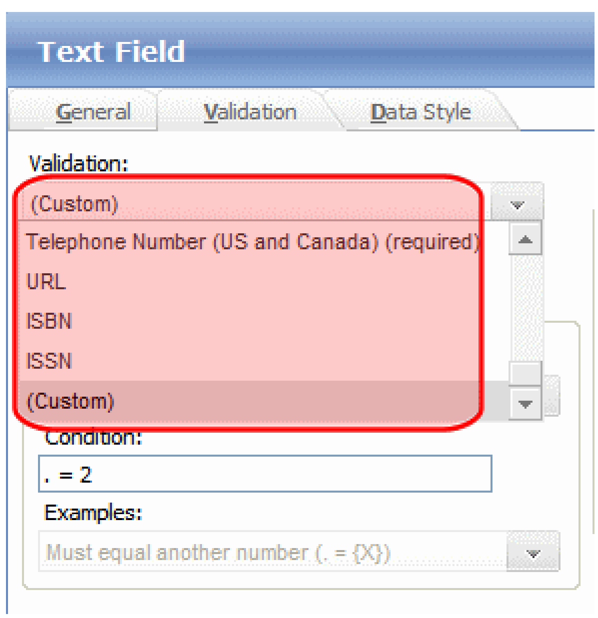


- The **Data Type** field is the value's basic type, for example, text, number, or URL.
- The **Condition** field displays the validation logic.
- The **Examples** drop-down list shows validation expressions that you can apply to the field.

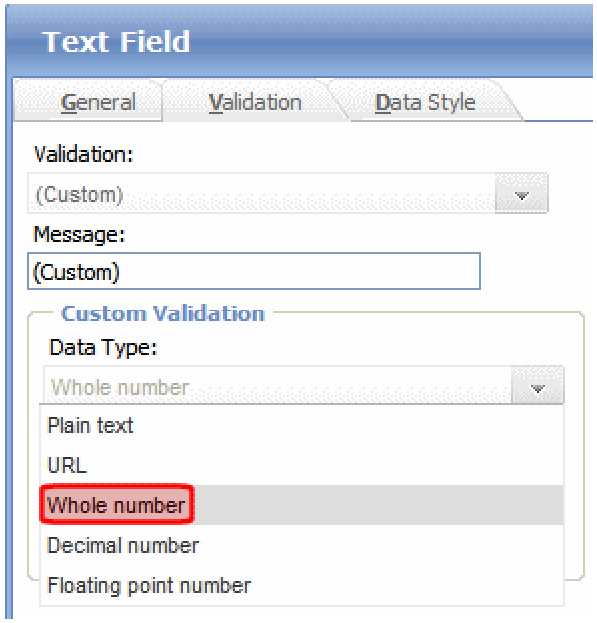
Example of Creating Custom Validation

As an example of custom validation, assume that a field collects telephone numbers, and you want to make sure the user enters 10 digits. To accomplish this, follow these steps.

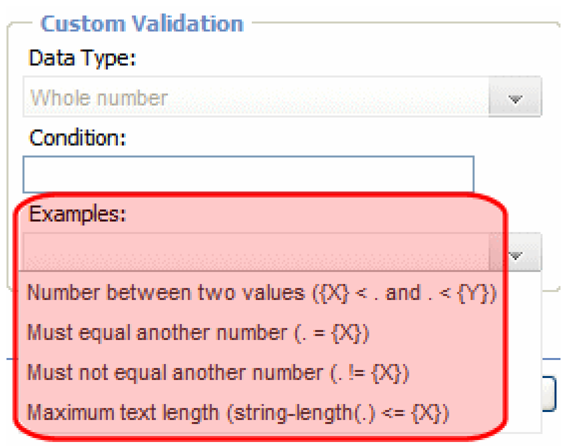
1. Insert a Text Field.
2. Complete the Text Field dialog's **General** tab.
3. Click the **Validation** tab.
4. In the **Validation** dropdown list, select **(Custom)**.



5. In the **Data Type** field, select **Whole Number** from the drop down list. This ensures that the user can only enter digits.

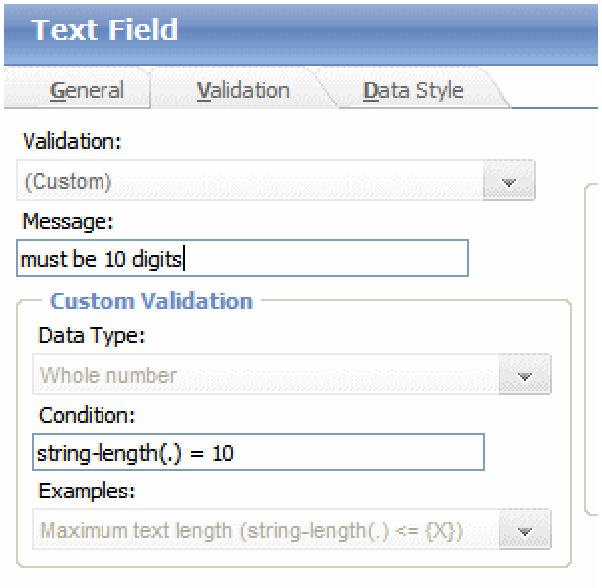


6. Click the down arrow to the right of the **Examples** field to see sample logic.



7. Click **Maximum text length...** . This option lets you specify the length of the user's response.
8. `string-length(.) <= {X}` appears in the **Condition** field.
9. Since you want the user's input to equal 10, remove the less than sign (<) from the calculation. Now it looks like this: `string-length(.) = {X}`.
10. Replace the `{X}` with 10. Now, it looks like this: `string-length(.) = 10`.
11. Move the cursor up to the **Message** field and compose a relevant error message. For example: `must be 10 digits`.

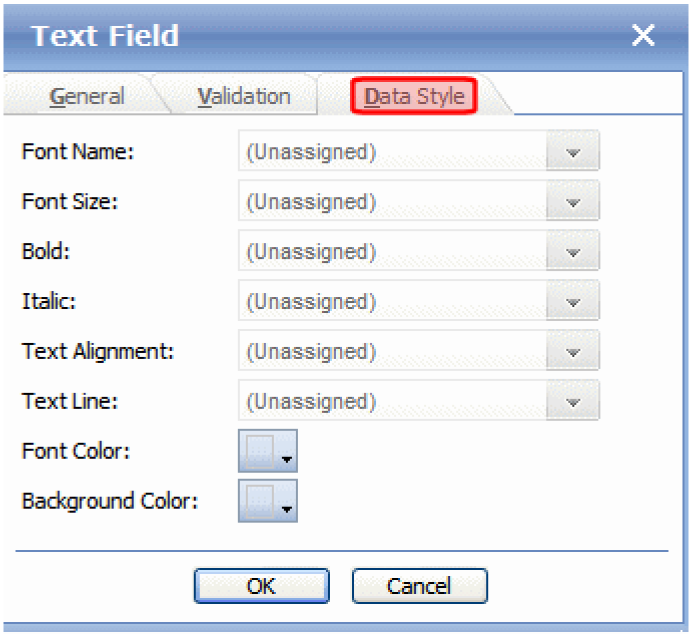
12. Your screen should look like this.



13. Press **OK**.

Fields on the Text Field Dialog - Data Style Tab

Click the Data Style tab to apply formatting to a field that accepts user input. When you do, the following tab appears.



Use the tab to assign the following formatting attributes to a response field.

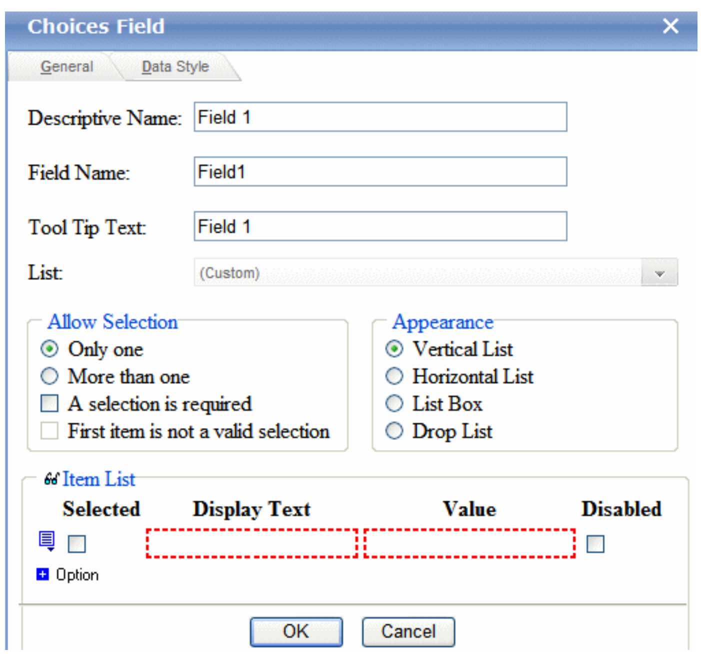
- Font style and size
- Bold and italic
- Text alignment (especially helpful for formatting dollar amounts in a plain text field)
- Underline or strikethrough
- Font color and/or background color

Inserting a Choices Field

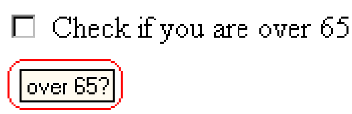
Use a Choices field when you want a site visitor to select from a predetermined list. You can allow a site visitor to select only one or more than one choice. You can also determine the list's items and appearance.

To insert a choices field, follow these steps.

1. Enter a field label. For example, **Country**.
2. Click the Choices field button . See Also: "Adding a Field to the Screen" on page 7-230
3. The following dialog appears.

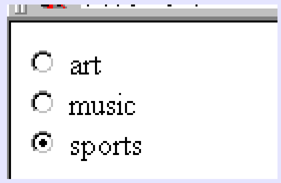


Fields on the Choices Dialog

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Descriptive Name</td><td>Enter a description of the field.
This text describes the field on form reports. See "Viewing Form Reports" on page 7-262.</td></tr>
<tr><td>Field Name</td><td>Enter a name for this field. This text identifies the field in the database and in email if the form is mailed.
Note: You cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;’"{}[]|‘~) into this field. If you do, they are replaced by underscores.</td></tr>
<tr><td>Tool Tip Text</td><td>Enter text that appears when a site visitor hovers the cursor over this field (circled in red below).
</td></tr>
<tr><td>List</td><td>Custom - You create your own set of choices. Use the Item List area to do this. See Also: "Item List" on page 7-248
Languages - A standard list of languages
Countries - A standard list of countries
U.S States and Territories - A standard list of United States of America states and territories
Canadian Provinces - A standard list of Canadian provinces
Age Ranges - A standard list of age ranges
Numeric Ranges - A standard list of numeric ranges
Years - A standard list of years
Gender - Male or female
Marital Status - A standard list marital statuses</td></tr>
<tr><td>Allow Selection</td><td>Click More than one to let a site visitor select more than one item for this field. Otherwise, click Only one to limit the user to one choice.
A selection is required - Check this box if the user must select at least one item.
First item is not a valid selection - You can use the first list item to prompt the user to make a selection instead of being a valid response. For example, the first item may say Select from the list. To do so, check this box.
If you do, the site visitor must choose any selection except the first item. If he tries to file the screen without choosing a different item, this error message appears: First item is not a valid selection.
Note: This option is only available if Appearance is set to Drop List.</td></tr>
</table>

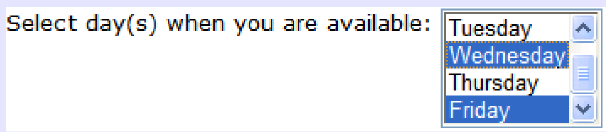
<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Appearance</td><td>

Click **Vertical List** to arrange the choices vertically.

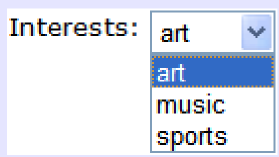


Click **Horizontal List** to arrange the choices horizontally.

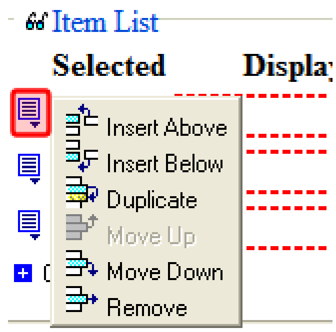
Click **List Box** to display all choices in a box. If more than four choices are available, the user scrolls to see additional options.



Click **Drop List** to display all choices in a dropdown list. When the user clicks the down arrow, all entries appear.



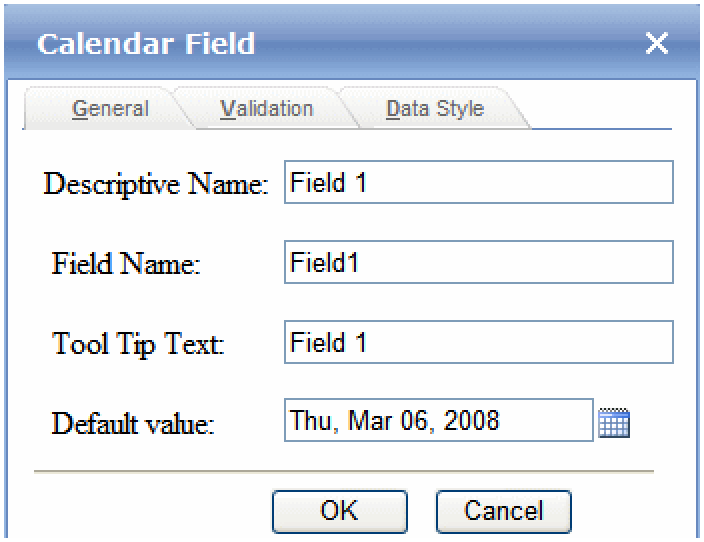
</td></tr>
</table>

Field	Description
Item List	This section of the screen displays the list items. It is only editable if the list type is Custom. **The Context-Sensitive Menu** Buttons to the left of each item (circled below) display a menu. The menu lets you remove items, rearrange them, and insert additional items anywhere on the list.  **The Selected Box** Place a check in the box of any item to be checked by default on the data entry screen. If you do, the user can accept the default or uncheck the item by clicking in the checkbox. Note that if **Only One** is selected under **Allow selection** (above), only one item can be selected. If the **Appearance** is set to Drop-Down list, this value is ignored. **Display Text** Enter text to describe this item on the data entry screen. **Value** Enter the value that is collected when the site visitor selects this item. For example, if **Interests** appears in the Name field, and you want `music` to be collected when the data entry user selects this item and saves the page, enter **music** here. **The Disabled Checkbox** Check the box next to any selection that you want to disable. If you do, the option appears on the form but the user cannot select it. **Option** Click this button to add a row to the bottom of the list.

Inserting a Calendar Field

To insert a field that lets a site visitor select a date, use a Calendar Field. To do that, follow these steps.

1. Enter a field label. For example, **Expiration Date**.
2. Click the Calendar field button ( ). See Also: "Adding a Field to the Screen" on page 7-230
3. The following dialog appears.

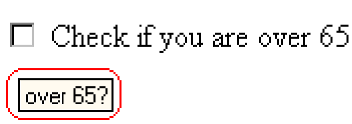


Respond to the fields on the screen.

See Also:

- "Fields on the Calendar Field Dialog - General Tab" on page 7-249
- "Fields on the Calendar Field Dialog - Validation Tab" on page 7-250
- "Fields on the Calendar Field Dialog - Data Style Tab" on page 7-251

Fields on the Calendar Field Dialog - General Tab

Field	Description
Descriptive Name	Enter a description of the field. This text describes the field on form reports. See "Viewing Form Reports" on page 7-262.
Field Name	Enter a name for this field. This text identifies the field in the database and in email if the form is mailed. Note: You cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|'~) into this field. If you do, they are replaced by underscores.
Tool Tip Text	Enter text that appears when a site visitor hovers the cursor over this field (circled in red below). 
Default value	If you want to set a default date, enter it here. The site visitor can change the default value while completing the screen.

Field	Description
Validation	Select the kind of validation to apply to this field. The choices are: - **No validation** - response is not checked - **Cannot be blank** - Response is required. The format of the response is not checked. If you assign **Cannot be blank**, the field is surrounded by red dashes when it appears on your Web site. - **Custom** - See "Custom Validation" on page 7-240
Error Message	Enter text that appears if a site visitor's response does not satisfy the validation criterion. For example, if the validation criterion is **Cannot be blank**, the error message could be **Please enter a response**. By default, the error message is the same as the validation criterion. Use this field to customize its text. Note: You can only enter double-byte characters if your Windows settings include that language. If you enter characters that are not in a language defined in your Windows settings, question marks (?) appear instead of the characters.

Fields on the Calendar Field Dialog - Validation Tab

Field	Description
Descriptive Name	Enter a description of the field. This text describes the field on form reports. See "Viewing Form Reports" on page 7-262.
Validation	Select the kind of validation to apply to this field. The choices are: - **No validation** - response is not checked - **Cannot be blank** - Response is required. The format of the response is not checked. If you assign **Cannot be blank**, the field is surrounded by red dashes when it appears on your Web site. - **Custom** - See "Custom Validation" on page 7-240
Message	Enter text that appears on the screen if the site visitor's response does not satisfy the validation criterion. For example, if the validation criterion is **Cannot be blank**, the error message could be **Please enter a response**. By default, the error message is the same as the validation criterion. Use this field to customize it. Note: You can only enter double-byte characters if your Windows settings include that language. If you enter characters that are not in a language defined in your Windows settings, question marks (?) appear instead of the characters.

Fields on the Calendar Field Dialog - Data Style Tab

See "Fields on the Text Field Dialog - Data Style Tab" on page 7-244

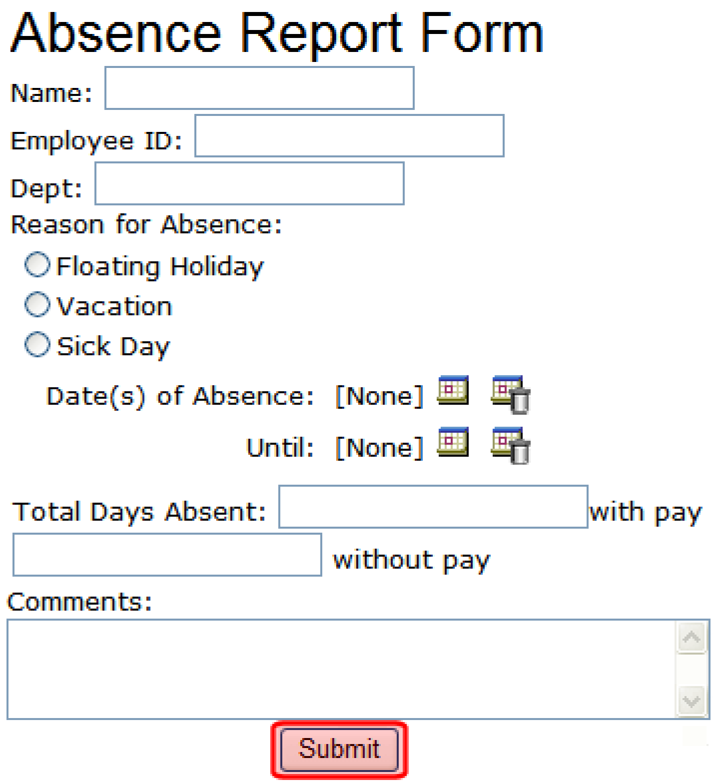
Editing a Form Field

To edit a form field, follow these steps.

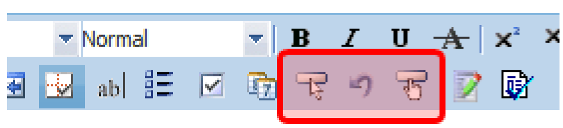
1. Click inside the field. It becomes surrounded with small squares.
2. Click the toolbar button that corresponds to the field type. See Also: "The Form Toolbar Options" on page 7-229
3. The dialog appears for that field type.
4. Edit as needed. See Also: "Form Fields" on page 7-233
5. Press **OK**.

Inserting or Editing Buttons on the Form

A form typically includes one or more *buttons*, which let a site visitor submit a completed form.



eWebEdit400's form toolbar has three buttons that you can place on a form (circled below.) The buttons are described below.

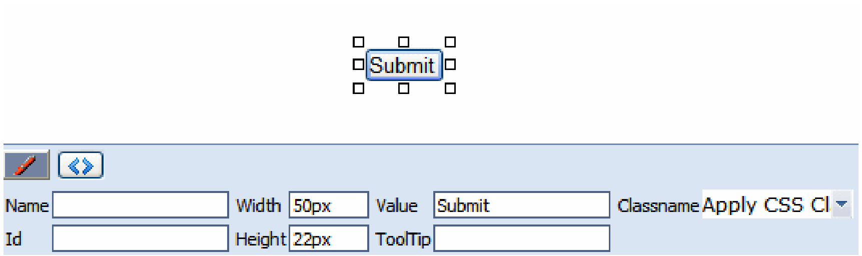


Toolbar Button	Name	Description
	Insert	Submits form information to your Web server. By default, it has no text. To learn how to add button text, see "Editing a Button's Properties" on page 7-253.
	Reset	Changes a form's field values back to their state when the form first loaded.
	Submit	Submits form information to your Web server. Its default text is **Submit**.

Editing a Button's Properties

After you insert a button, you may want to enter or change its properties, such as its text, height, and width. To edit a button's properties, follow these steps.

1. Click the button so that it is selected. A selected button is surrounded by small squares, as shown below.
2. Below the editor screen, several fields appear, as shown below.



3. Update the button fields as needed.

Field	Description
Name	Give the button a unique name.
Id	If needed, give the button a unique ID.
Width	Enter or change the button's width in pixels.
Height	Enter or change the button's height in pixels.
Value	Enter or change the button text.
Tooltip	Enter or change the button's *tooltip* (that is, text that appears in a small window when someone hovers the mouse over the button).
Classname	Enter or change the style sheet class assigned to the button.

Implementing a Form on a Web Page

After you create the form, you need to link it to another page on your Web site. You would insert the link as you would any form link. See "Adding a Library File to Content" on page 8-

18

Next, open your Web Site, navigate to the host page, and click the hyperlink to access the form. Now, you can test the form and make sure it works as you expected. If needed, you can return to edit mode, change the form, and test it again until you are happy with it.

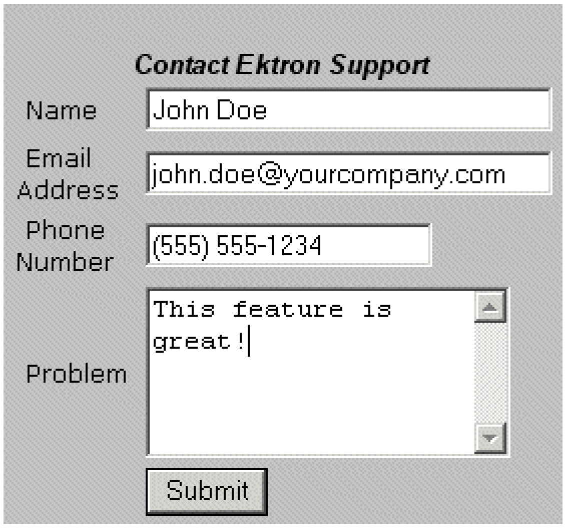
Sending Data as XML

While creating a form that generates email, you can specify that the email be sent as XML data or plain text.

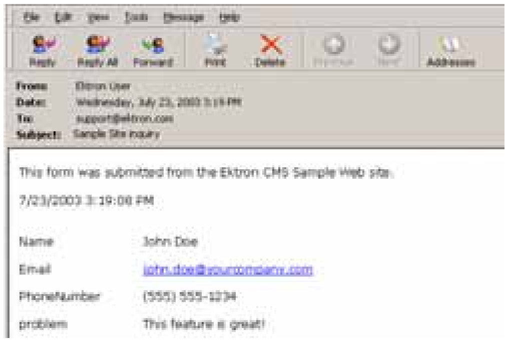
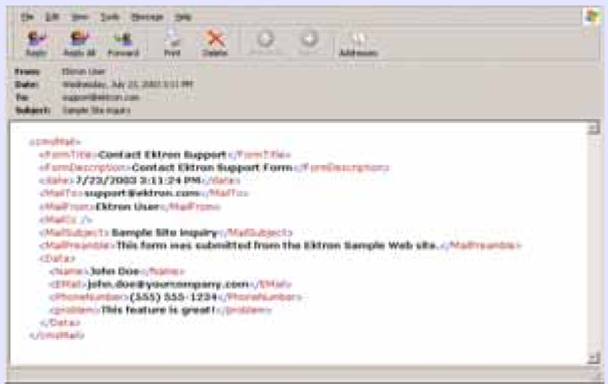
XML has the following advantages over plain text.

- Because XML data is structured, you can easily parse the content to store and retrieve important information.
- If you download the form data to an Excel spreadsheet, the XML tags become the spreadsheet's column headers. See Also: "Exporting a Form's Raw Data" on page 7-267

This section contrasts XML and plain text email using the form displayed below as the example. Here is an example of a form before it is submitted.



The following table displays the resulting email, depending on the method used.

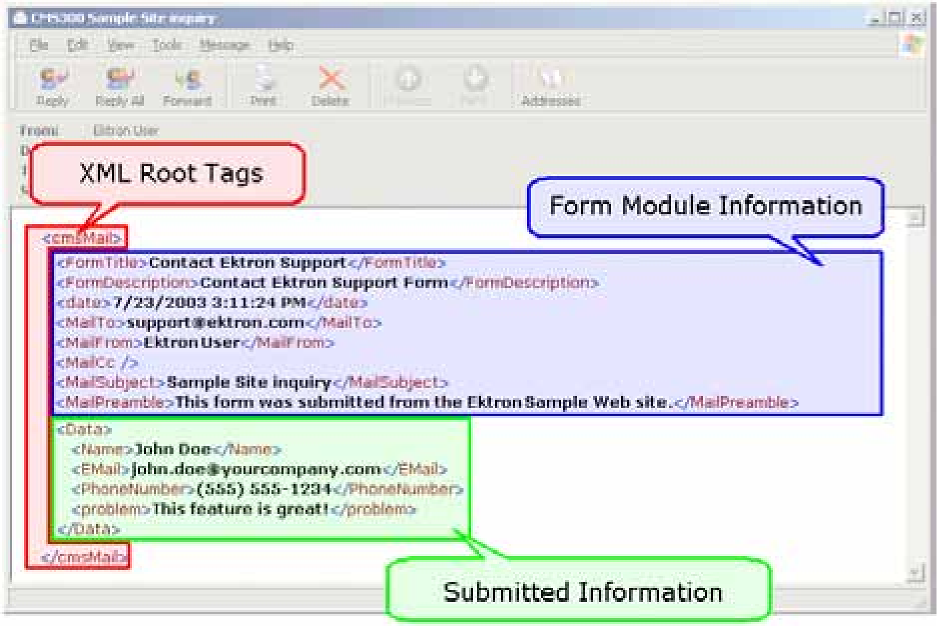
Form sent as	Generated email
Plain Text	
XML	

XML email Structure

A form's XML structure consists of two groups of XML tags:

- Form and mail elements
- Data elements

The following image illustrates the sections of XML email structure.



The following explains the sections of the XML email.

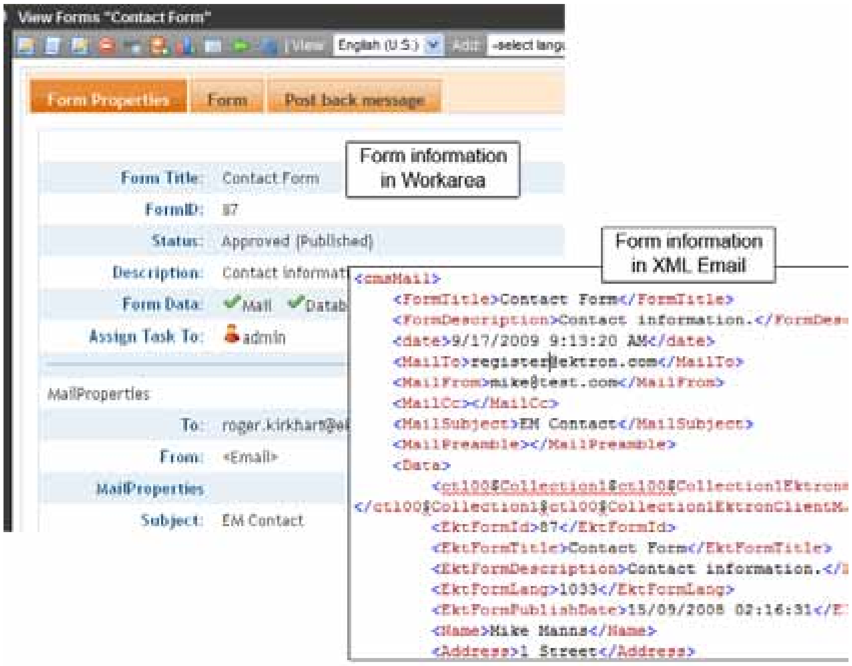
Root Tag

The XML email is wrapped in `<cmsMail>` root tags.

Form and Mail Tags

The form and mail tags display information about the form that was generated from the form information.

This illustration compares the information defined for the form with the information in the XML email.



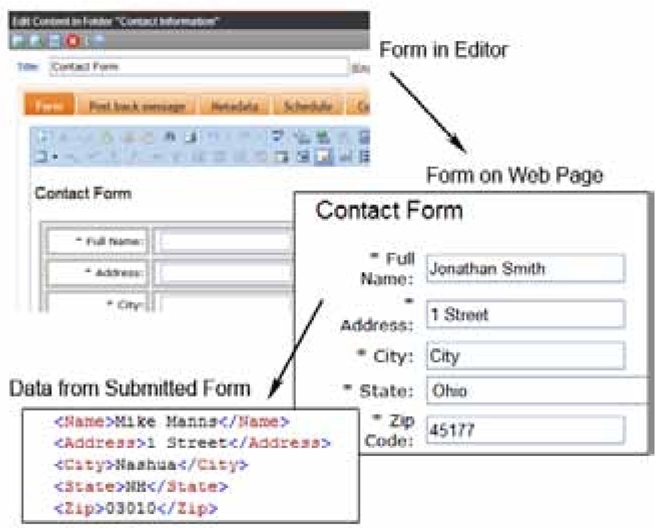
The following table explains each XML tag in the form and mail sections of the email.

XML Tag	Description
<FormTitle>	Title given to the form that was submitted.
<FormDescription>	Description given to the form that was submitted.
<date>	Date and time the form was submitted.
<MailTo>	To email address(es) defined in the form.
<MailFrom>	From email address(es) defined in the form.
<MailCc>	CC address(es) defined in the form.
<MailSubject>	Subject for the generated email defined in the form.
<MailPreamble>	Preamble for the generated email defined in the form.

Data Tags

The XML email's data tags wrap the information entered by the form's submitter. Each form element in the content becomes an XML tag.

The following image illustrates how a form is edited in the editor, displayed on a Web page, and then converted to XML for the email.



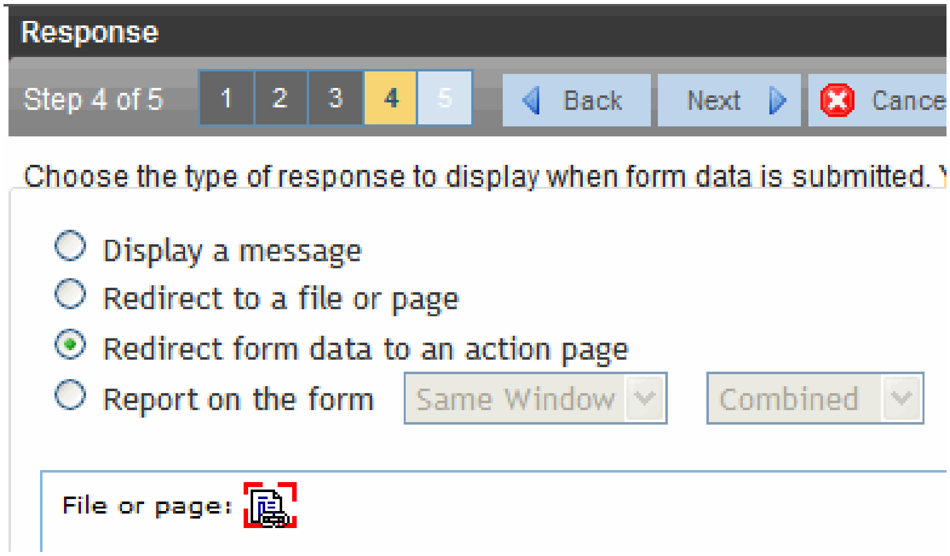
As shown in the graphic, the content is comprised of four form elements that are converted to XML tags:

- Name
- Email
- PhoneNumber
- Problem

Redirecting Submitted Form Data

This section explains how to redirect submitted form data to an action page. Because the data is redirected via server transfer, you can easily customize the handling of a multi-page form.

Users can select this option when creating or editing a form response, as illustrated below.



Instructions for how a user chooses a hyperlink to an action page are in "Redirecting Submitted Form Data" on page 7-258.

Warning! If your form will redirect the user to an action page, it must be implemented using a FormBlock server control. You cannot use a Poll server control when redirecting to an action page.

Note: If a form's specifications indicate that its data is saved to a database, the data is saved before being forwarded to an action page.

The following section explains how to set up a hyperlink to the action page in preparation for a user's selection.

Setting Up the Action Page

1. Create the action page. It must
   - load and use the form variables
   - have an .aspx extension
   - reside in the same web application as your Web site

Warning! If your site is using URL Aliasing, the action page's header must include the following: `EnableEventValidation="false" EnableViewStateMac="false"`

2. Place the action page in your Web site's root folder.
3. Set up a library hyperlink to the .aspx page. Here's how to do that:
   - In Ektron CMS400.NET, go to the Library.
   - Select **Hyperlinks** from the file type dropdown.

- Click the Add button ( ).
- In the **URL Link** field, enter the path relative to the Web root to the .aspx file you created in Steps 1 and 2. For example:

`http://localhost/`*`siteroot`*`/ServerVariables.aspx`

- Give the hyperlink a title and save it.

4. Inform your users of the hyperlink. They will select it when selecting the form response.

Assigning a Task to a Form

While tasks typically help Ektron CMS400.NET users track content activities, you can also assign a task to users or user groups whenever a form is submitted.

For example, your Web site offers a free product demonstration to anyone who completes a form. Whenever a site visitor submits the form, a task is assigned to your sales department's administrative assistant. He uses the information on the form to schedule a demonstration. The sales manager can review the task history to audit sales leads and ensure demonstration requests are being handled in a timely manner.

To set up a task that it is assigned to users or groups whenever a site visitor completes the form, follow these steps.

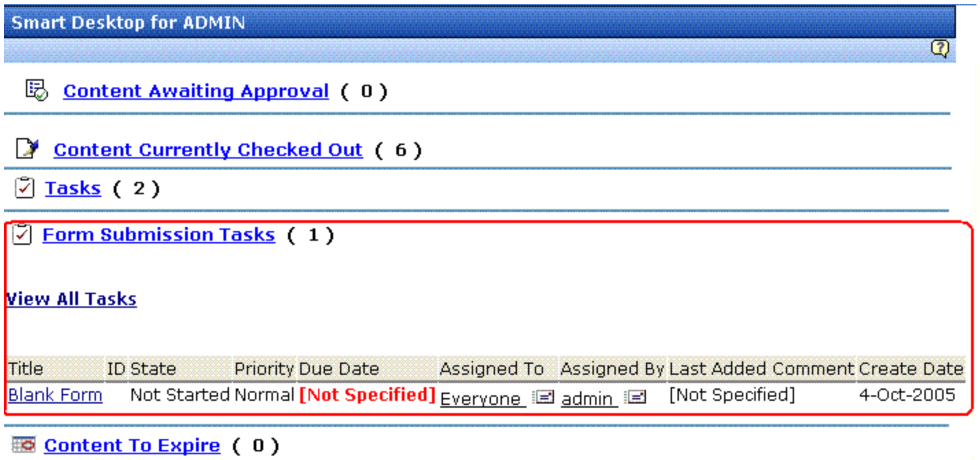
Note: You should be familiar with tasks before beginning this procedure. See Also: "Managing Tasks" on page 11-1

---

1. If you are creating a new form, assign the task at Step 3 of the Forms Wizard.

   If you are editing a form, assign the task on the form's Edit Properties screen.

   In both cases, you identify only users and groups to whom the task will be assigned whenever a site visitor completes the form. Ektron CMS400.NET assigns the remaining task information.
2. You complete the form and make it available on your Web site.
3. A visitor to your site fills out and submits the form.
4. A task is created and assigned to users and groups you identified in Step 1.
5. Any Ektron CMS400.NET user can view all tasks created via form submission in the Smart Desktop. See illustration below. See Also: "Personalizing the Smart Desktop" on page 4-4



Ektron CMS400.NET users and administrators can also view and update tasks assigned to them via the Task screens on the Smart Desktop. See "Viewing a Single Task" on page 11-24 and "Viewing a Task's History" on page 11-29.

See Also: "Task Information" on page 7-261; "email Automatically Generated Upon Form Submission" on page 7-262

Task Information

The task created upon form submission has the following information.

Field	Value
Title	Form title, as entered by the author
Assigned to	As set up by the user who created or edited the form
Assigned by	User who created or last edited form
Priority	Normal
Task Category	Form Submission Task Category
Task type	Form Submission Task
Created by	User who created or last edited form
	Not started

Field	Value
	Not specified
Start date	Not specified
Description	Data from form "*form name*" was received on *date time*. *form description* *Name of every field on the form: value submitted by user into that field*

email Automatically Generated Upon Form Submission

An email is automatically sent to every user named in Step 1 above who has a valid email address in the User Information Screen. The email's subject line is the form name. The body of the email contains the following information for each field on the form.

- name
- value submitted by user

Viewing Form Reports

If a form is set to store data in the database, you can run a report that displays the submitted data. To view a form report, follow these steps.

1. Navigate to the folder for which you want to view the report. The View Contents of Folder screen appears.
2. Click the form you want to view. (If you do not see your form in the folder, make sure the Content Type drop-down box is set to All Types or Forms.)
3. Click the View Reports button ( ).
4. The View Forms Report screen appears.
5. Enter report criteria using the following table as a reference.

Field	Description
Start Date	If desired, specify a start date. The report displays only forms that were submitted on or after the start date.
End Date	If desired, specify an end date. The report displays only forms that were submitted on or before the end date.
Report Display	Specify the format to display the report.
Select Legacy Report	Specify the version of the form or poll for which to get a report. Using this option allows you to see the results from previous polls and forms.

6. Click the **Get Result** button to display the report.

Display Formats

The submitted form data can be viewed in any of these formats.

- "Table with Totals" on page 7-263
- "Summary of Selected Choices" on page 7-264
- "Table of Values" on page 7-265
- "List of Submitted Values" on page 7-266
- "Submitted Data as XML" on page 7-267

Table with Totals

The table of values shows the following information for each completed form.

- a checkbox that lets you delete the response
- an internal identification number of the response
- the name of the user who submitted the form, if he signed in to Ektron CMS400.NET beforehand. If the user did not sign in, **anonymous** appears.
- date response was submitted
- The name of each field on the survey
  - under each field name is the submitted response for the each user
- the bottom line sums the numerical and percentage totals for each response

Sample of Table with Totals Format

General Demographic Survey

(Delete)	ID	Submitted By	Date Submitted	Gender		Age range			Education Level		A
				Male	Female	22-25	26-30	31-40	High School/GED	Master's Degree	$30,000-$39,999
☐	22	Member, John	12/6/2005 4:18:50 PM	✓		✓			✓		
☐	23	anonymous	12/6/2005 4:22:58 PM		✓			✓		✓	
☐	24	Edit, John	12/6/2005 4:23:40 PM	✓			✓		✓		✓
			Total:	2	1	1	1	1	2	1	1
			Average (3 rows):	66.67%	33.33%	33.33%	33.33%	33.33%	66.67%	33.33%	33.33%

Summary of Selected Choices

This format totals, for choice and select type fields, the number of times each choice was selected. Only choices that were selected at least once appear.

Sample Summary of Selected Choices Format

General Demographic Survey

Field	Value	Count
Age range	22-25	1
	26-30	1
	31-40	1
Annual Income	$30,000-$39,999	1
	$40,000-$49,999	1
	$70,000-$79,999	1
Education Level	High School/GED	2
	Master's Degree	1
Father's Education Level	High School/GED	1
	Master's Degree	1
	Some College	1
Gender	Female	1
	Male	2
Household Income	$100,000-$149,000	1
	$30,000-$39,999	1
	$60,000-$69,999	1
Marital Status	Legally Separated	1
	Married	1
	Single	1
Mother's Education Level	High School/GED	2
	Master's Degree	1
Race	African-American	1
	Native American	1
	White	1

Table of Values

The table of values shows the following information for each completed form.

- a checkbox that lets you delete the response
- an internal identification number of the response
- the name of the user who submitted the form, if he signed in to Ektron CMS400.NET beforehand. If the user did not sign in, **anonymous** appears.
- date response was submitted

- descriptive name of each form field appears in the column header
  - the value entered for each field appears below the header

Sample of Table of Values Format

General Demographic Survey

(Delete)	ID	Submitted By	Date Submitted	Gender	Age range	Education Level	Annual Income	Household Income	Marital Status	Religious
☐	22	Member, John	12/6/2005 4:18:50 PM	Male	22-25	High School/GED	$40,000-$49,999	$60,000-$69,999	Legally Separated	Evangelical Christian
☐	23	anonymous	12/6/2005 4:22:58 PM	Female	31-40	Master's Degree	$70,000-$79,999	$100,000-$149,000	Married	Protestant Christian
☐	24	Edit, John	12/6/2005 4:23:40 PM	Male	26-30	High School/GED	$30,000-$39,999	$30,000-$39,999	Single	Other

List of Submitted Values

The List of Submitted Values format provides the same information as the Table of Values, but is formatted vertically rather than horizontally. See Also: "Table of Values" on page 7-265

Sample List of Submitted Values Format

General Demographic Survey

(Delete)	ID	Submitted By	Date Submitted	Field	Value
☐	22	Member, John	12/6/2005 4:18:50 PM	Gender	Male
				Age range	22-25
				Education Level	High School/GED
				Annual Income	$40,000-$49,999
				Household Income	$60,000-$69,999
				Marital Status	Legally Separated
				Religious	Evangelical Christian
				Other Religious Affiliation	
				Race	African-American
				Mother's Education Level	High School/GED
				Father's Education Level	Some College
☐	23	anonymous	12/6/2005 4:22:58 PM	Gender	Female
				Age range	31-40
				Education Level	Master's Degree
				Annual Income	$70,000-$79,999
				Household Income	$100,000-$149,000
				Marital Status	Married
				Religious	Protestant Christian

Submitted Data as XML

Displays the results of the form in an XML format. The following information is included:

- <Title> - title of the form block

Warning! With polls you can create a new poll question to replace an existing poll question. By default the poll still has the same Title, ID, and other properties. You can change the title of a new poll question when you are editing the poll.

- <Description> - description of the form

- <SubmittedData> - information that was submitted

Sample of Submitted Data as XML

```
<Form>
<Title>Where did you hear about Ektron Medical?</Title>
<Description>Poll for finding out where visitor's heard about
our site</Description>
<SubmittedData>
<Date value="2006-05-16T17:25:35">5/16/2006 5:25:35 PM</Date>
<User id="1" member="false">
<Name><FirstName>Application</FirstName>
<LastName>Administrator</LastName></Name>
<Username>admin</Username>
<Email></Email>
</User>
<Data form_data_id="250">
<ektpoll1147812046505>Navigation_2</ektpoll1147812046505>
</Data>
</SubmittedData>
<SubmittedData>
<Date value="2006-05-16T16:48:22">5/16/2006 4:48:22 PM</Date>
<Data form_data_id="248">
<ektpoll1147812046505>Everything_4</ektpoll1147812046505>
```

Exporting a Form's Raw Data

After you run a report, you can export its data to a Microsoft Excel spreadsheet file (.xls) for further analysis. If a form uses an XML structure, each XML tag becomes a column header in the spreadsheet.

To export form data, follow these steps.

1. Access the View Form Reports screen for the report you want to export, as described in "Viewing Form Reports" on page 7-262.

2. Click the Export Reports button (

).

3. A File Download dialog box is displayed. Choose the option that best suits your needs.
4. After the data is exported, you can analyze and modify the .xls file.

Viewing Form Information

After a form is created, you can view its information in the Forms folder. To view a form, follow these steps.

1. Access the folder that contains the form you want to view.
2. Click the form you want to view.
3. The View Form screen displays.
4. Click the Form Properties tab.
5. The following table explains the information on the screen.

Field	Description
Form Title	Title used to reference the form
FormID	ID number automatically assigned to form
Status	The form's current status
Description	Extended description for the form
Form Data	The type of form data: Mail or Database.
Form Submissions	The maximum number of times a user can submit the form. This is typically used with polls and surveys to limit one user's influence over the results.
Assign Task to	Users and groups to whom a task will be automatically assigned whenever a site visitor completes the form.
Content Properties	Displays the properties of the form's content
Content Title	Title of content associated with form Note: The content name is the same as the Form name.
Content ID	Content ID number assigned to content
Status	The status of the content

Field	Description
Last Editor	Last user to edit the content
Start Date	Date and time when content will go live on Web site (if set for future date)
End Date	Date and time when content will be removed from Web site (if set for future date)
Date Created	Date and time when content was created

Viewing and Editing a Form's Properties

To see and update additional form information that does not appear on the View Form screen, view its properties. To do so, follow these steps.

1. Navigate to the form's View Form screen, as described in "Viewing Form Information" on page 7-268.
2. Click the **Form Properties** button ( ).
3. The Form Properties screen displays a subset of form information.

- Title and Description
- Database or Mail - if form data is emailed whenever a site visitor submits it, enter mail property information below. See "Mail Properties" on page 7-269
- Autofill form values - checked by default, this allows the form's fields to fill automatically when a logged-in site visitor has previously completed the form.
- Limit Submission - when checked, you can enter the number of times a user can submit a form in the **Number of Submissions** text field
- Assign task to - see "Viewing Form Information" on page 7-268
- Form block's ID number
- Mail Properties

Mail Properties

Field	Description
To	Email address to which the form is sent when submitted. See Also: "Retrieving email Address from the Submitted Form" on page 7-270
From	Text that appears in the email's **From** field. See Also: "Retrieving email Address from the Submitted Form" on page 7-270
CC	Text that appears in the email's **CC** field. See Also: "Retrieving email Address from the Submitted Form" on page 7-270
Subject	Text that appears in the email's subject field. See Also: "Retrieving Form Data Into the Subject and Preamble Fields" on page 7-271
Preamble	Beginning text of the email. See Also: "Retrieving Form Data Into the Subject and Preamble Fields" on page 7-271
Send data in XML Format	A green check means email data will be in a structured XML packet. A red X means the email data will be in a standard mailto format. For more information, see "Sending Data as XML" on page 7-254.

Retrieving email Address from the Submitted Form

In the **Mail Properties** section of the Edit Form screen, you can select email addresses submitted on the form to be inserted into these **Mail Property** fields:

- To
- From
- CC

So, instead of entering a static email address, it can be dynamically retrieved from the user's form submission. For example, you want to retrieve the "from" field of an email from the information a user enters when completing the form.

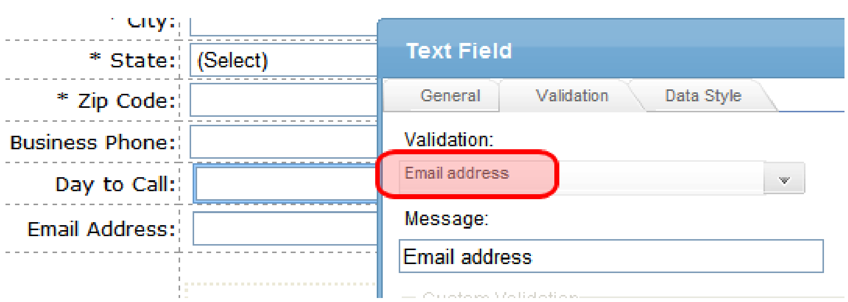
To do this, use the **OR to addresses in field** dropdown lists circled below. These lists contain fields that dynamically retrieve data from the submitted form.

Note that the **To** and **CC** fields can accept fields whose validation type is **email address** or **email address list**. On the other hand, the **From** field can only accept fields whose validation type is **email address** (that is, a single email address).

To set this up, follow these steps.

1. Add a form field whose **Validation** type is **Email address** or **Email address list** . The field prompts the user completing the form to enter his email address. Label the field something like **Enter your email address.**

Note: If the field allows more than one address, add on-screen instructions to separate each address with a semicolon (;).



2. Go to the **Edit Form** screen > **Mail Properties** section.
3. Move to the field labeled **From:**.
4. At the dropdown list following **OR to addresses in field**, select the field you created in Step 1.

Now, when a user completes the form, the value he enters in the field created in Step 1 is used for the email's From address.

Retrieving Form Data Into the Subject and Preamble Fields

You can retrieve data from a submitted form directly to the form's **Subject** and **Preamble** fields. (The subject is a standard mail field, and the preamble is text that appears at the beginning of the email.)

For example, the form may provide a list of your products. While the user is completing the form, he selects a product that he is interested in. The product then becomes the subject line of the email.

Note: Since a Textarea field can span multiple lines, it can only be used with the preamble. However, a plain text field can be used with both the subject and preamble.

To retrieve data dynamically from a form field into the email's subject line or preamble, follow these steps.

1. Add a form field that collects the information you want to insert into the email's subject line or preamble. See Also: "Adding a Field to the Screen" on page 7-230
2. Go to the **Edit Form** screen > **Mail Properties** section.
3. Move to the field labeled **Subject** or **Preamble**.
4. At the dropdown list following **OR use text in field**, select the field you created in Step 1.

Editing a Form

After you create a form, it can easily be edited if information needs to be changed. You can update the following information by following the procedure below.

- the form fields
- post back message
- metadata
- schedule
- comments
- Web Alerts

However to edit a form's **Title**, **Description**, form data, or task values, use the Edit Properties screen.

To edit a form, follow these steps.

1. Access the View Form screen for the form you want to edit, as described in "Viewing and Editing a Form's Properties" on page 7-269.
2. Click the Edit button ().
3. The Edit Form screen is displayed. The screen is the same as the Add New Form screen. For documentation of individual fields, see "Creating a New Form" on page 7-222.
4. Make the necessary changes to the form.

5. Click the Save button ().

See Also: "Editing a Form" on page 7-272

Editing a Form's Content

You can edit the content associated with the form by a variety of methods, including:

- Accessing the content by the floating toolbar on the Web page
- Editing the content by the View Form screen
- Accessing the content by the View Form content properties screen

This section explains how to edit a form's content from the View Form screen. To edit a form's content, follow these steps.

1. Access the View Form screen for the content, as described in "Viewing Form Information" on page 7-268.
2. Click the Edit Content button ( ).
3. The Edit Content screen appears.
4. Make the necessary changes to the form's content.
5. If you want to edit any field's properties, place the cursor in the field, right click the mouse, and choose **Field Properties**.
6. If needed, click the Postback Message, Metadata, Schedule, Comment or Web Alerts tab to edit that information.
7. Click a workflow button (Submit for Publication or Publish).

Editing a Form's Properties

See "Viewing and Editing a Form's Properties" on page 7-269

Mailto or Database Form

The Forms feature lets you create a mailto or a database form to use on your Web site. When creating or editing a form, you must specify the type of form you are creating. The options are:

- Send it via email
- Store it in a database
- Send it via email *and* store in a database

See "Viewing and Editing a Form's Properties" on page 7-269 for information about toggling this option on and off.

Advantages of a Mailto Form

By creating a mailto form, any email generation is done on the server-side, not on the client. This means that site visitors can submit email whether or not the client has email software.

Storing Form Data in a Database

By storing form data in the Ektron CMS400.NET database, you can keep information submitted by site visitors and view reports on that information. You can also export the form data to a spreadsheet.

Deleting a Form

You can easily delete forms that are no longer needed.

Note: Deleting a form also deletes its associated content and information.

To delete a form, follow these steps.

1. Access the View Form screen for the form you want to delete.
2. Click the Delete Form button ( ).
3. A confirmation message is displayed.
4. Click **OK**.

Creating Polls and Surveys

Polls and surveys are a type of form. All of the same functionality is available and applies.

Warning! For complete understanding of forms, polls, and surveys, you should read the entire chapter "The Structure of Form Data" on page 7-222.

- A *poll* is generally one question and appears on a site for a very short time: an hour or a day.
- *A survey* is usually multiple questions and appears on your site for a longer time than a poll.

Note: For information on scheduling when your polls and surveys appear on the site, see "Scheduling Content to Begin and End" on page 7-195.

With polls and surveys, you can show ongoing results to site visitors after they submit their answers.

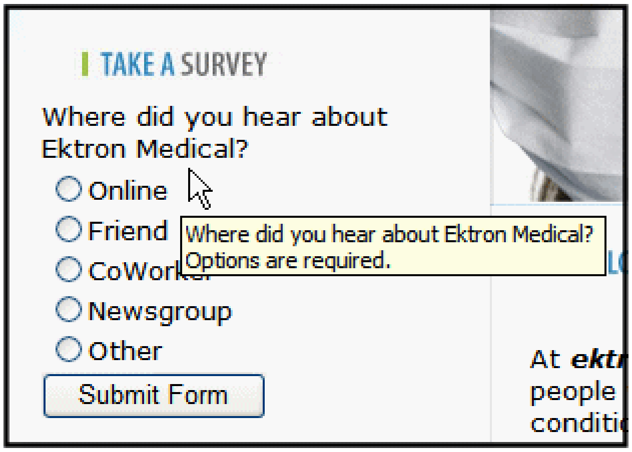
The following sections provide information about creating a poll or survey beyond the normal form information.

- "Working With Polls" on page 7-275
- "Creating a Survey" on page 7-279
- "Making Form Results Available to Site Users" on page 7-227
- "Viewing Form Information" on page 7-268

For information on how to display a poll or survey on a Web site, see "Poll Server Control" on page 7-284.

Working With Polls

Below is an example of a poll. Note that when a site visitor hovers over the poll, the question also appears as ToolTip text.



This subsection contains the following:

- "Creating a New Poll in the Workarea" on page 7-276
- "Replacing a Poll from the Web Site" on page 7-277
- "Editing a Poll from the Web Site" on page 7-278

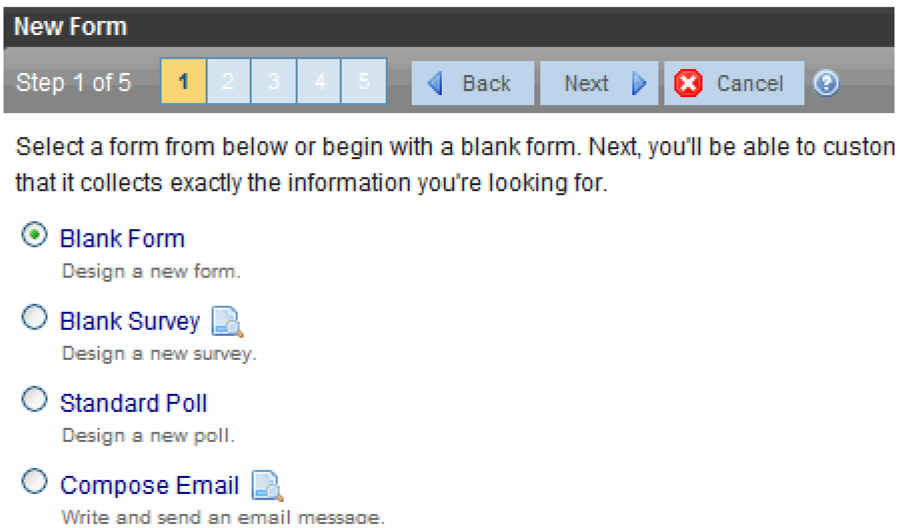
Creating a New Poll in the Workarea

To create a new poll, follow these steps.

Note: You can also create a new edition of a poll in another language by copying an existing poll and translating it. For more information, see "Translating Content to Another Language" on page 7-112.

Note: For the steps to create a new form, see "Creating a New Form" on page 7-222. For the steps to create a new survey, see "Creating a Survey" on page 7-279.

1. From the **View** menu, click **Language**, and select the language in which to create the poll.
2. Click **New** > **HTML Form/Survey**.
3. The New Form screen appears.



Note: If you choose Standard Poll or Blank Survey, the number of steps in the Forms Wizard changes from five to four. This happens because the Assign Tasks step is removed.

4. Choose **Standard Poll**. You can click the preview icon ( ) next to any sample form to preview it before choosing it.
5. Click the **Next** button.
6. Enter or edit the form's **Title** and **Description**.

- **Title** - used to reference the poll within the Workarea (required)
  - **Description** - an extended description of the poll.

7. Click the **Next** button.
8. This screen lets you add a poll question and possible replies.

Note: This screen allows you to add up to eight replies. If you have more than eight replies, you can add them in the forms editor after clicking the **Done** button.

9. Click the **Next** button.
10. This screen indicates that you have entered the basic poll information and should click the **Done** button to further edit and view the form's fields.
11. After clicking the **Done** button, the form editor launches so you can edit existing fields and properties. In addition, you can set post back and schedule information, add metadata and comments, change the title, and submit the poll for publication.

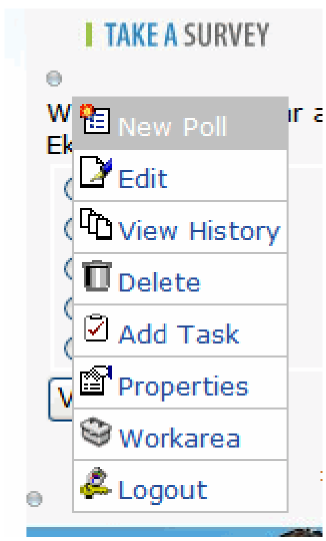
Note: From this screen, you can add more replies to your poll by right clicking on the choices field and clicking properties. See Also: "Inserting a Choices Field" on page 7-245.

Replacing a Poll from the Web Site

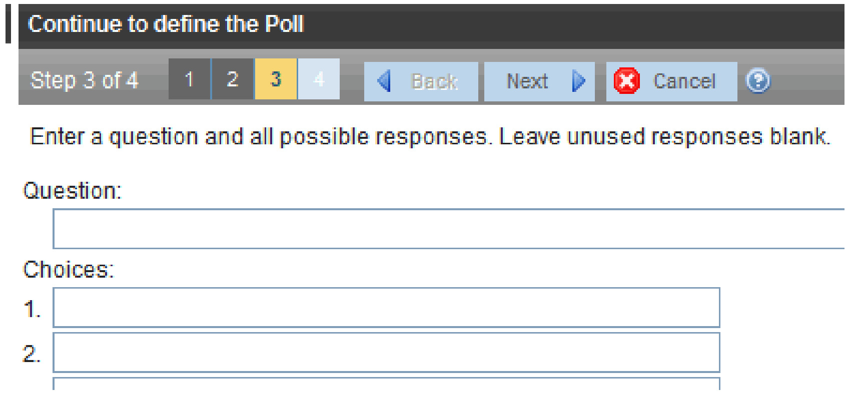
When logged into Ektron CMS400.NET, you can right click on a poll and choose **New Poll** to replace the current one. The title of the poll, its ID, and properties stay the same. Only the questions and answers change.

To replace a poll, follow these steps.

1. Log into Ektron CMS400.NET.
2. Navigate to the Web page that hosts the poll.
3. At the location of the poll, click the silver access point and choose **New Poll**.



4. The Workarea opens, indicating you are at step three of the Poll Wizard.



5. Add a new question to the **Question** text box.
6. Add possible responses to the **Choices** text boxes.
7. Click **Next**.
8. Click **Done**.
9. The form editor launches, allowing you to edit the fields and properties. In addition, you can set post back and schedule information, add metadata and comments, change the title and submit the poll for publication.
10. Once published, the updated poll appears on the site.

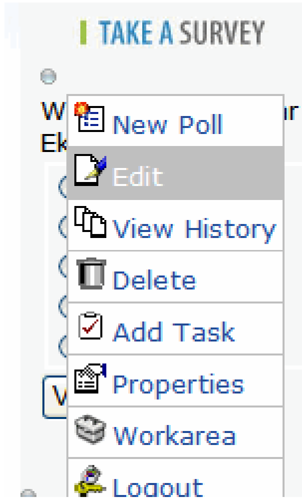
Editing a Poll from the Web Site

To edit an poll on a Web site, follow these steps.

Warning! If you are logged into the site and create a new poll by right clicking on a poll selecting **New**, the existing poll is replaced by the new one.

1. Log on to the Ektron CMS400.NET Web site.

2. Click the sliver access point on the poll you want to change and click **Edit**.



3. Make changes to the poll using the Forms editor.
4. Submit the poll to the Approval Process.

Creating a Survey

To create a new survey, follow these steps.

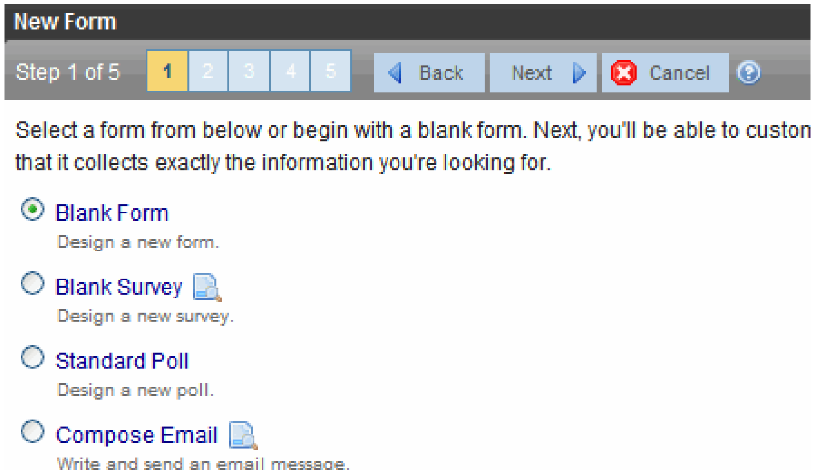
Note: You can also create a new edition of a survey in another language by copying an existing form and translating it. For more information, see "Translating Content to Another Language" on page 7-112.

Note: For the steps to create a new poll, see "Working With Polls" on page 7-275. For the steps to create a new form, see "Creating a New Form" on page 7-222.

---

1. Consult with your Ektron CMS400.NET administrator about the folders in which you should create polls. See Also: "Forms Must Use Template with FormBlock Server Control" on page 7-281
2. From the **View** menu, click **Language**, and select the language in which to create the form.
3. Click the **New** > **HTML Form/Survey**.
4. The New Form screen appears.

.



Note: When you choose Standard Poll or Blank Survey, the number of steps in the Forms Wizard changes from five steps to four steps. This happens because the Assign Tasks step is removed.

5. Choose **Blank Survey**. You can click the preview icon ( ) next to any sample form to preview it before choosing it.
6. Click the **Next** button.
7. Enter or edit the form's **Title** and **Description**.

- **Title** - used to reference the survey within the Workarea (required)
  - **Description** - an extended description of the survey.

8. Click the **Next** button.
9. This screen lets you determine what happens after the site visitor completes the survey. The choices are:

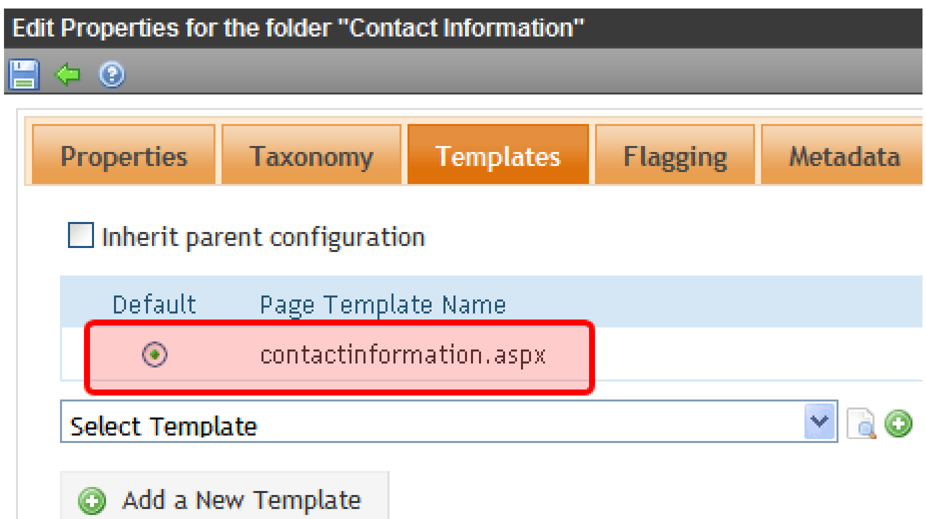
- **Display a message** - See "Composing the Postback Message" on page 7-224
- **Redirect to a file or page - Use the Library Identify a file or a page on your Web site that is launched when the visitor completes the form**
  - An example of a file is a white paper (a common file format is .PDF) that the visitor requested
  - An example of a page is one that lets the visitor download your product
  - **Redirect to an action page and forward form data** - See "Redirect to an Action Page and Forward Form Data" on page 7-226
  - **Report on the form** - See "Making Form Results Available to Site Users" on page 7-227

10. Click the **Next** button.

11. A screen indicates that you have entered basic information about the survey and should click the **Done** button to enter the survey's content. This procedure is described in "Creating a Form's Content" on page 7-228.

Forms Must Use Template with FormBlock Server Control

HTML forms can only be created in a folder whose template uses a FormBlock or Poll server control. In the Intranet sample site supplied with Ektron CMS400.NET, the Contact Information folder uses such a template, contactinformation.aspx (illustrated below).



You can modify this template as needed or create your own form template and assign it to any folder via its Folder Properties screen.

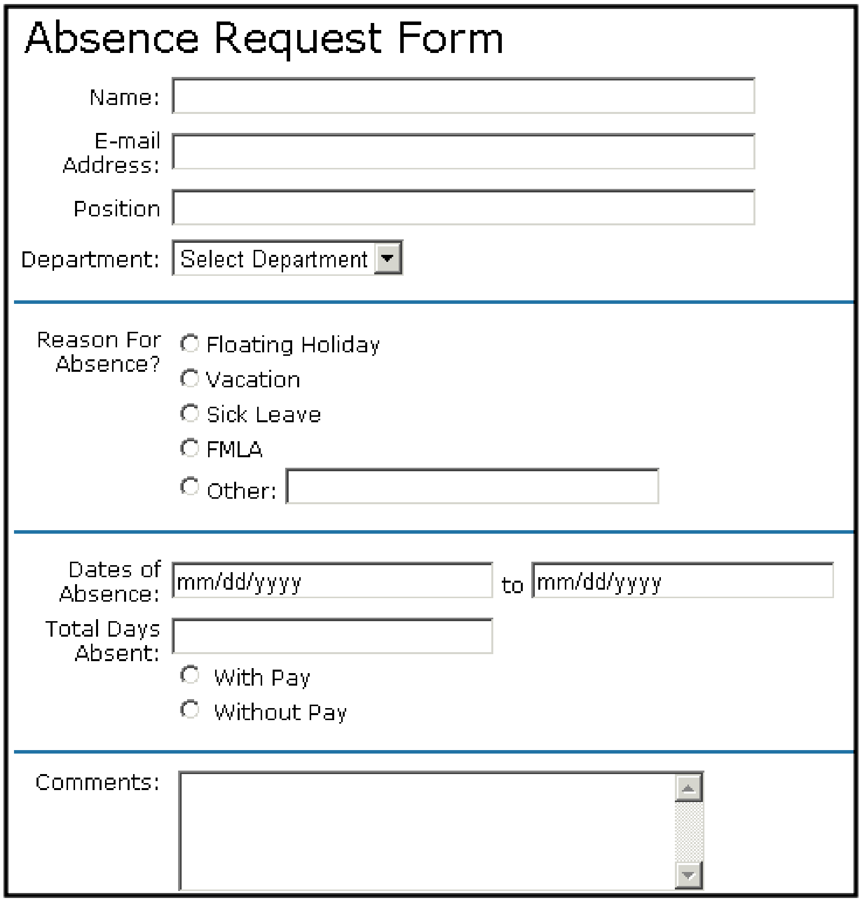
Since, by default, folders inherit properties from their parent folder, any new folders created under a parent folder use the correct template. Of course, you can break inheritance and assign a custom template for any folder.

FormBlock Server Control

The FormBlock server control displays a content block associated with a form.

Warning! If you create a template for an existing form content block, you must manually change its quicklink to point to the new template. This change does not occur automatically. This procedure is described in "Updating Default Template for Multiple Quicklinks" on page 8-24.

When added to a template and visited, the form content block might look like this. You can change the display to suit your needs by modifying its properties.



This subsection contains the following topics:

- "FormBlock Server Control Properties" on page 7-282
- "Automatic versus Manual Generation of Form Tags" on page 7-284

FormBlock Server Control Properties

The following table explains the properties of the FormBlock server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
AddValidation	The AddValidation property is obsolete and ignored. It has no effect. It is always true.	Boolean
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9.	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DefaultFormID	The ID of a FormBlock that appears where you inserted this server control if no other form block is identified. If you don't know the ID number of the form block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9.	Long
DynamicParameter	To make this form block dynamic, select **id**. When you do, this server control uses the form block passed as a URL parameter.	String
Fields	Displays a list of fields that are defined in the form. These fields are read only. This is an excellent way of displaying the field names used on the form. With this list of names, you can create events using the fields without having to enter the Workarea to see the names.	FormFieldCollection
Hide	Used to hide a form block in design time and run time. **True** = Hide form block **False** = Show form block	Boolean
IncludeTags	Determines if tags are generated automatically of manually. See Also: "Automatic versus Manual Generation of Form Tags" on page 7-284	Boolean
Language	Set a language for viewing form content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Value	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Automatic versus Manual Generation of Form Tags

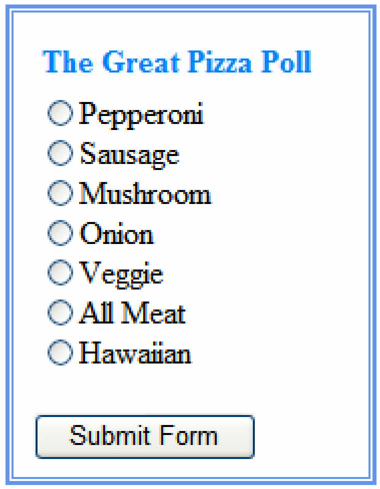
When using the FormBlock Server control's `IncludeTags` property, you have two options.

Option	Recommended if you are developing	How to Enable
Let Ektron CMS400.NET generate form tags automatically	A pure script .aspx page	Set `IncludeTags` property to **True**.

Modify HTML form tags in the .aspx file	An .aspx page and associated code-behind web form	Set IncludeTags property to **False**.
		Here is the default .NET generated form tag:
		`<form id="Form1" method="post" runat="server">`
		Modify the form tag as indicated in red:
		`<form id="Form1" method="post" runat="server" OnSubmit=”return EkFmValidate(this);”>`

Poll Server Control

The Poll server control displays a poll or survey created from an Ektron CMS400.NET form on a Web page. When added to a template and visited, the poll might look like this. You can change a poll's appearance by modifying its properties.



Ektron recommends displaying a poll or survey with a Poll server control, because it provides great flexibility with the poll's appearance. Typically, developers want a poll or survey in a small section of a Web page, not the main content. By using the `EnableAjax` property, you can display the results in the same area as the poll or survey without refreshing the entire page.

However, if you want the form/poll/survey's response to be either **Redirect to a file or page** or **Redirect form data to an action page**, you must use a Form Block server control to display the form on a Web page. See Also: "FormBlock Server Control" on page 7-281

This subsection contains the following topics:

Poll Server Control Properties

The following table explains the properties of the poll server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
(Poll ID)	The ID of the poll that appears where you inserted this server control. If you don't know the ID number of the form block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
AddValidation	The AddValidation property is obsolete and ignored. It has no effect. It is always true.	Boolean
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DynamicParameter	To make this form block dynamic, select **ekfrm**. When you do, this server control uses the form block passed as a URL parameter.	String
EnableAjax	Displays the poll or results, using an iFrame, in the area of the page that contains the poll without disturbing its surrounding contents. The default is true. **True** = Polls and results are shown in an iFrame without modification or a refresh of surrounding contents. **False** = The poll and the results replace the Web page's content.	Boolean
Fields	Displays a list of fields that are defined in the form. These fields are read only. This is an excellent way of displaying the field names used on the form. With this list of names, you can create events using the fields without having to enter the Workarea to see the names.	
Hide	Used to hide a form block in design time and run time. **True** = Hide form block **False** = Show form block	Boolean
Include Tags	Determines if tags are generated automatically of manually. See Also: "Automatic versus Manual Generation of Form Tags" on page 7-287	Boolean
Language	Set a language for viewing form content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**.	Boolean

Property	Value	Data Type
	True - Suppress wrap tags. **False** - Allow wrap tags.	
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Automatic versus Manual Generation of Form Tags

When using the poll server control's `IncludeTags` property, you have two options.

Option	Recommended if you are developing	How to Enable
Let Ektron CMS400.NET generate form tags automatically	A pure script .aspx page	Set `IncludeTags` property to **True**.

Modify HTML form tags in the .aspx file	An .aspx page and associated code-behind web form	Set `IncludeTags` property to **False**.
		Here is the default .NET generated form tag:
		`<form id="Form1" method="post" runat="server">`
		Modify the form tag as indicated in red:
		`<form id="Form1" method="post" runat="server" OnSubmit=”return EkFmValidate(this);”>`

Working with Smart Forms

Warning! This section explains how to create and manage Smart Forms using the eWebEdit400 editor. For documentation on doing this via eWebEditPro+XML, see http://www.ektron.com/manuals/CMS400/v76/adminmanual.pdf > "Managing Content "> "Working with Smart Forms" > Using the Data Designer with eWebEditPro +XML.

Warning! You cannot use eWebEditPro+XML to edit Smart Forms created with eWebEdit400.

Ektron CMS400.NET's Smart Forms give you access to the power of XML by separating Web content from presentation. In addition to hiding the XML tags from users, Ektron CMS400.NET can serve content to various presentation devices (PDAs, mobile phones, etc.), saving users from the tedium of creating duplicate content. Review and revision are drastically reduced because the accuracy and format of your Web content are managed using XML schema validation.

Using Smart Forms with Ektron CMS400.NET provides the following benefits:

- Strictly enforce content and page layout with Ektron's editor (Ektron eWebEditPro+XML), XSLT, and WYSIWYG templates for content contributors
- Deliver content to multiple devices (e.g., PDAs, mobile phones, etc.)
- Easily share content across B2B transactions
- Advanced XML authoring: Ektron's highly-acclaimed XML editor, Ektron eWebEditPro+XML, lets developers hide XML tags from content contributors and provides an easy-to-use WYSIWYG editing interface

The following are examples of industries that can benefit from XML Indexing.

Industry	Use XML indexing to find
Health Care	A cardiologist whose practice is located in your city
Human Resources	Sick time policy
Real Estate	A house with a zip code of 03031 priced under $200,000
Hospitality	A hotel in Boston
Online Retail	Fleece gloves for men
Educational	A course in .NET programming

Smart Forms are used in Ektron CMS400.NET to define the necessary files to display, save, and validate the content properly. This section explains how to take advantage of Ektron CMS400.NET's Smart Forms.

See Also:

- "Benefits of Using XML Data" on page 7-289
- "Before You Manage Smart Forms" on page 7-290
- "Adding a New Smart Form" on page 7-291
- "Assigning Smart Forms to a Folder" on page 7-376
- "Viewing Smart Forms" on page 7-378
- "Editing Smart Forms" on page 7-383
- "Creating Smart Forms Based on Existing Configurations" on page 7-385
- "Viewing Data Designer XSLTs" on page 7-386
- "Deleting Smart Form Configurations" on page 7-387
- "XML Indexing" on page 7-389=

Benefits of Using XML Data

This section explains why you should use XML as opposed to HTML content for your Web site. Because of XML's advantages, Ektron recommends using XML content whenever possible. Below are several reasons why XML is the preferred format for managing content.

- **Standardized format for capturing content**
  - You can create an XML Smart Form then require anyone creating content in a folder to use the form. The result is more uniform and consistent information.
  - Within an XML Smart Form, you can require authors to complete fields in a specified format. So, for example, if you want the author to enter a date, XML can ensure that it's captured in a standard format. Several standard formats are provided (email address, zip code), and you can create your own.
- **Superior control over content display**
  - Authors contribute XML content but have virtually no control over its format. The Web administrator determines the format through an XSLT file. By customizing the XSLT, you can exert maximum control over your Web site's appearance.
  - Since one file controls several (even hundreds of) pages, you can update just that file to efficiently change the look of all pages whose content is based on the Smart Form.
- **Improved search capabilities**
  - Because XML data is captured in individual fields, you can focus a search on relevant fields. For example, if your XML content captures data about books, you can place an

author search on your Web site. Since that search only looks through content in the **Author** field, it is much faster and returns more reliable results than a search of HTML content.

Before You Manage Smart Forms

You must define each Smart Form that will be used in your Web site. Each form is assigned to a content folder or content item and lets you specify how XML content appears in the editor, is validated, and is displayed in an output device.

There are two ways to create a Smart Form.

- Using the WYSIWYG Data Designer
- Using external XML files

Note: You cannot use external XML files if your editor is eWebEdit400.

This section explains how to create and manage Smart Forms using both methods.

The Smart Form Toolbar

During the process of creating and managing Smart Forms, several toolbar buttons are available. The following table describes the buttons and their actions.

Button	Name	Description	More Information
	Add Smart Form	Create a new Smart Form from scratch or based on properties of an existing one	"Adding a New Smart Form" on page 7-291
	Back	Return to previous screen	
	Delete	Delete a Smart Form	"Deleting Smart Form Configurations" on page 7-387
	Edit	Edit a Smart Form created with external files	"Editing Smart Forms" on page 7-383
	Edit Data Design	Edit a Smart Form created with the Data Designer	"Editing Data Design Packages" on page 7-383

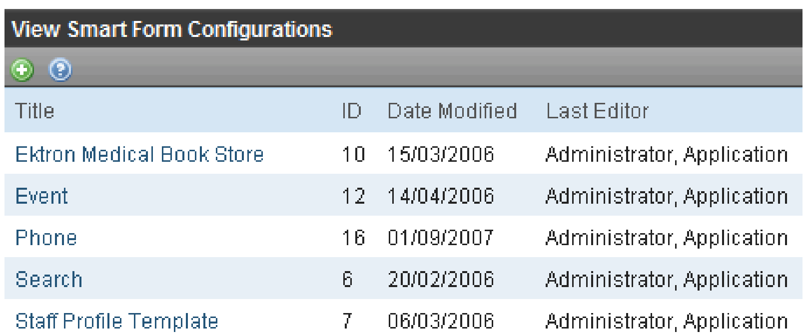
Button	Name	Description	More Information
	Save	Save changes	
	View XSLT	Display the XSLT for a Smart Form	"Viewing Data Designer XSLTs" on page 7-386

Accessing Smart Forms

Note: Only members of the Administrators group or those defined in Manage Members for Role: Smart Forms Admin screen can create or edit Smart Forms. See Also: "Defining Roles" on page 15-32

To access the Smart Form section of the Workarea, follow these steps.

1. In the Workarea, go to **Settings** > **Configuration** > **Smart Form Configuration**.
2. The View Smart Forms screen is displayed.



View Smart Form Configurations

Title	ID	Date Modified	Last Editor
Ektron Medical Book Store	10	15/03/2006	Administrator, Application
Event	12	14/04/2006	Administrator, Application
Phone	16	01/09/2007	Administrator, Application
Search	6	20/02/2006	Administrator, Application
Staff Profile Template	7	06/03/2006	Administrator, Application

From here, you can view, add, edit, and delete Smart Forms.

See Also:

- "Working with Smart Forms" on page 7-288
- "Before You Manage Smart Forms" on page 7-290

Adding a New Smart Form

When adding a new Smart Form, you have two options. The following sections explain both.

- "Adding a Smart Form Using the Data Designer" on page 7-292 (recommended)

- "Adding a Smart Form Using External XML Files" on page 7-293 (for example, XSLTs, schemas, etc.)

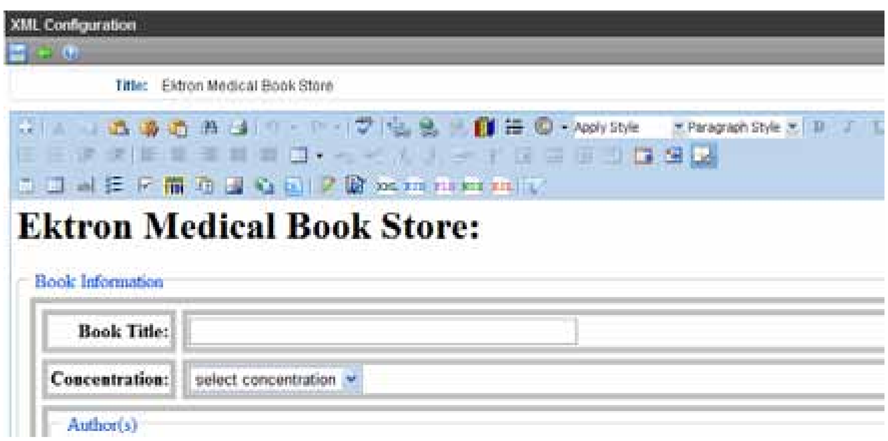
Note: To create a new Smart Form by copying and editing an existing one, see "Creating Smart Forms Based on Existing Configurations" on page 7-385.

Adding a Smart Form Using the Data Designer

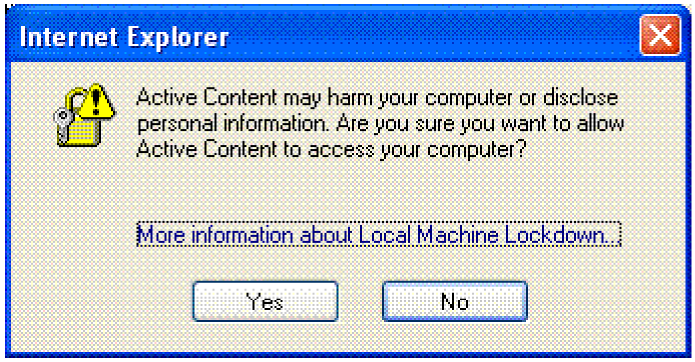
To add a Smart Form using the WYSIWYG Data Designer, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Add Smart Form button ( ).
3. The Add Smart Form screen is displayed.
4. Enter a **Title** for the Smart Form.
5. Click the Save button ( ).
6. The Smart Form Data Designer screen appears.

Note: If your computer runs Windows and your server's web.config file is set to use eWebEditPro+XML, Ektron CMS400.NET checks to see if eWebEditPro+XML is installed on your computer. If it is not, you are prompted to install it.



7. If eWebEditPro+XML is being installed, you may get the following error dialog.



To learn about why the dialog is appearing and help decide whether to click **Yes** or **No**, click the link **More information about Local Machine Lockdown**. A Windows Help topic appears and explains your options.

8. Design your Smart Form configuration in the Data Designer.

   See "Using eWebEdit400 to Create Smart Forms" on page 7-296 for information about creating XSLTs using the Data Designer.

9. Click the Update button ( ).

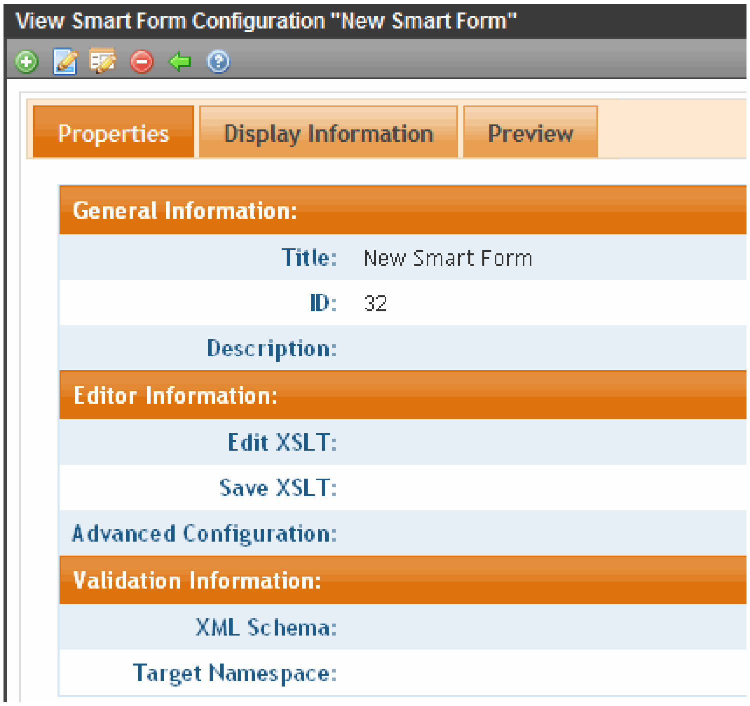
You are ready to assign the Smart Form to a folder or content item. See "Assigning Smart Forms to a Folder" on page 7-376 for more information.

Adding a Smart Form Using External XML Files

Warning! Release 7.5.2 and up of Ektron CMS400.NET supports two editors: eWebEditPro+XML and eWebEdit400. If you want users to insert Smart Form information using eWebEdit400, you cannot create or edit Smart Forms using external files. You must create and edit them using Ektron CMS400.NET's Data Designer.

To add a Smart Form using external XML files, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Add Smart Form button ( ).
3. The Add Smart Form screen is displayed.
4. Enter a **Title** for the Smart Form.
5. Click the Save button ( ).
6. The Smart Form Data Designer screen is displayed.
7. Click the Back arrow ( ) to exit.
8. The View Smart Form screen for the new Smart Form is displayed.



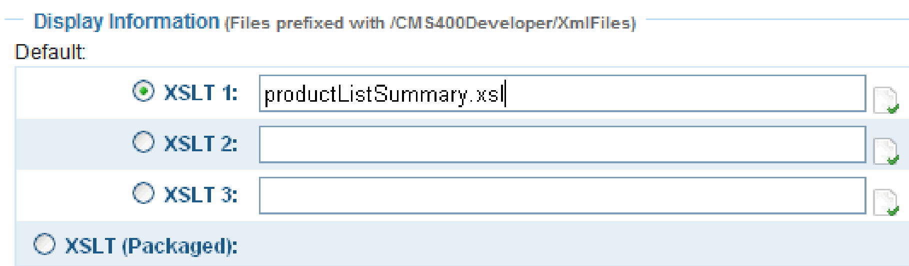
9. Click the Edit button ().
10. The Edit Smart Form screen is displayed.
11. Enter the necessary information using the following table as a reference.

Smart Form Fields

Section	Field	Description
Generic Information	Title	Name given to Smart Form.
	ID (display only)	ID number assigned when configuration is created.
	Description	Detailed description given to configuration by its creator or last editor.
Editor Information	Edit XSLT	XSLT applied to content while being edited.
	Save XSLT	XSLT used to transform the XML when saved to the database.
	Advanced Configuration	XML file that contains display information, schema validation, and other advanced XML data.
Validation Information	XML Schema	The .xsd file used to validate the XML content
	Target Namespace	The default namespace used for outgoing XML
DIsplay Information	XSLT1	XSLT 1 applied to XML data when viewed on a device
	XSLT2	XSLT 2 applied to XML data when viewed on a device
	XSLT3	XSLT 3 applied to XML data when viewed on a device
	XSLT Packaged	XSLT package applied to XML data when viewed on a device

Note: When a Smart Form is created using the Data Designer, a default XSLT is created based on the configuration. To learn about modifying the packaged XSLT, see "Editing a Smart Form's XSLT" on page 7-385.

12. Specify the default display XSLT for the configuration by clicking the corresponding radio button.



13. Click the Save button ( ).

XML File Verification

A verification button ( ) appears to the right of some fields on the Add Smart Form screen. After you identify an XSLT or schema, you can click this button to verify that the file:

- exists in the location specified
- contains well-formed XML

Note: The XML Verification feature does *not* validate the contents of the XML file.

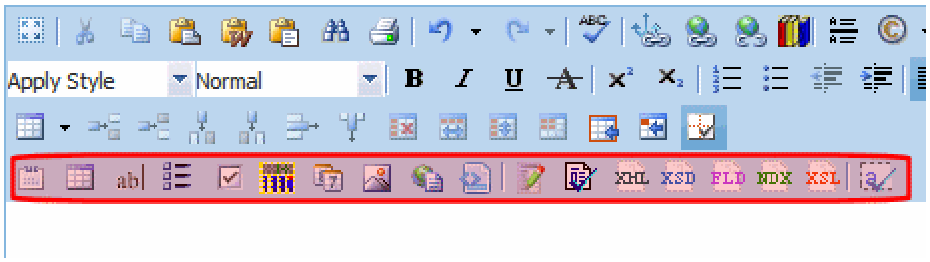
The following table explains possible results when clicking the verification button.

Display	Result	Description
✔	Verified	The file passes all verification parameters
✘	Not Verified	The file either: ▪ Does not exist in the specified location ▪ Does not contain well-formed XML Review current settings. Ensure the file is in the proper location, and that it contains well-formed XML

Using eWebEdit400 to Create Smart Forms

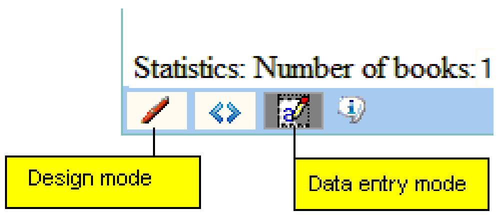
When you use the Data Designer, eWebEdit400 changes in the following ways.

- An additional row of toolbar buttons (circled below) lets you add Data Designer fields to the screen.



To edit the properties of any field on the screen, select the field, right click the mouse, and select **Field Properties**.

- two buttons at the bottom of the screen let you switch between Design mode and Data Entry mode. (For more information, see "Inserting a Field Type" on page 7-297.)



- *Data Design mode* - lets you insert and remove fields from the data entry screen
- *Data Entry mode* - simulates the screen's appearance during data entry

Inserting a Field Type

eWebEdit400 provides several options that let you insert or edit fields in the editor. Each field type is described below.

Field type	Icon	Description	For more information, see
Group Box		Groups related fields, which can be surrounded by a box and have a caption	"Group Box" on page 7-308

Field type	Icon	Description	For more information, see
Tabular		Same as group box, but fields can be presented in a table format	"Tabular Data " on page 7-317
Text	ab|	Free text field; user can format text using the editor	"Text Field " on page 7-323
Choices		Several choices appear on screen. User checks appropriate boxes. All user choices are inserted as values within single XML tag.	"Choices " on page 7-327
Checkbox		User's response is either checked or unchecked	"Checkbox " on page 7-322
Calculated		Performs calculations using other fields on the screen	"Calculated Field " on page 7-332
Calendar		Lets user insert a date by clicking a calendar	"Calendar Field " on page 7-341
Image Only		Lets user insert an image	"Image Only Field " on page 7-344
Link Field		Lets user insert a link to a file, such as a PDF document	"File Link Field " on page 7-346
Resource Selector		Lets user place content or folders on a Smart Form.	"Resource Selector Field " on page 7-349
Field Properties		Lets you change the properties of any field. Select the field then click this button. Note: This option is also available on the right click menu.	
Validate		Ensure the screen contains valid XML. This button is available in both data entry and data design modes.	

Field type	Icon	Description	For more information, see
Display internals of Data Design		See "Viewing an Internal Representation of the Design" on page 7-299	
Validate		Validates data when previewing data entry	

Deleting a Field from the Screen

To remove a field from the screen, follow these steps.

1. Move the cursor to the field. The field's background color changes.

2. Press <Ctrl>+<X> to remove the field.

Usually, the field label is not deleted when you delete a field. To delete the label, select it and press <Ctrl>+<X>.

Previewing the Screen

If you want to view how the screen will appear to the person who will complete the screen, click the View Data Entry button (). (See Also: "Inserting a Field Type" on page 7-297.)

Viewing an Internal Representation of the Design

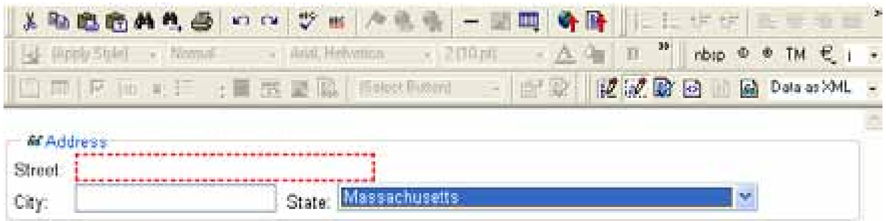
Several toolbar buttons display an internal representation of the Data Design. The buttons are described below.

Button	Description	Example
	The XML data document	- <root> - <Information> <LastName /> <FirstName /> <MiddleName /> <Gender>male</Gender> <Address /> <city /> <state>MA</state> <Zip /> <SSN /> <BDate /> <HomeTel /> <WorkTel /> <x-ray /> - <Dental_Insurance> <Field1 /> <OtherInsurance>N/A</OtherInsurance> <Account_Number>N/A</Account_Number> </Dental_Insurance> <medication /> <lastAppointment /> <clincal /> </Information> </root>
	Defines the structure, content, and semantics of an XML document	- <xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified" xmlns:xs="http://www.w3.org/2001/XMLSchema"> - <xs:element name="root"> - <xs:complexType> - <xs:sequence> - <xs:element name="Information"> - <xs:complexType> - <xs:sequence> - <xs:element name="LastName"> - <xs:simpleType> - <xs:restriction base="xs:string"> <xs:minLength xmlns:xs="http://www.w3.org/2001/XMLSchema" value="1" /> </xs:restriction> </xs:simpleType> </xs:element> - <xs:element name="FirstName"> - <xs:simpleType> - <xs:restriction base="xs:string">. .. ..

Button	Description	Example
FLD	A list of all fields and information about them (as XML)	<fieldlist> <field name="LastName" datatype="string" basetype="text" xpath="/root/Information/LastName" title="Last Name">Last Name</field> <field name="FirstName" datatype="string" basetype="text" xpath="/root/Information/FirstName" title="First Name">First Name</field> <field name="MiddleName" datatype="string" basetype="text" xpath="/root/Information/MiddleName" title="Middle Name">Middle Name</field> <field name="Gender" datatype="choice" basetype="text" xpath="/root/Information/Gender" title="" datalist="IDAPK3KC">Gender</field> . .. .
NDX Index	xpath information for any indexed field on the screen	<indexable> <xpath type="string">/root/Information/SSN</xpath> <xpath type="string">/root/Information/HomeTel</xpath> <xpath>/root/Information/WorkTel</xpath> </indexable>
XSL	The Data Design document's presentation XSLT	<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform"> <xsl:output method="xml" version="1.0" omit-xml-declaration="yes" indent="yes" encoding="utf-8" /> <xsl:strip-space elements="*" /> <xsl:variable name="ektdesignns_fieldlist" select="/*/ektdesignpackage_list/fieldlist" /> - <xsl:template match="/" xml:space="preserve"> <p> </p> - <fieldset id="Information" title="Demographic Information"> <legend>Patient Information</legend> - <div> - <p> Last Name <xsl:text> </xsl:text> <xsl:value-of select="/root/Information/LastName" /> First Name <xsl:text> </xsl:text> <xsl:value-of select="/root/Information/FirstName" /> .. ..

Sample Screen Design

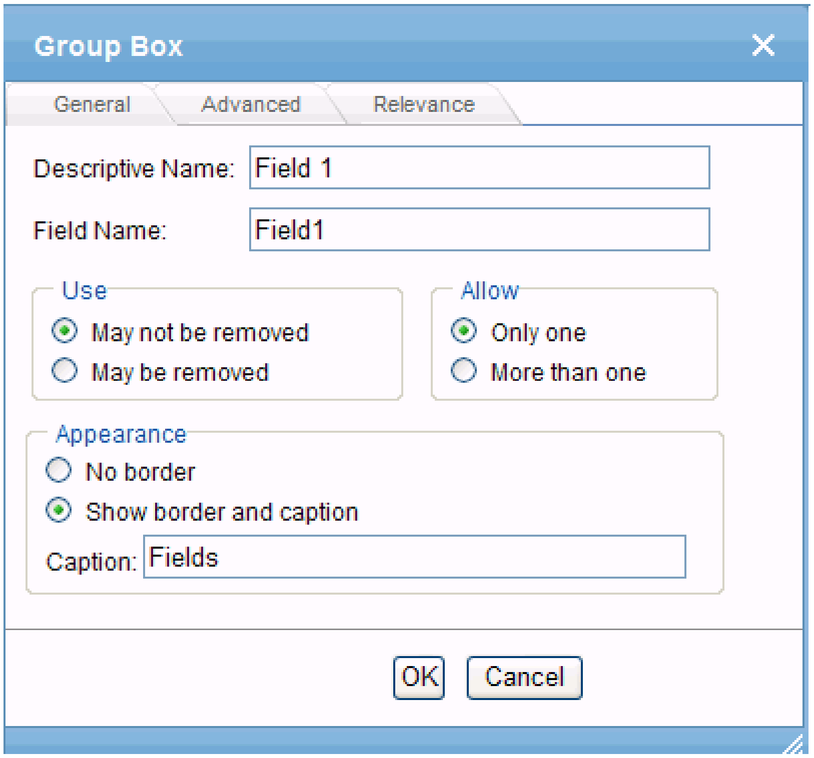
This section provides a brief overview of designing a screen, so that you can learn how the pieces fit together. Let's assume you want the screen to look like this.



Note: The following example helps you understand how to create a simple data entry screen. It does not explain how to save a screen so that a user can enter data into it. When you are ready to create a screen, ask your system administrator to help determine a method for saving it and making it available to users for data entry.

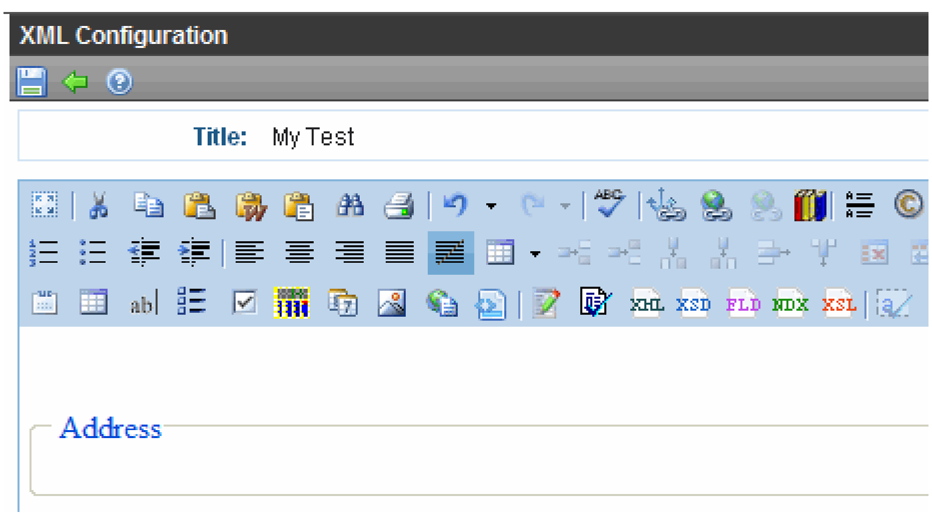
To create such a screen, follow these steps.

1. Sign on to the eWebEdit400 Workarea as an administrator or a Smart Form administrator. See Also: "Defining Roles" on page 15-32
2. Go to **Settings** > **Configuration** > **Smart Form Configurations**.
3. Click the Add button ( ).
4. Assign the form a title. For example, Sample Smart Form.
5. Click the Save button ( ).
6. The screen refreshes and the editor appears.
7. Reviewing the screen design (shown above), you notice that the fields are surrounded with a box and a caption. To achieve this, click the Group Box button ( ). Then, complete the dialog as shown below.



Note: Later, each field on the dialog is documented. Since this section provides an overview, it does not delve into those details.

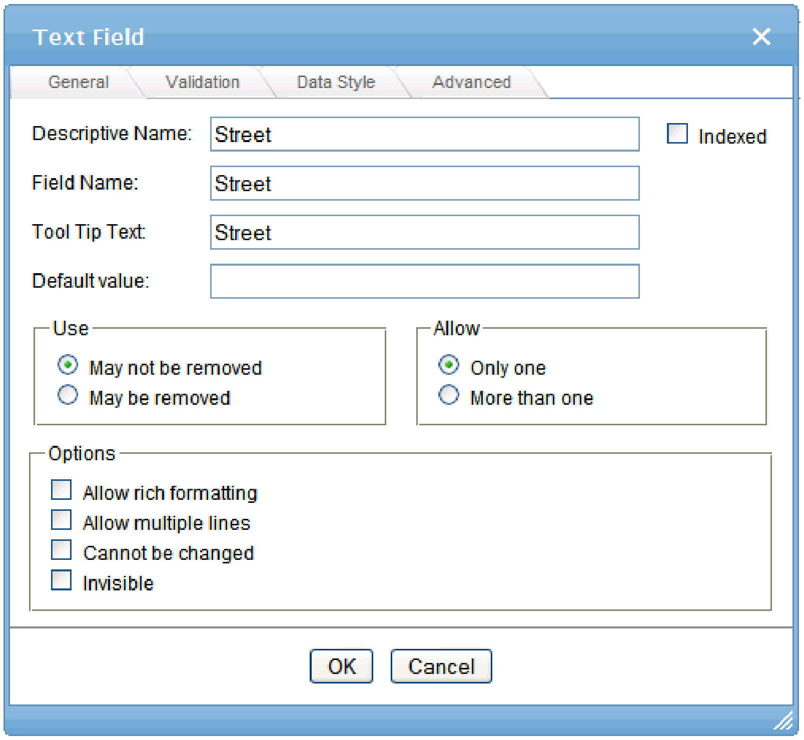
At this point, the screen looks like this.



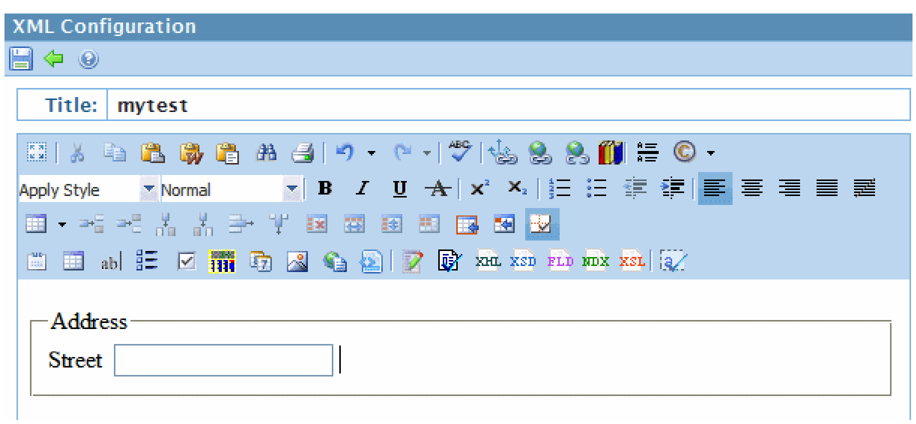
8. The next field, Street, should let the user enter text. So, place the cursor into the Address box and type **Street**.

9. Place the cursor to the right of **Street** and click the text field icon (abl).

10. Complete the dialog as shown below.

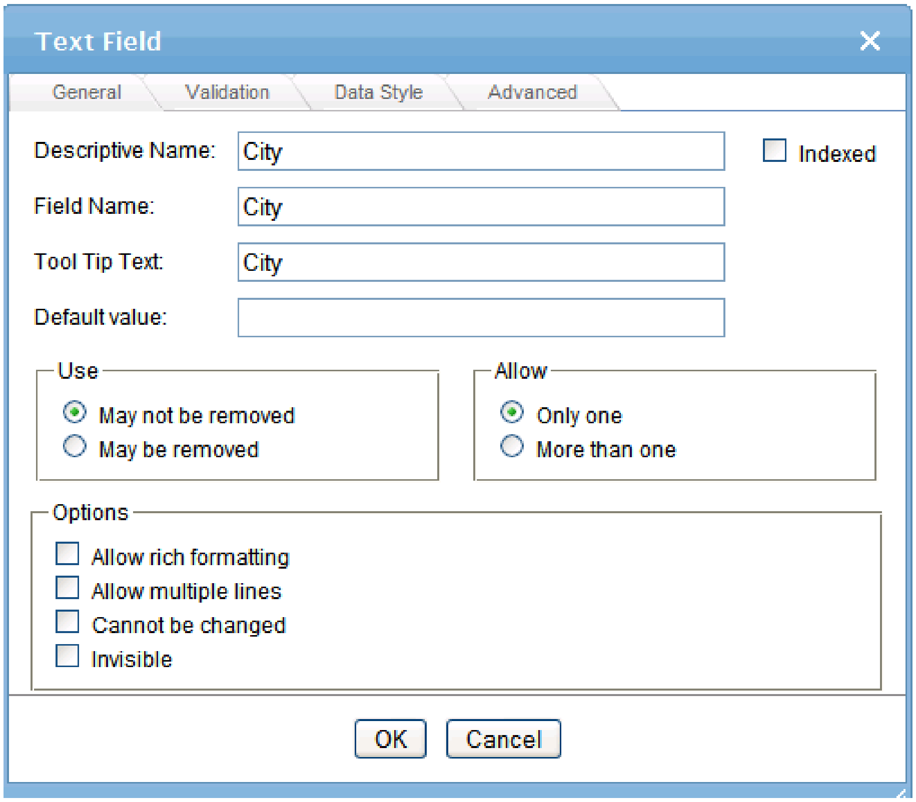


Now, the screen looks like this.

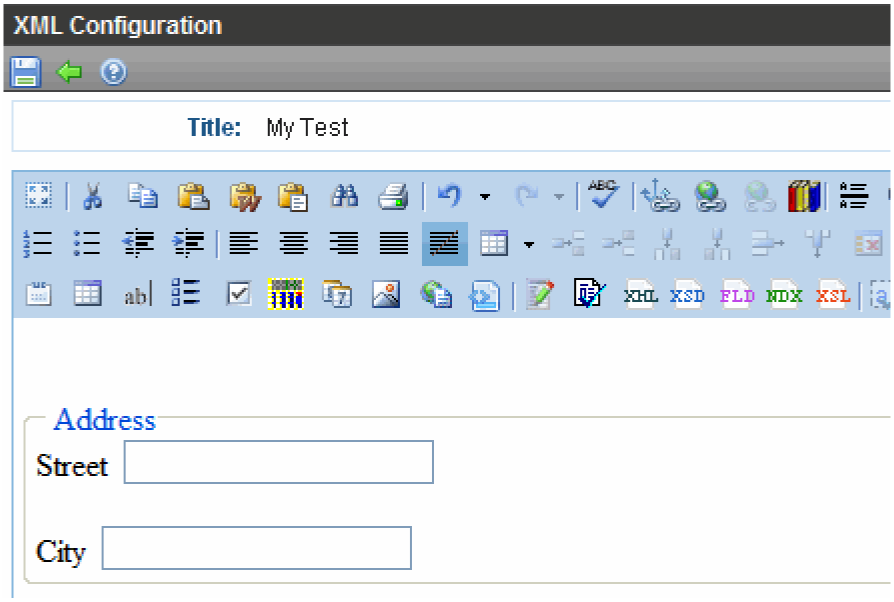


11. The next field, **City**, should also let the user enter text. Assume that you want **City** to appear in the line below **Street**. To make room for **City**, move the cursor to the end of the **Street** field and press <Enter> to create a new line. Then type **City**.

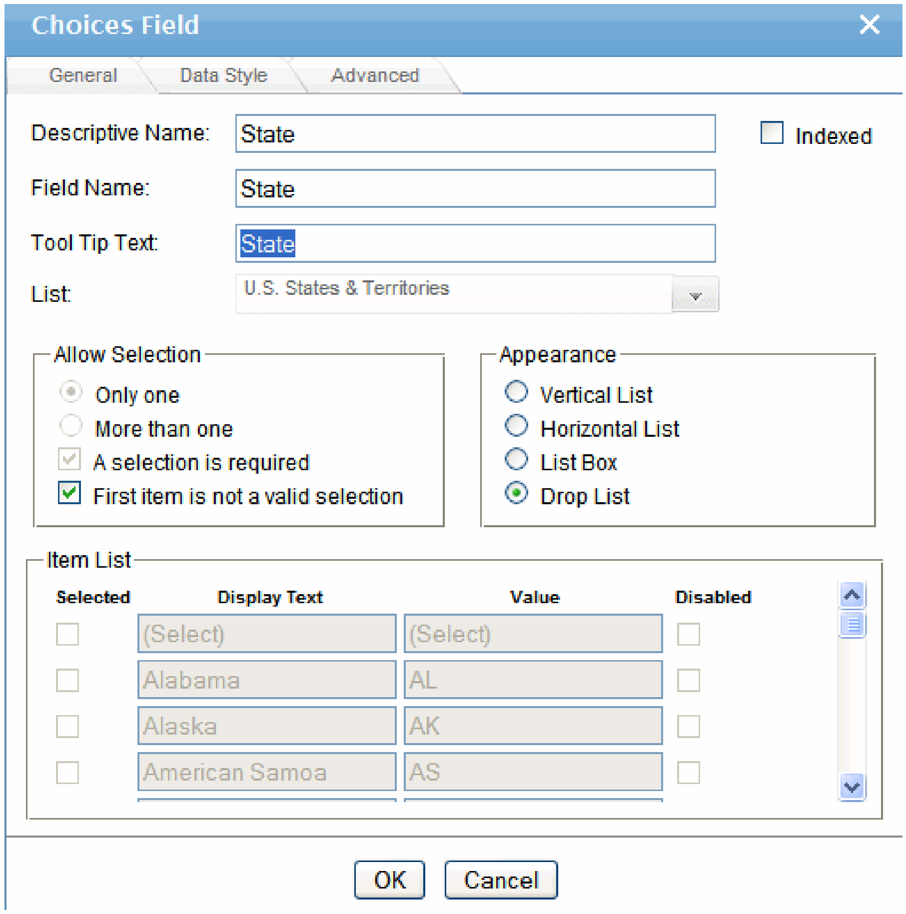
12. Click the plain text field icon (ab|). Then, complete the dialog as shown below.



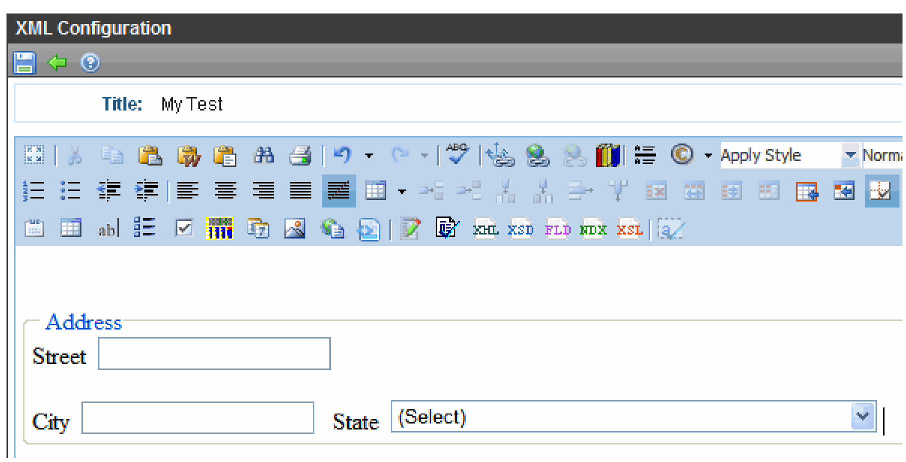
Now, the screen looks like this.



13. The next field, **State**, should let the user choose from several states. Assume that you want the state to appear to the right of **City**. Move the cursor to the end of the **City** field and drag the Choices Field field icon () into that space. Then, complete the dialog as shown below.



Now, the screen looks like this.



The above example is very simple and does not use the Data Designer's more powerful and flexible features. To learn more about Data Designer, read the rest of this chapter.

Data Designer Field Types

To help you use all of the Data Designer's capabilities, this section explains each field type you can insert. They are very flexible and can accommodate all of your needs when designing a data entry screen.

The Data Designer supports the following field types.

- "Group Box " on page 7-308
- "Tabular Data " on page 7-317
- "Checkbox " on page 7-322
- "Text Field " on page 7-323
- "Choices " on page 7-327
- "Calculated Field " on page 7-332
- "Calendar Field " on page 7-341
- "Image Only Field " on page 7-344
- "File Link Field " on page 7-346
- "Resource Selector Field " on page 7-349

Group Box

A Group Box field lets you group related fields together on a screen by surrounding them with a box and optionally placing a caption above them.

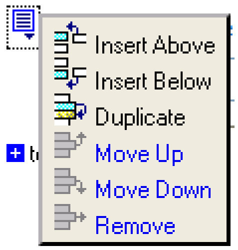
After you insert a Group Box field, to insert other kinds of fields within the box, place the cursor inside the box then select a field type button.

Note: The tabular data field type might better accommodate your needs. See "Tabular Data " on page 7-317.

Advantages of Grouping Fields

One advantage of grouping fields is that you can allow the user in Data Entry mode to add another instance of a group.

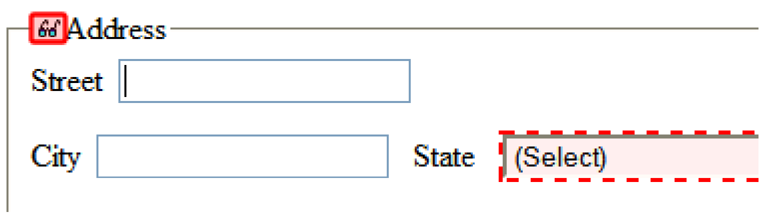
For example, if a screen collects several fields of information about each telephone call, the user could simply click the **Insert Below** button to insert a new group of fields, ready to collect information about the next call.



Another advantage of grouping fields is that you can suppress a group of irrelevant fields. For example, if a screen includes two groups of fields that collect information about hardcover and paperback books, and you are adding information about a hardcover book, you can collapse the paperback book questions because they are not relevant to your current task.

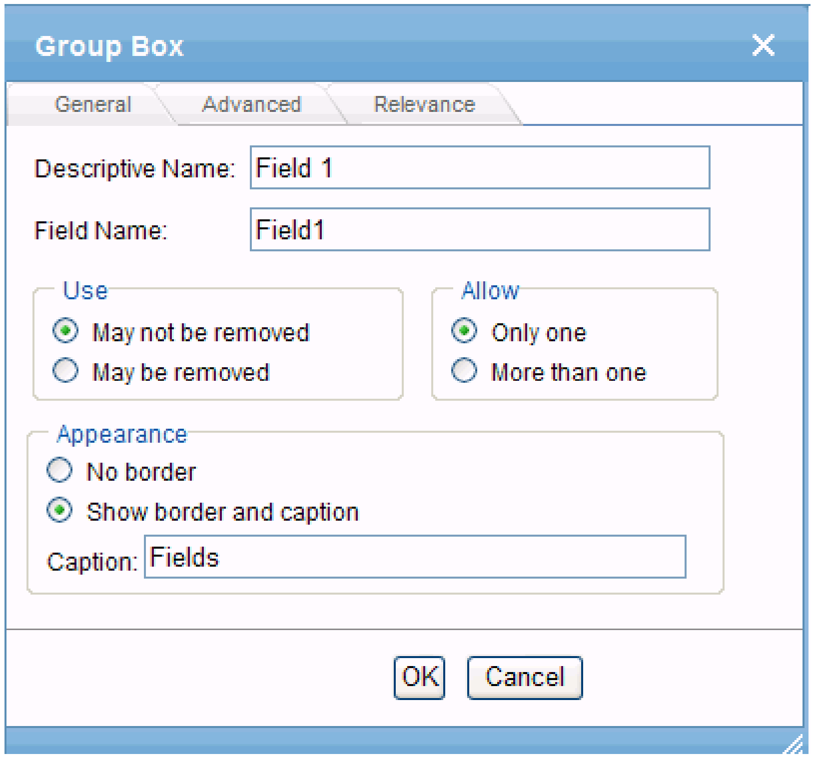
Use the eyeglass icon to expand or collapse the display of fields within a group.

Expanded Group Field with glasses icon highlighted



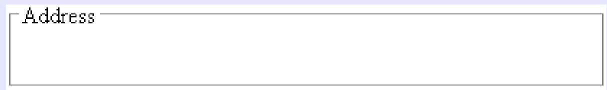
Collapsed Group Field

Dialog Box



Fields on the Group Box Dialog

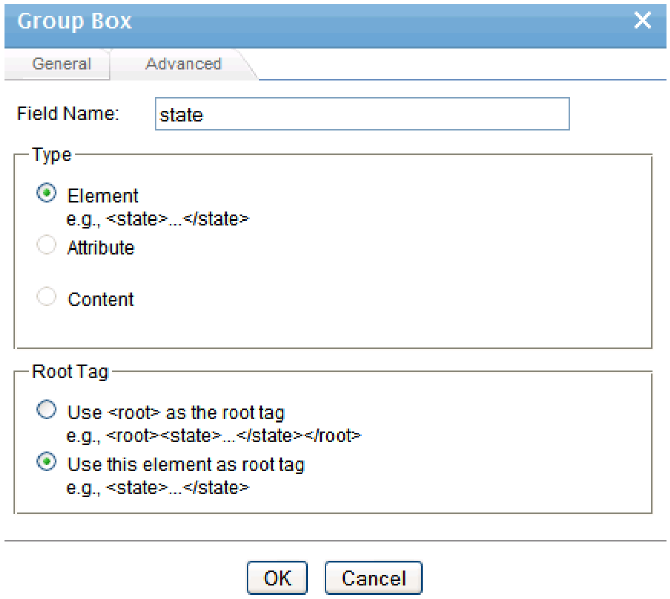
Field	Description
Descriptive Name	Enter the name of this field. Internally, the name is used as the field's caption. By default, the Data Designer assigns a name made up of **Field** followed by the next available number. So, the first field's default name is **Field1**, the second field's default name is **Field2**, etc. You can change the default if you want.
Field Name	Enter the field's element name. This defines the field in the XML.
Use	See "The Use Field" on page 7-369
Allow	See "The Allow Field" on page 7-370
Appearance	Click **Show border and caption** if you want to surround the fields in this group with a box. You can also create a caption to appear in the top line of the box. Click **No border** if you do not want to surround the fields in this group with a box.

Field	Description
Caption	If desired, enter text to describe this group of fields on the data entry screen. For example:  After you insert this field onto the screen, you can use eWebEditPro+XML's formatting capabilities to modify its size, font, color, and other attributes. Note: The Caption field only appears on this dialog when you create the Group Box field. If you later try to edit the field, the Caption field is not on the dialog. However, you can edit Caption text within the editor.
Advanced Tab	See "Advanced Tab" on page 7-366.
Relevance	See "Relevance Tab" on page 7-312.

Using a Tag Other Than <Root>

By default, Ektron CMS400.NET surrounds your Data Design with `<root>` tags. If you would like to replace the `<root>` tags with another element name, follow these steps.

1. After creating a new Data Design screen, insert a Group Box as the first field.
2. In the Group Box Dialog**'s Field Name** field, enter the root text.
3. On the Group Box Dialog box, click the **Advanced** tab.
4. In the Root tag section of that screen, select **Use this element as the Root tag** and press **OK**.



5. Place all other screen elements within the Group Box field.

Relevance Tab

The **Relevance** tab allows a group of fields to appear or disappear according to the value of other fields in the configuration. It appears on both the Group Box and Tabular Data Box dialogs.

Here are some example uses.

- A group of questions about pregnancy that appears only if the patient is female.
- A list of states that appears only if the user selects **United States** as his country.
- A list of car manufacturers. When a user chooses one, all of its models appear in a second list.

Fields that can be Used in Relevance Conditions

Only the following field types can be used in a Relevance condition.

- Check box
- Text
- Calculated
- Choices

Note: If using a **Choices** field, in the **Appearance** area of the dialog, you can only choose **List Box** or **Drop Box**. **Vertical List** and **Horizontal List** are not supported.

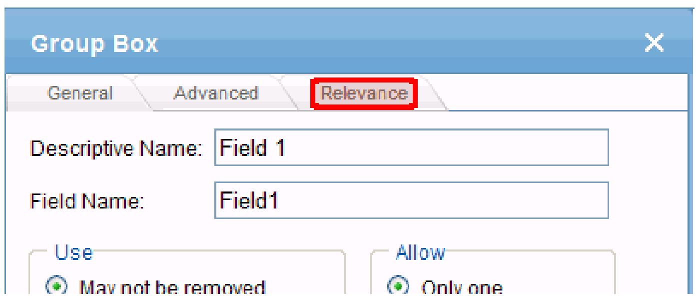
Applying Relevance to a Group Box Field

To apply relevance to a Group Box field, follow these steps.

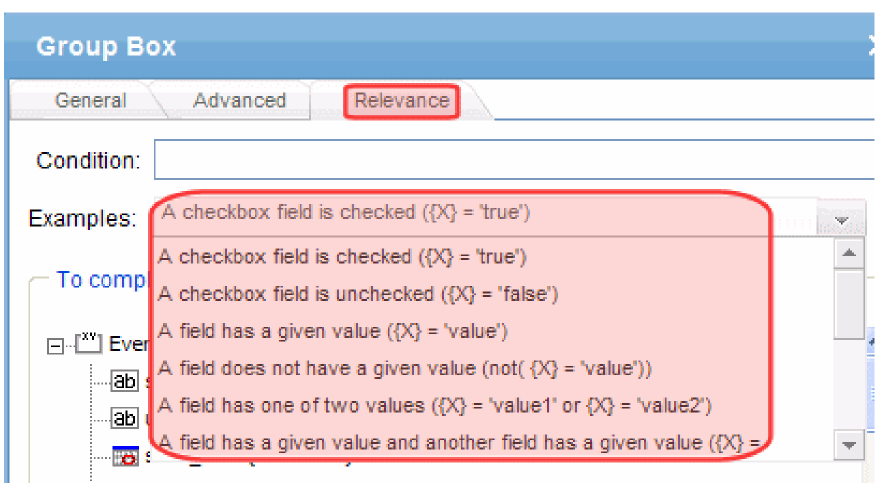
1. Edit a Smart Form configuration in Data Design mode to which you want to apply Relevance.
2. If necessary, insert the field(s) on which the group box's appearance will depend.
3. Insert a Group Box field. See Also: "Group Box " on page 7-308

Note: The location of the Group Box field is independent of the location of the fields to which you will apply conditions.

4. Click the Group Box dialog's **Relevance** tab (circled below).



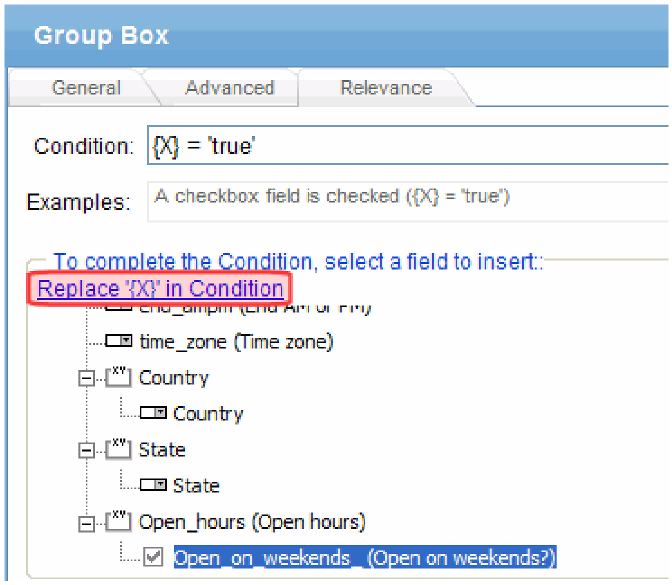
5. The **Relevance** tab appears.
6. Scroll through the list of sample conditions to determine which one best fits your situation.



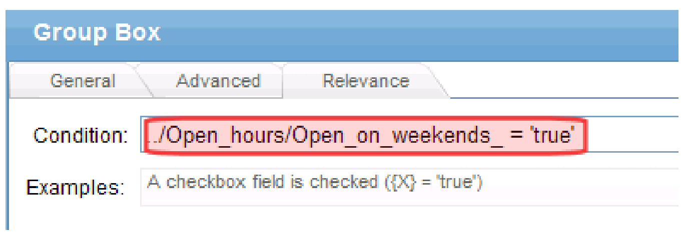
7. Select a field from the lower half of the screen to replace the first variable (X or Y) in the condition.

For example, if the condition is `A checkbox field is checked ({X} = 'true')`, click the check box field whose value must be `true` in order for this group to appear.

8. Click **Replace {X} in Condition**.



9. Notice that, in the **Condition** field, the variable was replaced by the selected field (see example below).



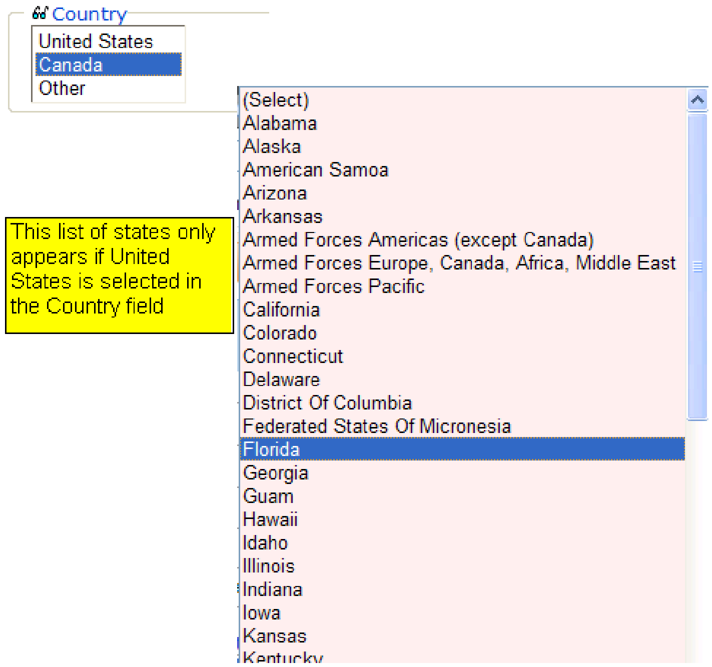
10. If the condition has another variable, repeat Steps 7 and 8.

11. Press **OK**.

It is a good idea to try out Relevance by switching to Data Entry mode and testing.

Example of Applying Relevance to a Group Box Field

Assume you want a list of states in the United States to appear only if a user selects United States from the Country field.



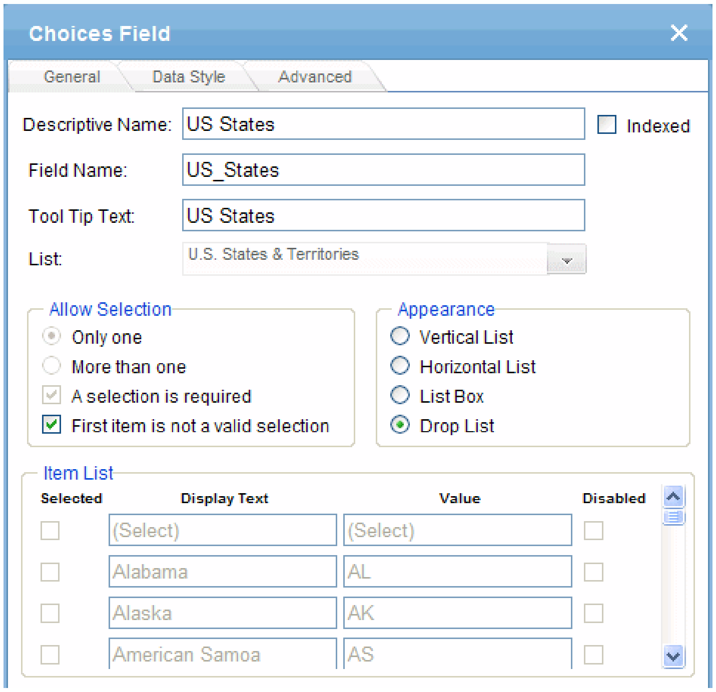
To accomplish this, follow these steps.

1. Create a Choices field and assign to it three values:

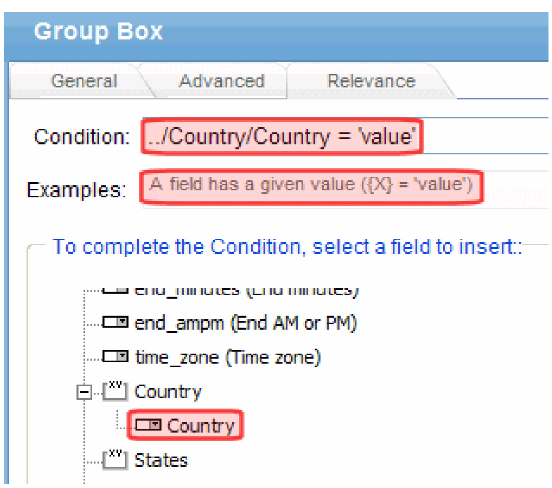
- United States
- Canada
- Other

   See Also: "Choices " on page 7-327

2. Create a Group Box field and name it **States**.
3. With that Group Box field, create a new Choices field.
   - Name it **US States**.
   - In its **List** field, select **U.S. States & Territories**.
   - In **Allow Selection**, check **First item is not a valid selection**
   - In the Appearance field select **Drop List**.



4. Place the cursor on the **States** Group Box field and click the Group Box toolbar button.
5. Click its **Relevance** tab.
6. Pull down the **Examples** list.
7. Click A field has a given value ({X} = 'value').
8. Scroll through the lower half of the screen until you see the **country** Choices field.
9. Click **Replace '{X}' in Condition**.
10. Notice that the **Condition** field now reads **../Country/Country** = **'value'**.



11. In the **Condition** field, replace **Value** with **United States**.

Warning! The text that replaces **Value** must *exactly* match the desired value of the selected field.

12. Click **OK**.

Tabular Data

The Tabular data button inserts a table into which you can place other types of fields. It's similar to a group box.

Tabular data's main advantage over a group box is that it lets you place fields in columns (see below).

Note: "Group Box" on page 7-308 describes many features that also apply to tabular data. Read that section to gain a full understanding of working with tabular data.

Creating a Table

First you insert the table. Then, you insert an appropriate type of field into each column. As examples, in the table above, the **Description** field type would be plain text, while the **In Stock?** field type would be choices.

If you insert a field into a table and its caption appears to the left of the data entry region (see below), move the caption to the column header (see second illustration below).

To access table commands (such as add row and add column), place the cursor inside a table cell and right click the mouse.

Warning! Only table cells into which you place a field are available to visitors of your Web page.

Editing Tabular Data

To edit tabular data, hover the cursor over a table border line until you see a four-headed arrow. Then, click the right mouse button and select **Field Properties**.

Note: You cannot reduce the number of columns by editing the Tabular Data dialog's **Columns** field. To delete a column, place the cursor in the column, right click the mouse, and select **Delete Column**.

How Tabular Data Forms XML Structure

Tabular data creates three levels of XML tags:

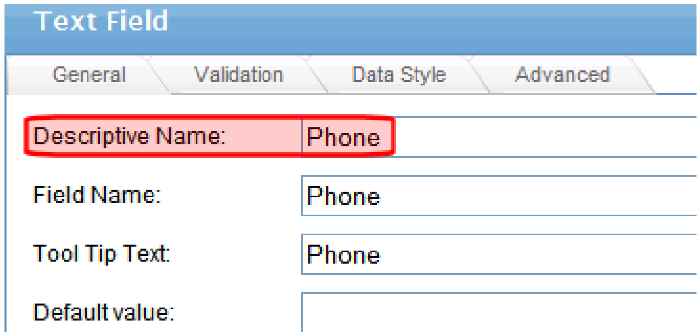
- inner level: each field in the table
- middle level: each row in the table
- outer level: the entire set of table data

To explain how this works, we'll use the following contact list as an example.

Name	Phone	Email
John Doe	555-1212	john.doe@example.com
Mary Smith	555-8765	msmith@example.net

How XML Tags are Assigned to Field Names

When you insert a field into a table, a dialog helps you define the field type. For example, when inserting a plain text field, the Plain Text Field dialog appears. On that dialog, the value of the **Phone** field defines the tags that enclose that field's contents.



To continue our example, every contact is represented in XML as:

```
<Name>John Doe</Name>
<Phone>555-1212</Phone>
```

<Email>john.doe@example.com</Email>

and

```
<Name>Mary Smith</Name>
<Phone>555-8765</Phone>
```

<Email>msmith@example.net</Email>

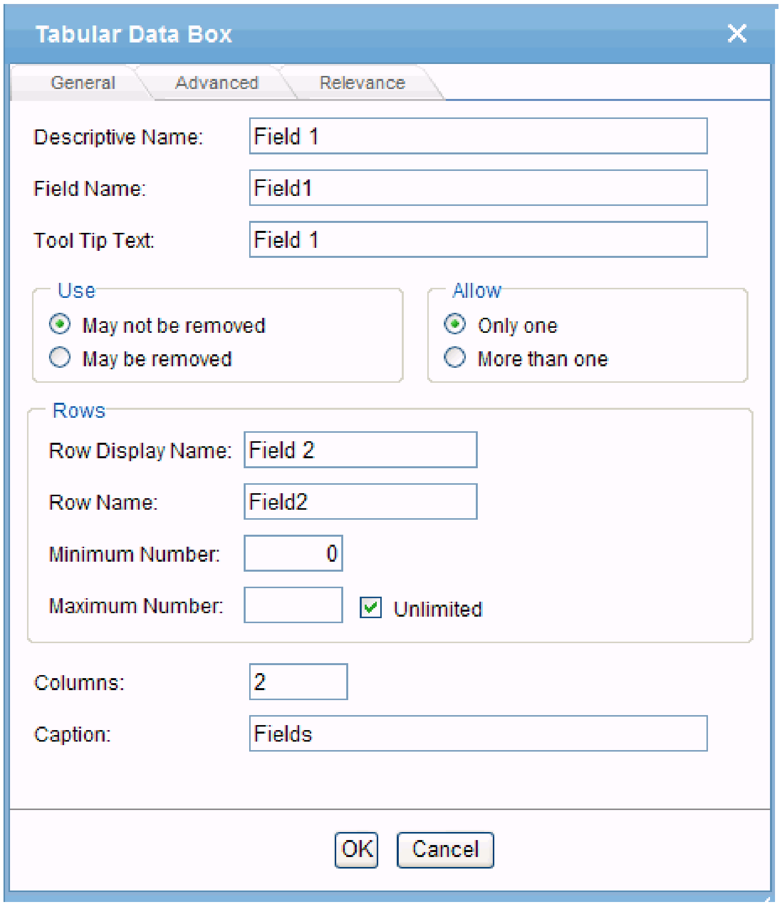
How XML Tags are Assigned to Table Rows

Each row of the table collects information for one contact. On the Tabular Data Box dialog, the **Row Name** field defines the XML tag that groups information for *each contact*. For example, the **Row Name** field value is **Contac**

```
</AddressBook>
<contact>
<Name>John Doe</Name>
<Phone>555-1212</Phone>
<Email>john.doe@example.com</Email>
</Contact>
 <Contact>
<Name>John Doe</Name>
<Phone>555-1212</Phone>
<Email>john.doe@example.com</Email>
 </Contact>
Contact>
<Name>Mary Smith</Name>
<Phone>555-8765</Phone>
<Email>msmith@example.net</Email>
</Contact>
```

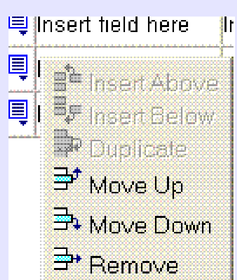
</AddressBook>

Dialog Box



Fields on the Tabular Data Dialog

Field	Description
Descriptive Name	Enter the name of this table. By default, the Data Designer assigns a name made up of **Field** followed by the next available number. So, the first field's default name is **Field1**, the second field's default name is **Field2**, etc. You can change the default if you want.
Field Name	Enter the table's element name. This will define the table in the XML. See Also: "How Tabular Data Forms XML Structure" on page 7-318
Tool Tip Text	Enter the text that appears when a user hovers the cursor over the table's column headers.
Use	See "The Use Field" on page 7-369

Field	Description
Allow	See "The Allow Field" on page 7-370 Note: If you check **More than one** here, you are allowing the user to insert an entirely new table, not an additional table row.
Rows	
Row display name	Enter the text that appears when a user hovers the cursor over the table's cells. Use this field to describe the kind of information to be inserted into the table's cells.
Row name	Enter the name of the XML tag used to collect data for each entry in the table. See Also: "How Tabular Data Forms XML Structure" on page 7-318
Minimum number	If desired, enter the minimum number of rows for this table. If you enter a number and the data entry user tries to save the screen without inserting at least the minimum number of rows, he is informed that **Element content is incomplete according to the DTD/Schema**. By default, the user is allowed to cancel or save the screen anyway. However, the system administrator determines whether or not the user can save an invalid document.
Maximum number	If desired, enter the maximum number of rows for this table. If you don't want to assign a maximum number, check the **Unlimited** check box. **Result of Assigning a Maximum** When this table appears on a data entry screen, and a user adds the maximum number of rows, the **Insert Above** and **Insert Below** options are grayed out on the menu (see example below). 
Columns	Enter the number of columns to appear in the table. See Also: "Editing Tabular Data" on page 7-318
Caption	If desired, enter text to describe this table on the data entry screen. The caption appears centered above the table. After you insert this field onto the screen, you can use eWebEditPro+XML's formatting capabilities to modify the caption's size, font, color, and other attributes.
Advanced Tab	See "Advanced Tab" on page 7-366

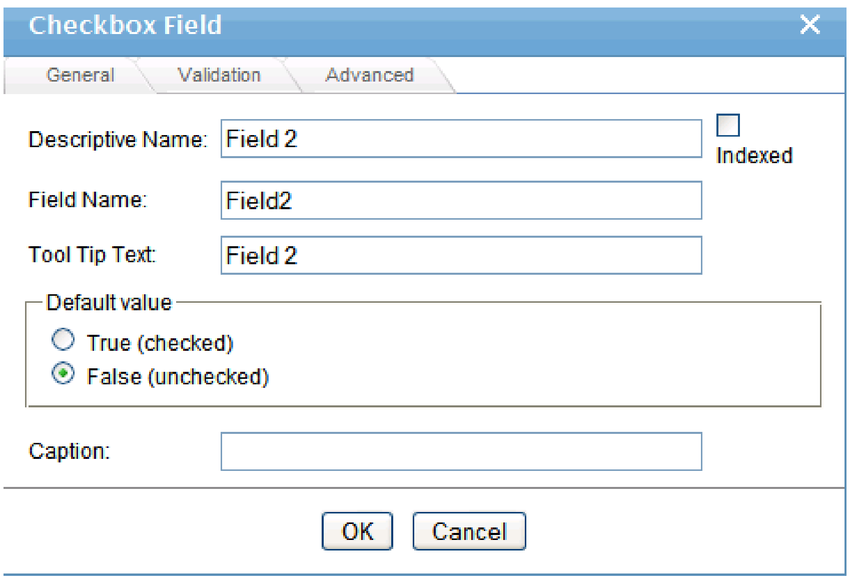
Field	Description
Relevance	See "Relevance Tab" on page 7-312

Checkbox

A Checkbox field is only one character wide and accepts one of two possible values: checked or unchecked. For example

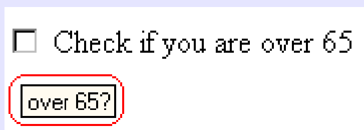
Check if you are over 65 ☐

Dialog Box



Fields on the Checkbox Dialog

Field	Description
Descriptive Name	Enter text to guide the user's response to this field. To continue the above example, the caption would be **Check if you are over 65**. After you insert this field onto the screen, the Descriptive Name appears to the right of the checkbox. You can use eWebEditPro+XML's formatting capabilities to

Field	Description
	modify its size, font, color, and other attributes. Note: The Descriptive Name field only appears on this dialog when you create the Check Box field. If you later try to edit the field, it is not on the dialog. However, you can edit the Descriptive Name text within the editor.
Indexed	Check if you want to index this field. See Also: "XML Indexing" on page 7-389 The **Indexed** field may not appear, depending on how your administrator set up your system.
Field Name	Enter the field's element name. This will define the field in the XML.
Tool Tip Text	Enter text that appears when a user hovers the cursor over this field (circled in red below). 
Default value	If you want this field to be checked when the screen first appears, click **True**. Otherwise, click **False**.
Validation tab	You can use this screen to specify that the checkbox must be checked or unchecked.
Advanced tab	See "Advanced Tab" on page 7-366

Text Field ab|

Use a text field when you want the user to enter a text response.

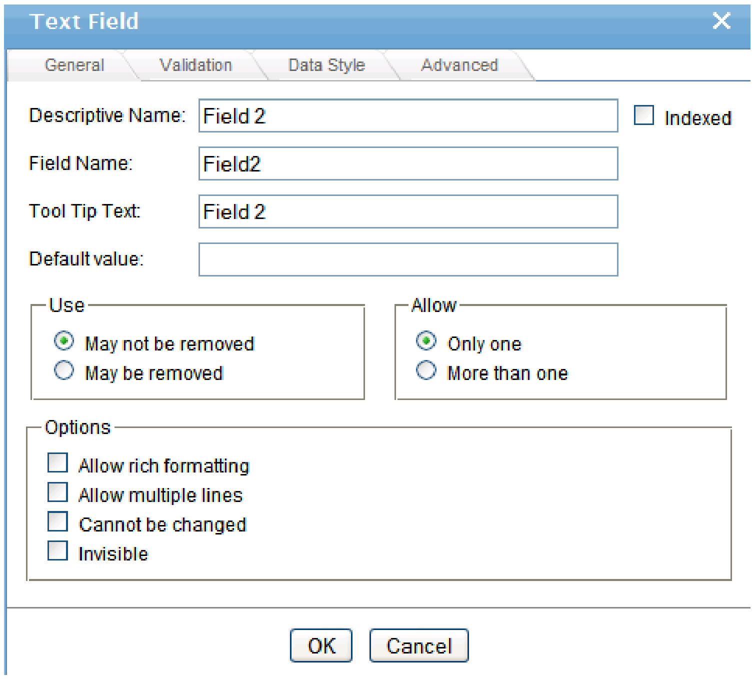
Note: If a plain text field tries to perform a numerical calculation with a value that is blank or contains letters, `NaN` appears in the field. (`NaN` stands for "not a number.") If a plain text field tries to divide by zero, `Infinity` appears.

Note: If a plain text field collects a URL, add on-screen instructions to prefix it with `http:\\`. If the user does not, the URL address is not stored properly.

The following capabilities are available with a text field.

- The text can be read-only or hidden
- You can only allow plain text, or let the Smart Form author format the text
- You can specify that the text field consists of a single or multiple lines

Dialog Box



Fields on the Text Field Dialog

Field	Description
Descriptive Name	Enter the name of the field.
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 7-389. The **Indexed** field may or may not appear, depending on how your administrator set up your system.
Field Name	Enter the field’s element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Default Value	If you want to set a default value for this field, enter that value here. The default value appears in Data Entry mode, where the user can accept, change, or delete it.

Field	Description
	For example, if this field collects a city, and most users enter New York, enter `New York` as the value.
Use	See "The Use Field" on page 7-369
Allow	See "The Allow Field" on page 7-370
Allow Rich Formatting	Check this box if you want to let the Smart Form author format the text in this field. If you do not check the box, the author can only enter plain text.
Allow Multiple Lines	Check here to let this text box expand to accommodate the user's input. If you do not check this box, a single line input box appears on the data entry screen to accept user input.
Cannot be Changed	Check here to make this field read-only. That is, the user cannot insert data into it in Data Entry mode. You might use this option to provide instructions for completing the screen.
Invisible	Check here to make this field hidden in Data Entry mode. This option lets you store unseen information in an XML document. An example might be putting a version number for the data design so that XML documents can be upgraded to newer versions using an XSL transform.

Field	Description
Validation	Select the kind of validation to apply to this field. Your choices are: ■ **No validation** - the user's response is not checked ■ **Cannot be blank** - the user must enter a response ■ **Non-negative whole number or blank** - the user must enter a positive whole number *or* no response ■ **Non-negative whole number (required)** - the user must enter a positive whole number ■ **Decimal number or blank** - must be a decimal number (for example, 12.345 or 12) or blank. A leading minus sign "-" is allowed. The decimal point must be a period (.), even in locales that normally use a comma (,). Note: Decimal numbers include whole numbers because the decimal point is implied. That is, 12 is 12.0000. ■ **Decimal number required - must be a decimal number (it cannot be blank) of none, one, or two decimal places.** A leading minus sign "-" is allowed. The decimal point must be period (.), even in locales that normally use a comma (,). ■ **Percent: (0-100) required - the user must enter a whole number from 0 to 100** ■ **email address/email address required - a user name followed by an at sign (@) followed by a domain name** ■ **email address list/email address list required** - several email addresses separated by a semicolon (;) ■ **Zip code (US only)** - the user's response must consist of 5 (*nnnnn*) or 9 digits separated by a dash after the fifth (*nnnnn-nnnn*) ■ **Social Security number (US only)** - the user's response must consist of nine digits in this pattern: *nnn-nn-nnnn* ■ **Postal Code (Canada)/Postal Code (Canada) required** - the user's response must consist of six characters in the format `ANA NAN`, where `A` is an alphabetical character and `N` is a numeric. ■ **Social Insurance Number (Canada)/Social Insurance Number (Canada) required - nine digits See Also: http://en.wikipedia.org/wiki/Social_Insurance_Number**

Field	Description
Validation *(continued from above)*	■ **ISBN code - 13 digit ISBN code. See Also: http://isbn-information.com/13-digit-isbn.html** ■ **ISSN code - See Also: http://www.issn.org/2-22635-What-is-an-ISSN.php** ■ **Custom - You can create custom validation.** For more information, see "Custom Validation" on page 7-371. If you assign to this field any value other than **No validation**, the field is initially surrounded by red dashes in Data Entry mode. If the user's response does not meet the validation criterion, the field remains surrounded by red dashes. The system administrator determines whether or not the user can save an invalid document.
Data Style	See "The Data Style Field" on page 7-370
Advanced	See "Advanced Tab" on page 7-366

Choices

Use the Choices field when you want to give the data entry user several options. For example, you create a Choices field named **Interests** that lists these options.

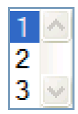
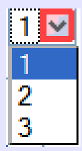
- music
- art
- sports

The data entry user could check the first two and leave the third blank.

Flexibility of the Choices Field

The following capabilities are available with a Choices field.

- You can limit a user's response to one item, or allow more than one.
- You can require a response.
- You can determine the list's appearance from these choices.

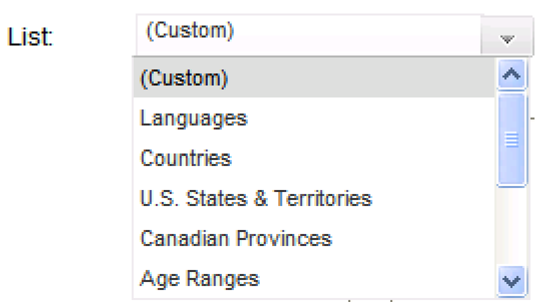
List type	Example	Description
vertical		All choices appear, arranged vertically.
horizontal		All choices appear, arranged horizontally.
list box		All items appear. The default one is selected when the screen first appears, but can be changed.
drop list		Only the top item on the list appears. To its right, a down arrow appears (circled). The user clicks the arrow to display all items and select one.

- You can choose from a standard list of choices or create your own list.

See Also: "Creating Your Own Predefined List" on page 7-331

Using a Standard List

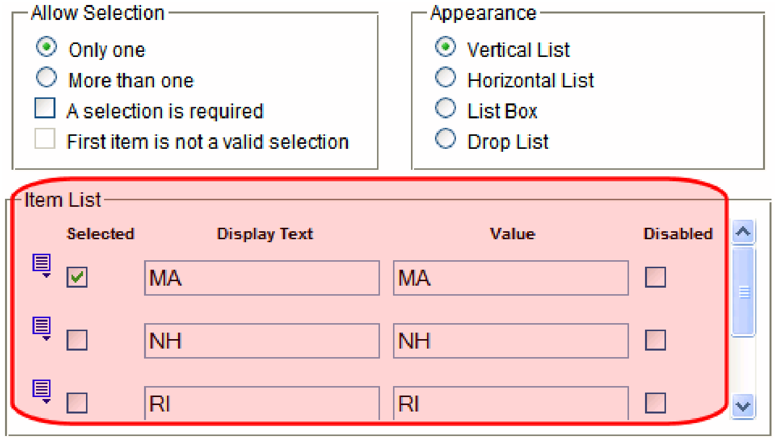
To use a standard list, click the black down arrow next to the **List** field to see your options.



If you choose a standard list, it appears in the lower half of the screen. You cannot change its values.

Creating a Custom List

To create your own set of list options, accept the List field’s default value, **Custom**. Then, enter the list values using the **Item List** section of the screen, shown below.



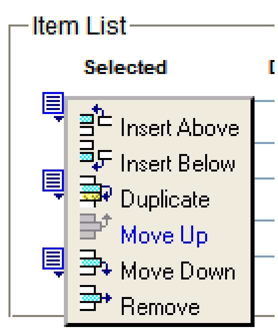
To indicate an option is the default choice, check the **Selected** checkbox.

In the **Display Text** field, enter text to describe this item on the data entry screen. After you insert this field onto the screen, you can format it. For example, you can apply bold, assign a style, etc.

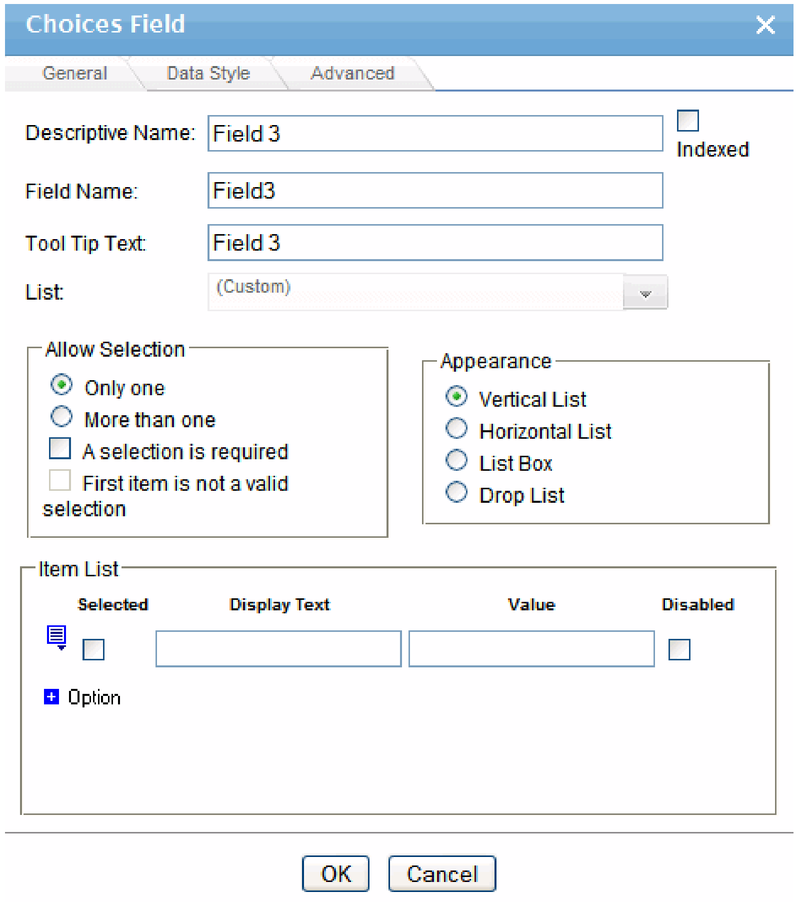
In the **Value** field, enter the value that is collected when the data entry user selects this item.

For example, if Interests appears in the Name field, and you want music to be collected when the data entry user selects this item and saves the page, enter **music** here.

To add a new choice, delete an existing choice, or move a choice up or down within the list, click the menu icon ( ) to the left of that choice. The select a menu option.



Dialog Box



Fields on the Choices Dialog

Field	Description
Descriptive Name	Enter the name of the field.
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 7-389 The **Indexed** field may or may not appear, depending on how your administrator set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this choice list.

Field	Description
List	See "You can choose from a standard list of choices or create your own list." on page 7-328
Allow selection	Click **More than one** to let the data entry user select more than one item on the data entry screen. Otherwise, click **Only one**. For example, if you click **More than one**, and the choices are: music, art, sports, the user could select all three choices. **A selection is required - Check this box if the user must select at least one list item.** **First item is not a valid selection - Check here if the first item on the list is not a valid value but instead text that prompts the user to respond to the field. An example of such text for a list of states is Select a state.** If you check this box and the user selects the first value on the list (most likely by default), an error message appears when he tries to save the screen.
Appearance	See "You can determine the list's appearance from these choices." on page 7-327
Item List	See "Creating a Custom List" on page 7-328
Value	Enter the value that is collected when the data entry user selects this item. For example, if **Interests** appears in the Name field, and you want `music` to be collected when the data entry user selects this item and saves the page, enter **music** here.
Data Style	See "The Data Style Field" on page 7-370
Advanced	See "Advanced Tab" on page 7-366

Creating Your Own Predefined List

An administrator can create a predefined list of options to appear when a user is inserting a **Choices Field**.

Advantage of Creating Custom List in Configuration File

Although a user can create a custom list of choices via the **Item List** area of the Choices Field dialog, that list is only available in that field of that screen. If the user wants to insert the same list in another section of the screen or a different screen, he must re-enter all options.

However, if you create a list according to the steps below, your custom list is stored in the configuration file (along with the standard choice lists, such as **Countries**). As a result, any user connected to your server can insert the list into any **Choices Field** on any screen.

Creating the List

To insert a custom list of choices, follow these steps.

1. Open the eWebEdit400 configuration file, *site root*/workarea/contentdesigner/DataListSpec.xml.
2. Insert the new list following the pattern of the other lists in the file. Below is an example of such a list.

```
<datalist name="MyNewList">
<schema datatype="string" />
<item default= "true" value= "Green" />
<item value= "Red" />
<item value= "Blue" />
</datalist>
```

Notes:

- you can specify a data type. Values are string, nonNegativeInteger, date, decimal.
- as shown in the third line above, you can specify a default value

Creating a Dynamically Populated Choice List

You specify the elements of the custom options list described above in the configuration data. You can also create a dynamically-populated list from any XML source. The source can be on your server or on a remote Web site. Follow these steps to add a dynamic data list to the **Choices** field.

1. Follow steps 1 through 3 in "Creating the List" on page 7-331.
2. Insert a new datalist item according to this pattern.

<datalist name="MyNewList" src="{url to xml data source}" select="{xpath to data item element}" captionxpath="{relative xpath to data item's display text}" valuexpath="{relative xpath to data item's value}">

Warning! The `datalist name` must match the `listchoice data` attribute.'

For example

<datalist name="USPS-CA" src="[eWebEditProPath]/uspsca.xsd" select="/xsd:schema/xsd:simpleType/xsd:restriction/xsd:enumeration" captionxpath="xsd:annotation/xsd:documentation" valuexpath="@value" namespaces="xmlns:xsd='http://www.w3.org/2001/XMLSchema'" validation="select-req">

In this example, the data list is stored in the uspsca.xsd file, located within the `ewebeditpro` folder. However, it could be in any XML data source.

Calculated Field

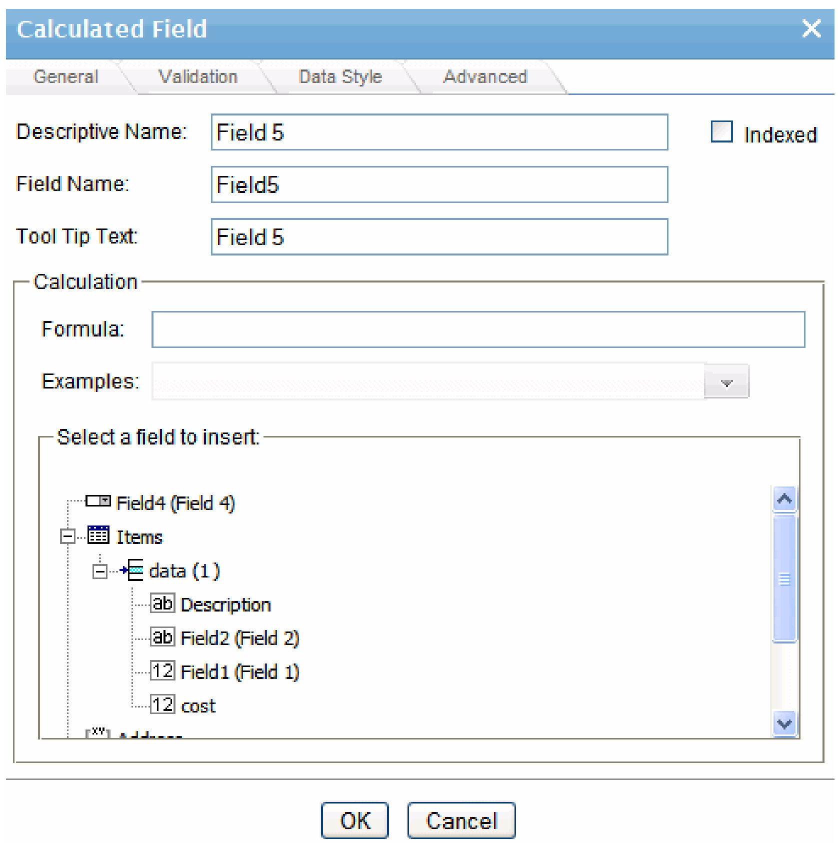
Use a calculated field to perform a calculation based on values in other fields. For example, if your screen collects mortgage information, you could create one field to collect the mortgage and interest payment and another to collect taxes and insurance. The calculated field could sum those two numbers and display the monthly payment.

You can validate a calculated field. For example, you can require a positive number between 100 and 1,000.

Calculated fields are display only -- users cannot edit them.

Warning! If a field will be referenced in a calculation, use the validation feature to require a value for that field. This forces the user to enter a number to be used in the calculation.

Dialog Box



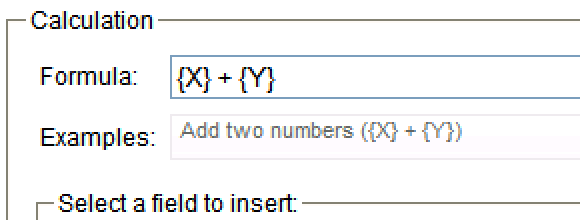
Fields on the Calculated Field Dialog

Field	Description
Descriptive	Enter the name of the field.

Field	Description
Name	
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 7-389. The **Indexed** field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Formula	Enter the calculation that this field will perform. See Also: "Using the Formula Field" on page 7-334
Select Field	Click this button to select a field to reference in the calculation. For more information, see "Using the Formula Field" on page 7-334.
Examples	Click the down arrow to the right of this field to see examples of calculations you can perform. When you select an example, it is copied into the **Formula** field. See Also: "Explanation of Examples" on page 7-336
Validation	Select the kind of validation to apply to this field. Your choices are: - **No validation** - the user's response is not checked - **Non-negative number (required)** - the result of the calculation must be a positive number If you assign to this field any value other than **No validation**, the field is surrounded by red dashes in Data Entry mode. If the user's response does not meet the validation criteria, the field remains surrounded by red dashes. Your system administrator determines if a user can save a screen with invalid data.
Error message	If you select **Non-negative number** above, insert text that appears on the screen if the user's response does not meet this criterion.
Custom Validation	See "Custom Validation" on page 7-371
Data Style	See "The Data Style Field" on page 7-370
Advanced	See "Advanced Tab" on page 7-366

Using the Formula Field

You can copy a sample calculation into the **Formula** field by clicking the **Examples** field and selecting an operation from the drop down list. For example, if you click **Examples Add two numbers {X}+{Y}**, **{X}+{Y}** appears in this field.



Next, replace the variables with fields on the screen. Be sure to select the curly brackets ({}) as well as the letter between them. Then, when the user enters data into those fields, the calculation is performed using the current field values.

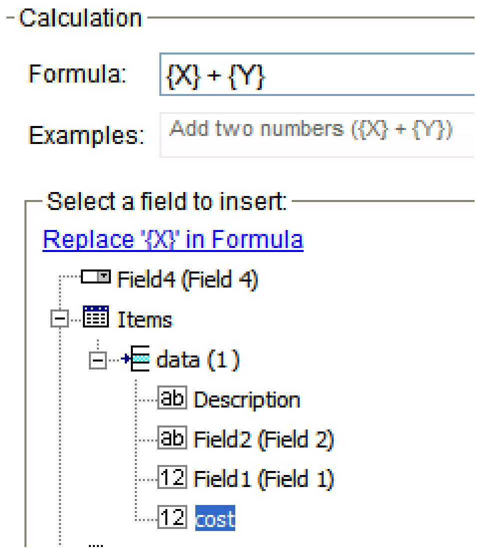
If a calculated field tries to perform a numerical calculation with a value that is blank or contains letters, `NaN` appears in the field. (`NaN` stands for “not a number.”)

If a calculated field tries to divide by zero, `Infinity` appears.

Warning! If the user does not replace *all* variables with a field or a number, when the content is validated, validation will fail.

To do this, follow these steps.

1. Select the first variable to replace. To continue the example, select **{X}**.
2. Select a field to replace that variable in the calculation.



3. Click **Replace X in Formula**.

Warning! If a variable appears more than once in a formula (for example, {X} * number({X} <= {Y}) + {Y} * number({X} > {Y}), you only need to replace the first occurrence - eWebEdit400 replaces subsequent occurrences for you.

4. Continue replacing all variables in the formula.

Notes

- If an XML document contains several occurrences of a field that is referenced in a formula, the value is derived as follows:
  - When using the XPath functions sum() and count(), all values with the field name are considered. For example, a document includes three books whose prices are $10, $20 and $30. In this case, sum's value is $60.
  - When using all other functions, the first value is used. For example, a document includes three books whose prices are $10, $20 and $30. If a calculation formula refers to <price>, its value is $10.
- You can replace a variable with a number instead of a field. For example, replace {X} * {Y} with ../price * 1.15.
- The expression can be complex, such as (round(Field1 * 0.80) + (1 div Field2)) - 2.
- You can use a string expression that creates a text message. For example, to calculate a full name from its parts: concat(title, ' ', givenname, ' ', familyname), which could produce "Dr. Jonathan Smythe".

Referencing Other Calculated Fields

A calculated field can only reference other calculated fields that appear before it in a document. For example, a document collects a series of numbers.

- One calculated field counts the number of numbers.

- Another totals their values.
- A third computes the average by dividing the total by the count.

In this example, you must place the third field below or to the right of the first two fields. Calculated fields that are defined later in a document do not appear in the Select Field or Group dialog.

Explanation of Examples

The following table explains the standard examples that appear in the **Examples** drop-down list of the Calculated Field dialog. Note that your system administrator can customize the list, so it may not match what is below.

Example Field Text	Example Field Formula	Description
Add two numbers	{X} + {Y}	Add the value in the first field (X) to the value in the second field (Y).
Subtract two numbers	{X} - {Y}	Subtract the value in the second field (Y) from the value in the first field (X).
Multiply two numbers	{X} * {Y}	Multiply the value in the first field (X) by the value in the second field (Y).
Divide two numbers	format-number({X} div {Y},'0.###')	Divide the value in the first field (X) by the value in the second field (Y).
Format as a percentage	format-number({X} div {Y},'#0%')	Determine what percentage one number (X) is of another (Y). For example, if {X}=10 and {Y}=100, the result of the calculation is 10%.
Absolute value of a number	{X} * (number({X} > 0)*2-1)	The number regardless of the sign (negative or positive).
Minimum of two numbers	{X} * number({X} <= {Y}) + {Y} * number({X} > {Y})	The smaller of two field values.

Example Field Text	Example Field Formula	Description
Maximum of two numbers	{X} * number({X} >= {Y}) + {Y} * number({X} < {Y})	The larger of two field values.
Zero if subtraction is negative	({X} - {Y}) * number(({X} - {Y}) > 0)	Subtract one number (Y) from another (X). If the difference is less than zero, insert zero.
Multiply by another number if checkbox is checked	`{X} * ( {Y} * number( {Z} ='true') + number( {Z} !='true'))`	X is a numeric field. Y is another numeric field to multiply by X if a checkbox is checked. Z is the checkbox. For example, {X}=2 and {Y}=3 - if the checkbox is checked, the result is 2 * 3, which is 6 - If the checkbox is not checked, the result is 2
Round a decimal number	round({X})	Rounds the number to the nearest integer. For example, `round(3.14)`. The result is 3.
Round up a decimal number	ceiling({X})	Returns the smallest integer that is greater than the number. For example, `ceiling(3.14)`. The result is 4. For negative numbers: ceiling(-3.14) = -3
Round down a decimal number	floor({X})	Returns the largest integer that is not greater than the number argument. . For example, `floor(3.14)`. The result is 3. For negative numbers: floor(-3.14) = -4
Format decimal number 0.00	format-number({X},'0.00')	Rounds a value either up or down to the hundredth place. As examples, 100 becomes 100.00, and 3.14159265 becomes 3.14.

Example Field Text	Example Field Formula	Description
Total numeric values from multiple fields	sum({X}[text()] | {Y}[text()] | {Z}[text()]))	Add the values in all referenced fields. Only elements that contain a value are summed. Empty elements are excluded.

Total a list of numeric values	sum({X}[text()])	Total all values in a single repeating field. Here's an example.
		Plain Text Field properties
		Name: Miles
		Allow: more than one
		Validation: non-negative whole number
		XML Data
		`<root>`
		`<Miles>89</Miles>`
		`<Miles>12</Miles>`
		`<Miles>23</Miles>`
		`<Miles>19</Miles>`
		`</root>`
		sum(Miles) equals 89+12+23+19=143
		Only elements that contain a value are summed. Empty elements are excluded.

Example Field Text	Example Field Formula	Description

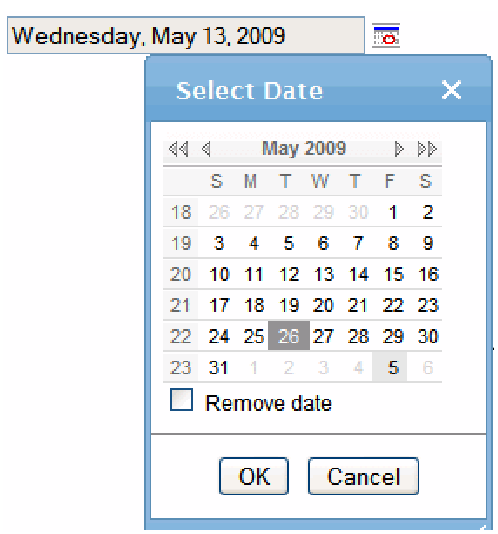
Average a list of numeric values	format-number(sum({X}[text()]) div count({X}),'0.###')	Calculate the average of all values in a single repeating field.
		To continue the example from the **Total a list of numeric values field** (above):
		Plain Text Field properties
		Name: Miles
		Allow: more than one
		Validation: non-negative whole number
		XML Data
		`<root>`
		`<Miles>89</Miles>`
		`<Miles>12</Miles>`
		`<Miles>23</Miles>`
		`<Miles>19</Miles>`
		`</root>`
		Average=89+12+23+19=143
		divided by the number of values (4)= 35.75
		Only elements that contain a value are summed. Empty elements are excluded.

Count the number of values in a list	count({X})	Calculate the number of values in a single repeating field.
		To continue the example from the **Total a list of numeric values field** (above):
		Plain Text Field properties
		Name: Miles
		Allow: more than one
		Validation: non-negative whole number
		XML Data
		`<root>`
		`<Miles>89</Miles>`
		`<Miles>12</Miles>`
		`<Miles>23</Miles>`
		`<Miles>19</Miles>`
		`</root>`
		Count = 4

Example Field Text	Example Field Formula	Description
Lowercase text	translate({X},'ABCDEFGHIJKLMNOPQRSTUVWXYZ', 'abcdefghijklmnopqrstuvwxyz')	Replace all uppercase characters with the lowercase version of that character
Uppercase text	translate({X},'abcdefghijklmnopqrstuvwxyz', 'ABCDEFGHIJKLMNOPQRSTUVWXYZ')	Replace all lowercase characters with the uppercase version of that character
Remove extra spaces	normalize-space({X})	Remove extra space characters from content\
Concatenate text	concat({X}, ', ', {Y})	Link text strings together into a single string. For example, `concat('The',' ','XML')` yields `The XML`.
Size of a text string	string-length({X})	Count the number of characters in a selected field's value. For example, if the referenced field's value is Hello, string-length = 5.

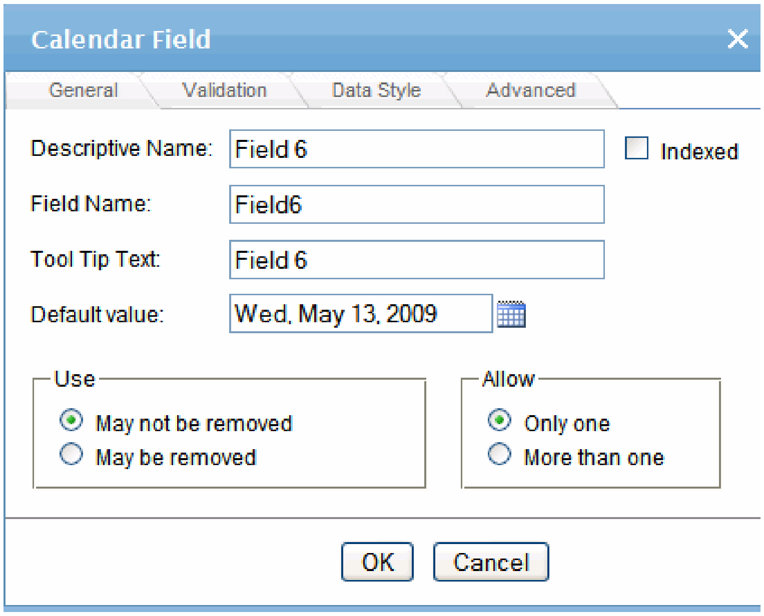
Calendar Field

Insert a calendar field when you want the Smart Form author to enter a date. The user clicks a date from an interactive calendar.



Because users cannot enter digits, a standard date format is ensured. The date is stored as a standard XML date (in the format yyyy-mm-dd), and localized to the computer of the user viewing it.

Dialog Box



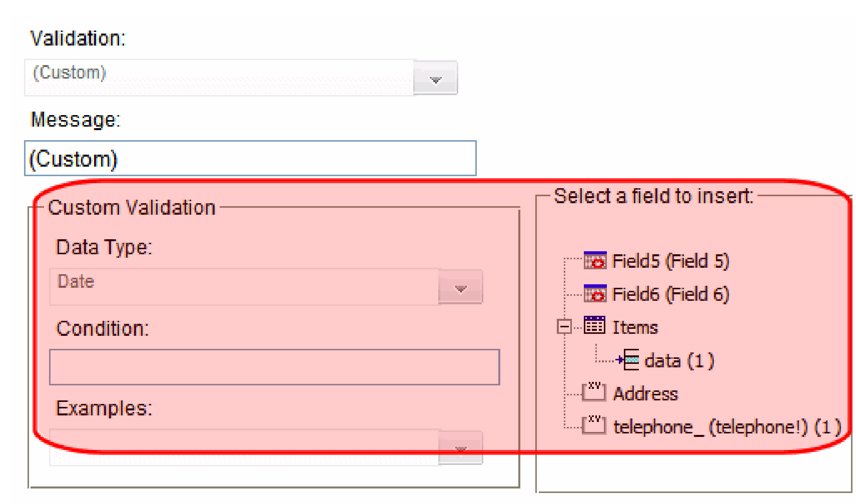
Fields on the Calendar Field Dialog

Field	Description
Descriptive Name	Enter the name of the field.
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 7-389 The **Indexed** field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.

Field	Description
Default value	If you want this screen to have a default date when the user first sees it, click the calendar icon to the right and select a date. The user can change the date in Data Entry mode. Note: If you enter a default date, you cannot later remove it. You can change it. If necessary, you can delete the field and enter a new one.
Use	See "The Use Field" on page 7-369
Allow	See "The Allow Field" on page 7-370 **Warning!** Warning! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.
Validation	If you want to require the user using the calendar to enter a response, click the down arrow to the right of this response field and select **Cannot be blank**.
Error Message	If you select **Cannot be blank** above, insert text that appears on the screen if the user's response does not meet this criterion.
Custom Validation	See "Custom Validation with a Calendar Field" on page 7-343
Data Style	See "The Data Style Field" on page 7-370
Advanced	See "Advanced Tab" on page 7-366

Custom Validation with a Calendar Field

The Calendar Field dialog features a Custom Validation area (illustrated below).



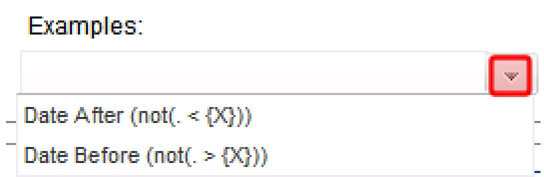
The Custom Validation area can ensure the user's input is greater or less than the date you are inserting on the Data Design screen.

- The **Data Type** field shows **Date**.
- The **Condition** field displays the validation logic.
- The **Examples** drop-down list shows validation expressions that you can apply to the field.
- Any **Error Message** displays in Data Entry mode when the user inserts an invalid value. Your system administrator determines if a user can save the invalid data.
- The **Select a Field to Insert** area displays fields that can be inserted into the **Condition** field. You must choose a calendar type field (note the calendar to the left of these fields).

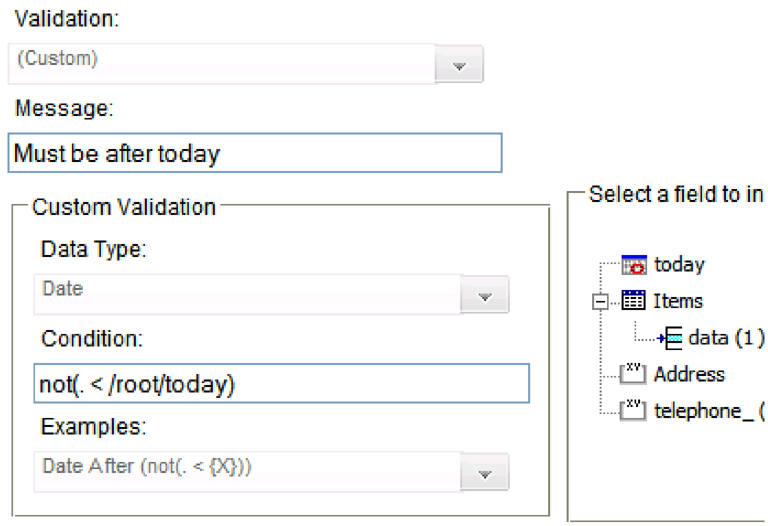
Example of Creating Custom Validation

As an example of custom validation, assume a field collects the date when a patient's health insurance policy expires. You want to make sure the date is later than today. To accomplish this, follow these steps.

1. Create a calendar field that prompts for today's date.
2. Create another calendar field that prompts for a patient's health insurance policy expiration date.
3. While creating the second field, in the **Validation** section, click **Custom Validation**.
4. The Custom validation screen appears.
5. Click the down arrow to the right of the **Examples** field to see sample logic.



6. Click **Date After (not(. >={X})**. This option lets you specify that the user's response must be later than a specified date.
7. In the **Condition** field, select **{X}** and click the **Select Field** button.
8. The Select Field or Group screen appears.
9. Select the field that prompts for today's date, which you created in Step 1.
10. That field replaces **{X}** in the **Condition** field.
11. Move the cursor to the **Error Message** field and compose an error message. For example: `Must be after today.`
12. Your screen should look like this.



13. Press **OK**.
14. Press **OK** to save that dialog and test the validation on the date field. To do this, switch to Data Entry mode and enter a date earlier than today to verify that validation works as expected.

Image Only Field

Use an Image Only field to place an icon on the screen, which the user in Data Entry mode can click to insert an image into the Web content. You can insert a default image if desired.

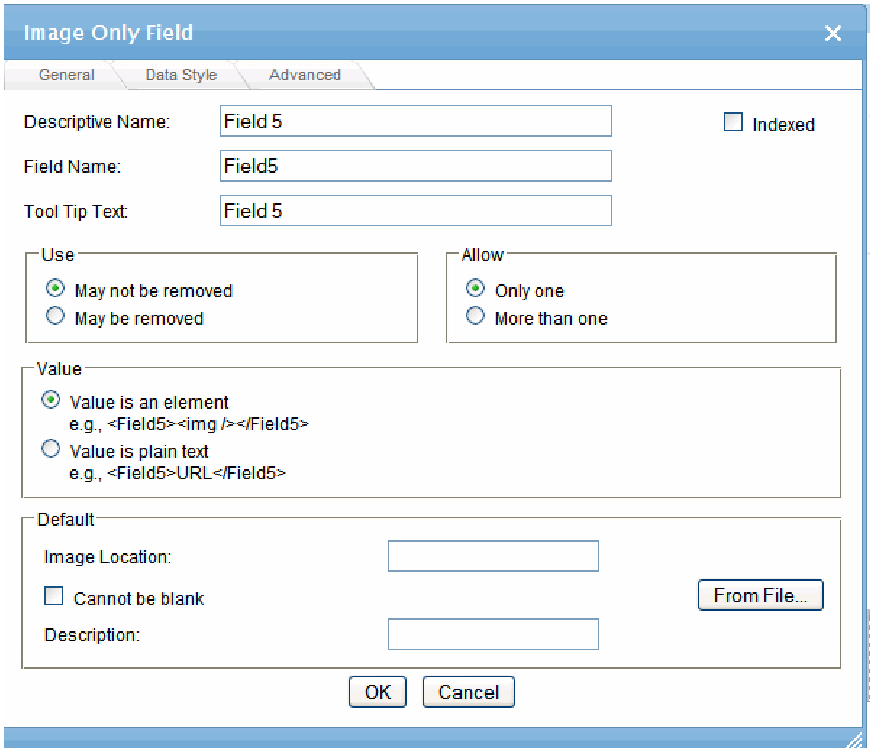
To let the user insert any file, such as a Microsoft Word document, use a File Link field. See Also: "File Link Field " on page 7-346

Using an Image Only Field in Data Entry Mode

In Data Entry mode, the image's caption appears, followed by a default image (if you specify one) and this icon: .

Note: The user can only insert a file whose extension is defined within the `<validext>` element of the configdataentry.xml file. Your system administrator can help you do this.

Dialog Box



Fields on the Image Only Dialog

Field	Description
Descriptive Name	Enter the name of the field.
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 7-389. The **Indexed** field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Use	See "The Use Field" on page 7-369
Allow	See "The Allow Field" on page 7-370
Value	Whether the value is an element or plain text. **Value is an element** renders the field as `<img src="url" alt="text" />` for an image.

Field	Description
	Value is plain text renders the field as just the url.

Default Image Location	If desired, you can insert a default image, which might be the most common image or simply a reminder that an image needs to be inserted.
	To help find the image, click the **From File** button and navigate to image file.
	You can only insert an image file whose extension appears between the `<validext>` tags in the configdatadesign.xml file. For example:
	`<validext>gif,jpg,png,jpeg,jpe,doc,txt`
	`</validext>`

Cannot be blank	If you want to require the user completing this field to enter a response, click inside this check box.
Description	Enter the image's alt text, which is used as a replacement for an image whenever it cannot be seen. For example, a visually impaired person is using a screen reader.
Advanced	See "Advanced Tab" on page 7-366

File Link Field

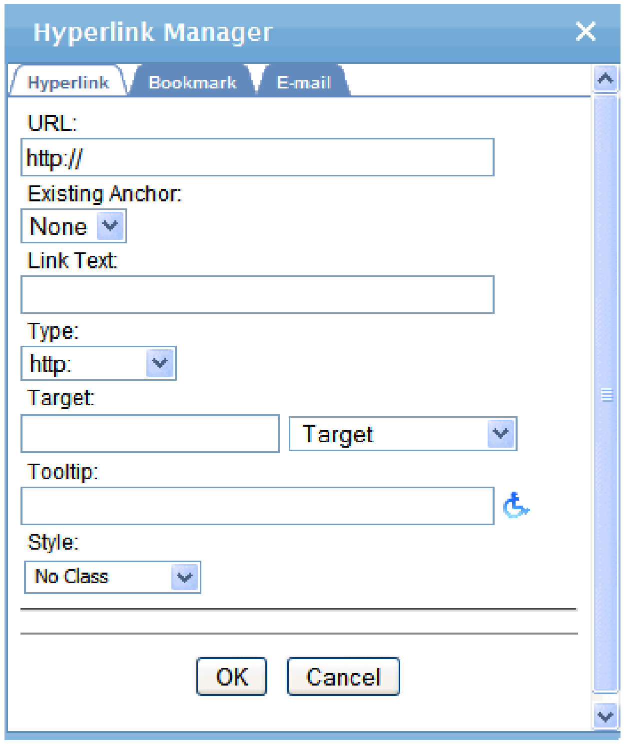
Use a File Link field to place an icon on the screen which the user in Data Entry mode can use to link to any Library file, such as a Microsoft Word document or a .gif image file. (You can also use an Image Only field to let the user insert an image. See Also: "Image Only Field " on page 7-344)

The File Link field does *not* let you link to Ektron CMS400.NET assets.

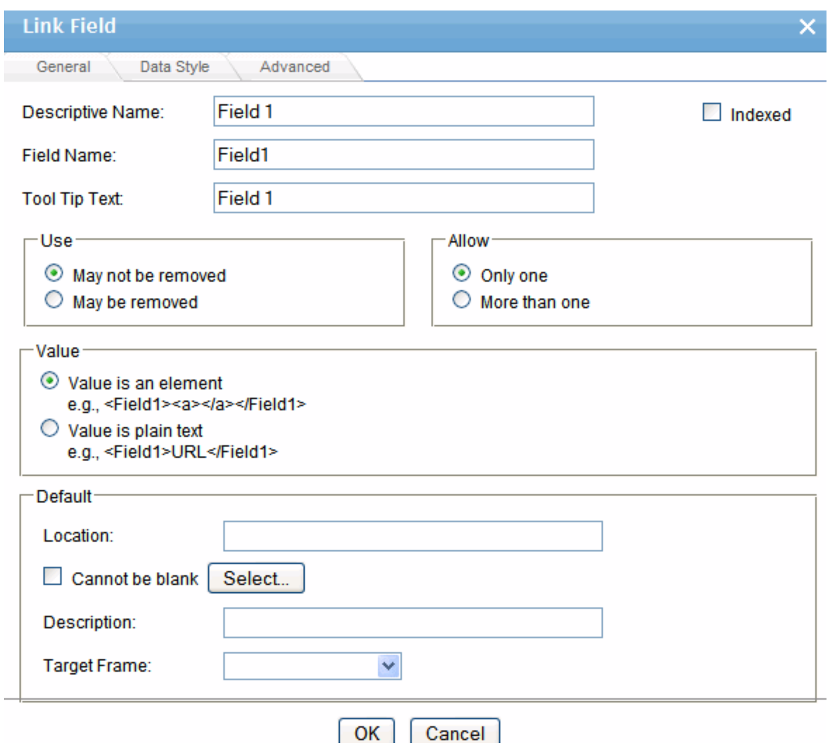
Using a File Link Field in Data Entry Mode

In Data Entry mode, the file link field's caption appears, followed by this icon: . When the user clicks the icon, this screen prompts the user to specify a information about the link.

Note: The user can only insert a file whose extension is defined within the `<validext>` element of the configdataentry.xml file. Your system administrator can help you do this.


Hyperlink Manager
Hyperlink
Bookmark
E-mail
URL:
http://
Existing Anchor:
None
Link Text:
Type:
http:
Target:
Target
Tooltip:
Style:
No Class
OK
Cancel

Dialog Box


Link Field
General
Data Style
Advanced
Descriptive Name:
Field 1
Indexed
Field Name:
Field1
Tool Tip Text:
Field 1
Use
May not be removed
May be removed
Allow
Only one
More than one
Value
Value is an element
e.g., <Field1><a></Field1>
Value is plain text
e.g., <Field1>URL</Field1>
Default
Location:
Cannot be blank
Select...
Description:
Target Frame:
OK
Cancel

Fields on the File Link Field Dialog

Field	Description
Descriptive Name	Enter the name of the field.
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 7-389 The indexed field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Use	See "The Use Field" on page 7-369
Allow	See "The Allow Field" on page 7-370
Value	Whether the value is an element or plain text. **Value is an element** renders the field as `<img src="url" alt="text" />` for an image. **Value is plain text** renders the field as just the url.

Default Location	If desired, you can insert a default link, which can be the most common link or simply an example.
	To help find the link, click the **Select** button and navigate to a file. You can only insert a file whose extension appears between the `<validext>` element of the configdatadesign.xml file. For example:
	`<validext>gif,jpg,png,jpeg,jpe,pdf,doc`
	`</validext>`

Cannot be blank	If you want to require the user completing this field to enter a response, click this check box.
Description	If desired, enter text that the user can click to access the linked file.
Target Frame	■ New Window(_blank) - In a new browser window, on top of the current browser. ■ Same Window(_self) - In the same position within the browser window. The new window replaces the current one. ■ Parent Window(_parent) - If your page contains frames, in the frame that contains the frame with the hyperlink. ■ Browser Window(_top) - If your page contains frames, in the full display area, replacing

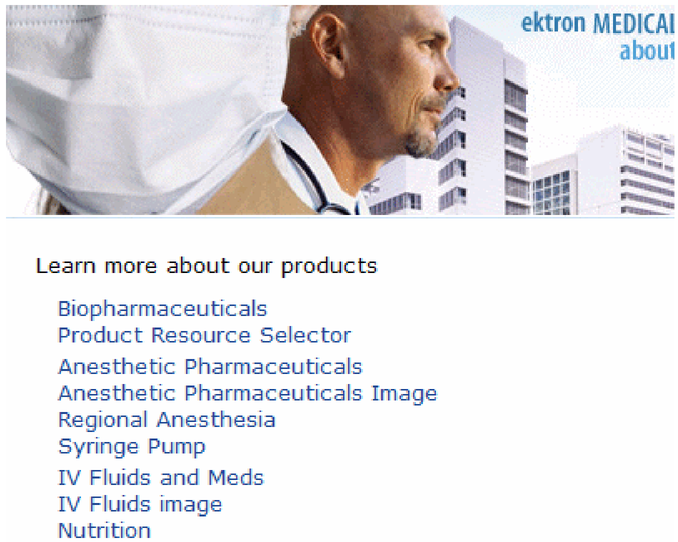
Field	Description
	the frames.
Data Style	See "The Data Style Field" on page 7-370
Advanced	See "Advanced Tab" on page 7-366

Resource Selector Field

A Resource Selector field lets you place elements of Ektron CMS400.NET content or folders on a Smart Form. For example, on the page below, all content in a selected folder appears.

Each content item in the folder is represented as a hyperlink followed by its summary. A site visitor can click the hyperlink to view the content.

An alternative display of the content, showing hyperlinks only, appears below.



So, a Resource Selector field acts like server controls that let you place content on your Web pages, such as the content block and List Summary controls. The advantages of the Resource Selector field are

- you can add content or folders to a Smart Form. This means you can easily position resources then surround them with text, images, etc., to place them into proper context.
- the management is handled within the Workarea. This means CMS administrators and content contributors can create the Smart Form without needing a developer to create/modify templates and server controls.

Resource Selector Examples

You could use Resource Selector fields to create a KB article that provides links to other, related KB articles.

Another benefit of using a Resource Selector is the ability to do *single sourcing*, that is, reuse the same content on different pages. This is helpful for content that needs to appear repeatedly (copyright information, license agreement, contact information, etc.), but you want to maintain only one version.

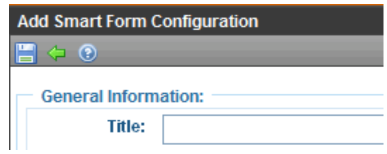
Overview of Using a Resource Selector

Note: Before reading this section, you should be familiar with the process of creating Smart Forms. See Also: "Adding a New Smart Form" on page 7-291

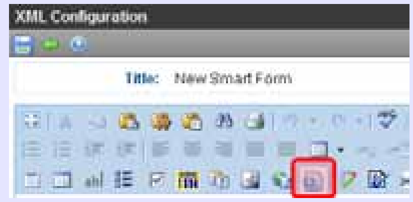
When creating an XML Smart Form that uses a Resource Selector, you follow these steps. You would follow most of the steps with any Smart Form.

Step

1. An XML Smart Form Designer creates a Smart Form configuration.

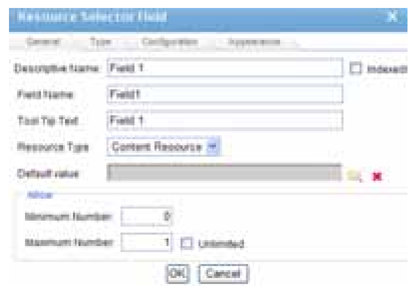


2. While editing the Data Design, he places Resource Selector fields on the configuration, along with other field types.

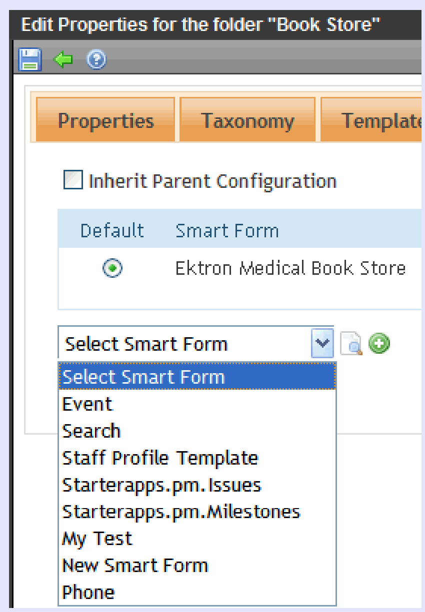


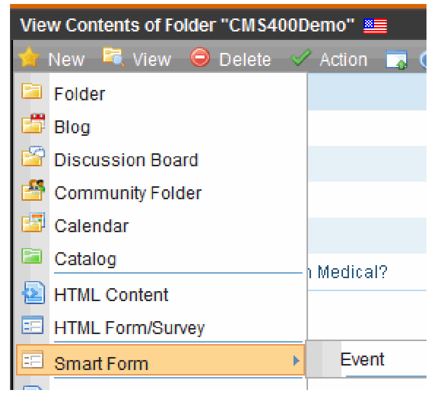
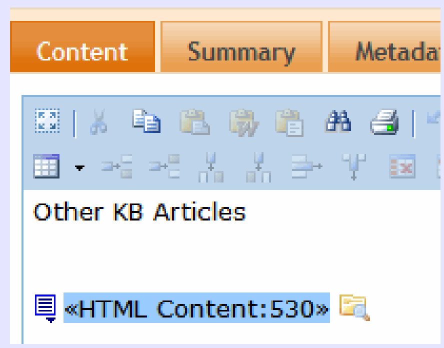
3. While placing a Resource Selector field, a dialog lets the designer determine its properties.

For example, can the content author select content or folders? These properties are described in "Adding a Resource Selector Field" on page 7-353.



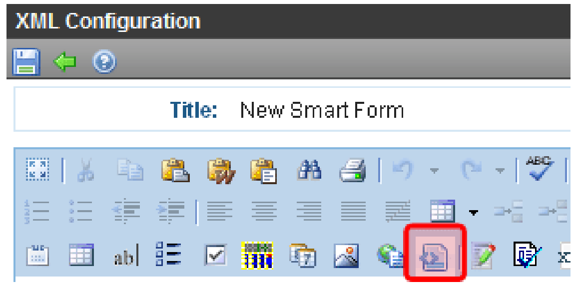
4. An administrator assigns the Smart Form configuration to Ektron CMS400.NET folders.
See Also: "Assigning Smart Forms to a Folder" on page 7-376



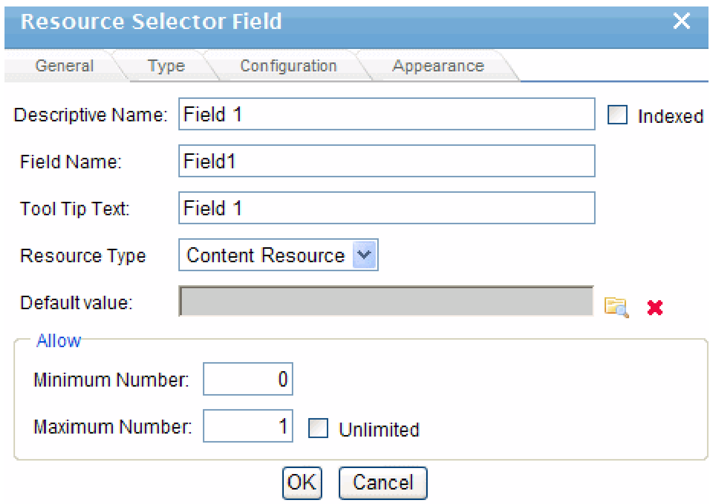
Step	
5. An author creates a Smart Form based on the configuration.	
6. He adds content or folders to the Smart Form, along with other field types.	
7. A site visitor browses to the page and views the content.	

Adding a Resource Selector Field

To add a Resource Selector field to a Smart Form configuration, click the button shown below.



When you do, the following dialog appears.



Complete the first three fields as described below.

Field	Description
Descriptive Name	Enter the name of this field. Internally, the name is used as the field's caption. By default, the Data Designer assigns a name made up of **Field** followed by the next available number. So, the first field's default name is **Field1**, the second field's default name is **Field2**, etc. You can change the default if you want.
Field Name	Enter the field's element name. This defines the field in the XML.
Tool Tip Text	Enter the text that appears when a user hovers the cursor over the table's column headers.

Next, you must decide if this resource selector field will let the content author insert *content* or a *folder*. The following sections walk through both options.

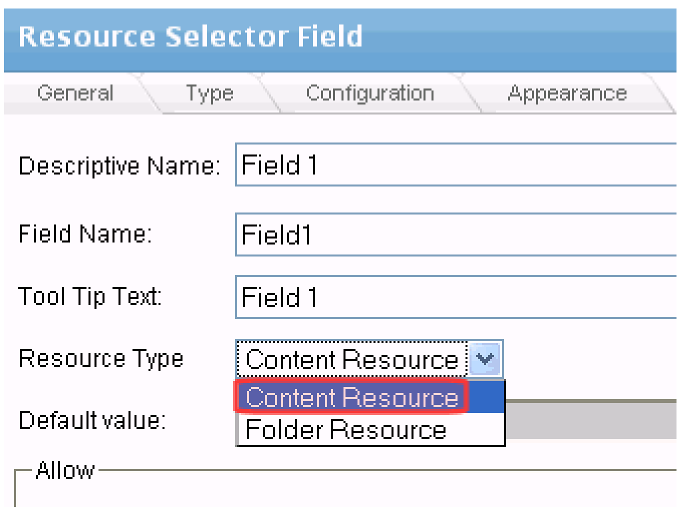
- "Letting a Content Author Add Content" on page 7-355
- "Letting a Content Author Add a Folder" on page 7-361

Letting a Content Author Add Content

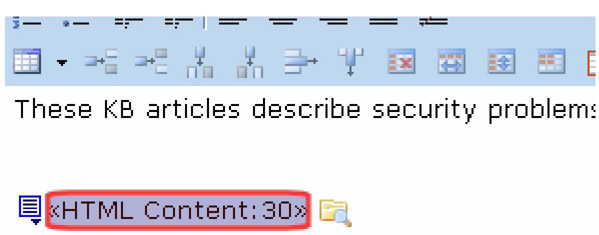
To add a Resource Selector field that lets an author add *content* to a Smart Form, follow these steps.

Prerequisites: You completed the first three fields on the Resource Selector Field dialog. See Also: "Adding a Resource Selector Field" on page 7-353

1. On the Resource Selector Field dialog, at the **Resource Type** dropdown, select **Content Resource**.

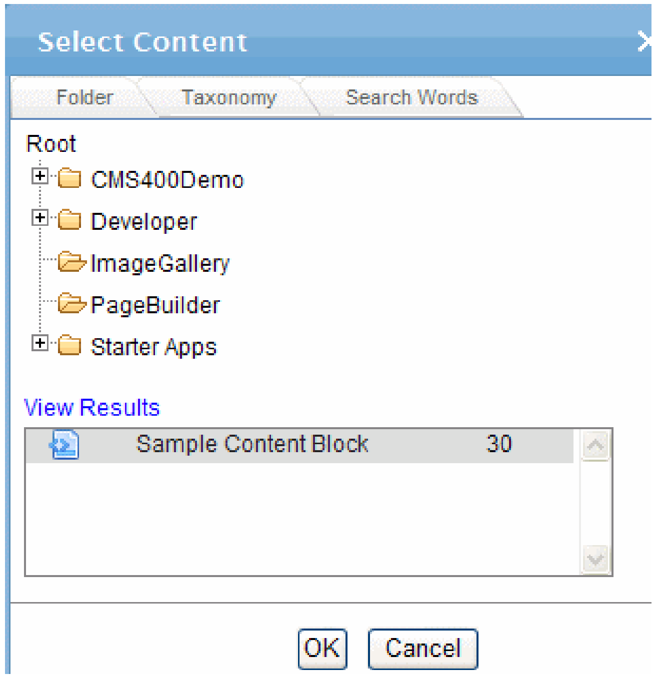


2. The **Default Value** field lets you define a default content item. If you do, when a content author places this field on a Smart Form, he sees the default content (as shown below).



The author can accept the default or change it.

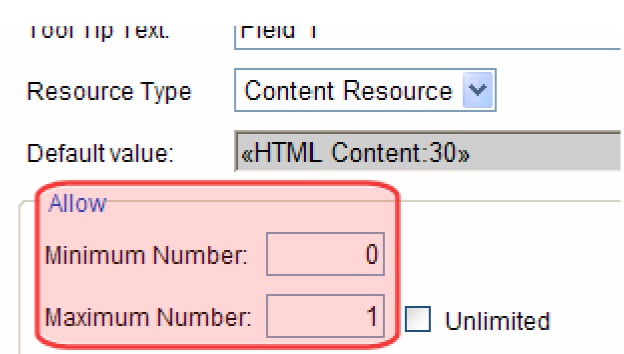
To specify a default content item, click the folder icon next to **Default Value**. The Select Content dialog appears (shown below).



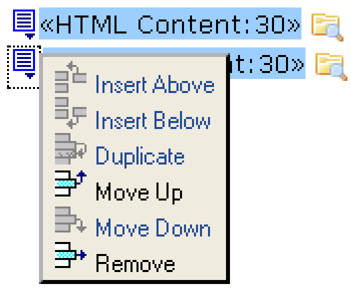
Use the **Folder**, **Taxonomy**, or **Search** tab to identify the default content. See Also: "Taxonomy" on page 9-200, "The Search Published Tab" on page 9-87

Note: When browsing by folder, you only see content folders. You do not see eCommerce catalog, Blog, Community, or Discussion Board folders.

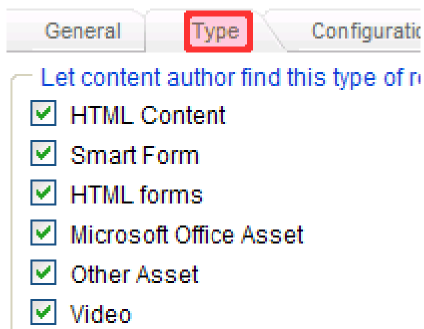
3. Use the **Allow** section of the dialog to define a minimum and maximum number of content items that can be placed on the screen where you are inserting this Resource Selector.



These settings affect the content author's work with this field on a Smart Form in the following way. Assume you set a **Minimum** of 1 and a **Maximum** of 2. After the content author adds two content items for this resource selector, his only options (shown below) are to remove or rearrange fields -- he cannot add more.

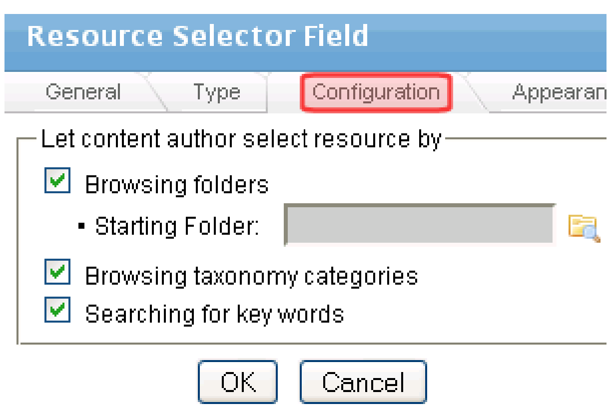


4. Click the **Type** tab of the Resource Selector Field dialog.

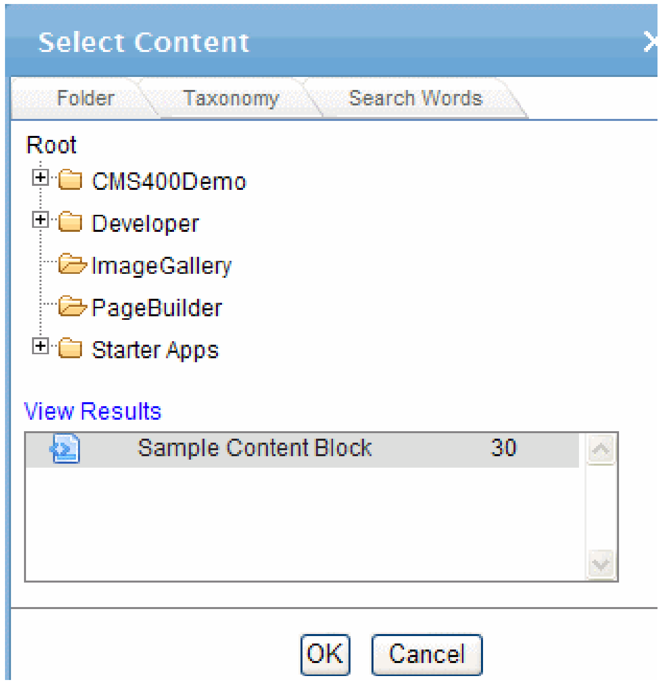


All content types that a content author may add appear. Uncheck types that you do *not* want to let a content author add. See Also: "Types of Content" on page 2-3

5. Click the **Configuration** tab. This tab lets you determine how a content author can select content for the Smart Form.



If you check all three options (as shown above), when a content author clicks this Resource Selector, he sees the following dialog.

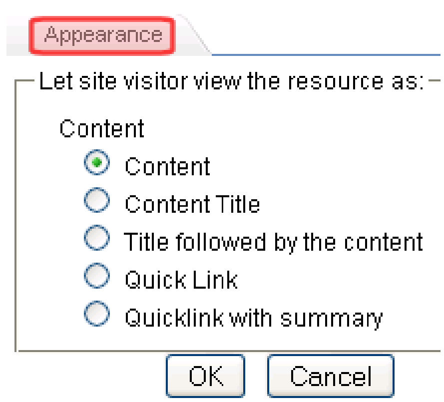


Note that the dialog lets the author browse the folder structure, taxonomy structure, or use search to select content.

Note: When browsing by folder, you only see content folders. You do not see eCommerce catalog, Blog, Community, or Discussion Board folders.

On the other hand, if you unchecked **Browsing taxonomy categories** and **Searching for key words**, the content author could only use the **Folder** tab to select content.

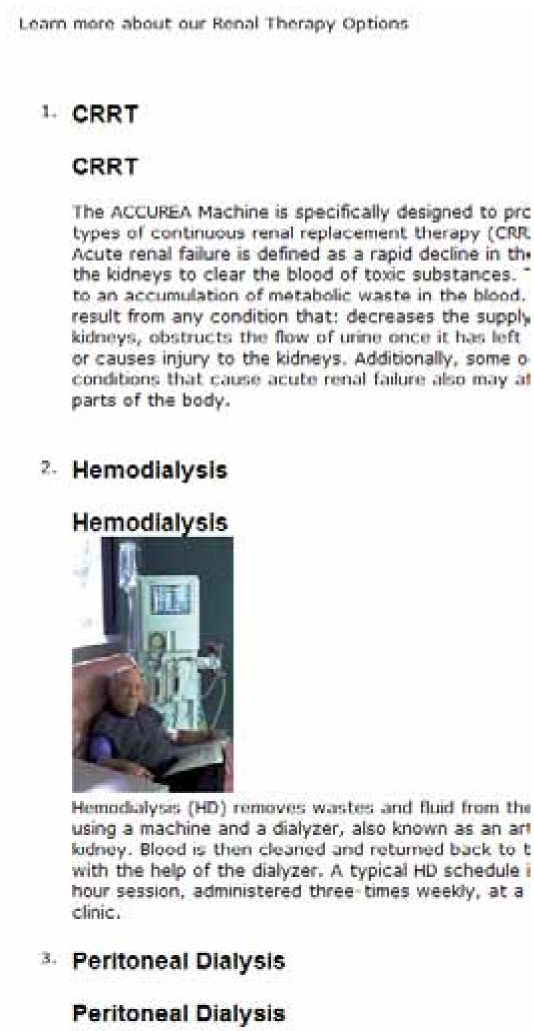
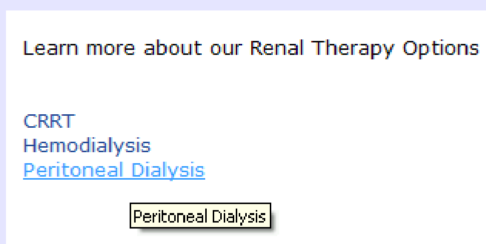
6. Click the **Appearance** tab. This tab lets you determine the default appearance of this Smart Form on your Web site.

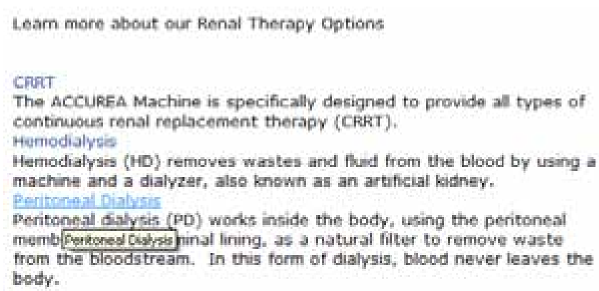


Note: Unlike other settings on this dialog, the content author is not involved in the **Appearance** settings.

The table below provides a sample of each **Appearance** option.

Appearance option	How content appears on Web site
Content	Learn more about our Renal Therapy Options 1. **CRRT** The ACCUREA Machine is specifically designed tc types of continuous renal replacement therapy (Acute renal failure is defined as a rapid decline ir the kidneys to clear the blood of toxic substanc to an accumulation of metabolic waste in the blc result from any condition that: decreases the su kidneys, obstructs the flow of urine once it has or causes injury to the kidneys. Additionally, son conditions that cause acute renal failure also ma parts of the body. 2. **Hemodialysis**  Hemodialysis (HD) removes wastes and fluid fron using a machine and a dialyzer, also known as a kidney. Blood is then cleaned and returned back with the help of the dialyzer. A typical HD sched hour session, administered three-times weekly, a clinic. 3. **Peritoneal Dialysis** 
Content Title	Learn more about our Renal Therapy Options 1. CRRT 2. Hemodialysis 3. Peritoneal Dialysis

Appearance option	How content appears on Web site
Title followed by content	
Quick Link	

<table>
<tr><th>Appearance option</th><th>How content appears on Web site</th></tr>
<tr><td>Quicklink with Summary</td><td>
</td></tr>
</table>

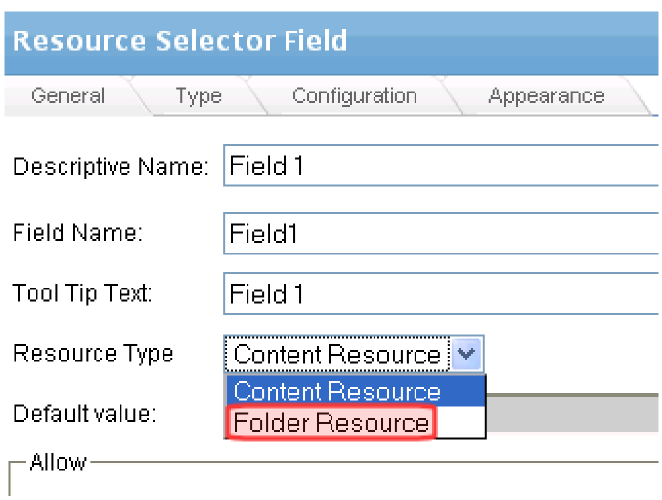
7. Save the dialog and configuration.
8. To learn how a content author works with this configuration, see "How a Content Author Adds Resource Selector Field" on page 7-365.

Letting a Content Author Add a Folder

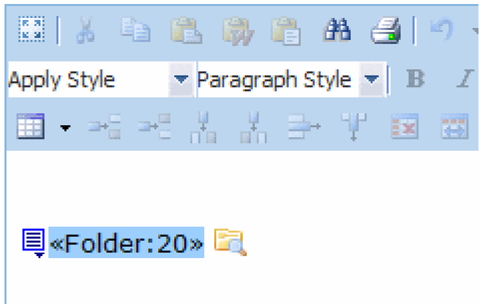
To add a Resource Selector field that lets an author add *folders* to a Smart Form, follow these steps.

Prerequisites: You completed the first three fields on the Resource Selector Field dialog. See Also: "Adding a Resource Selector Field" on page 7-353

1. On the Resource Selector Field dialog, at the **Resource Type** dropdown, select **Folder Resource**.

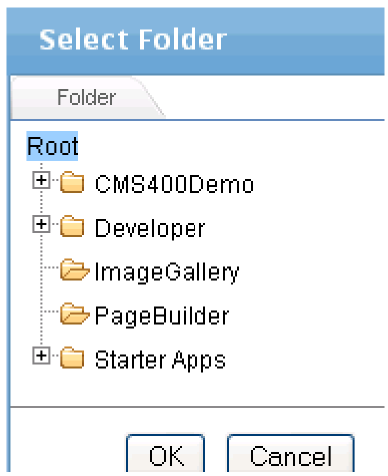


2. The **Default Value** field lets you define a default folder. If you do, when a content author places this field on a Smart Form, he sees the default folder (as shown below).



The author can accept the default or change it.

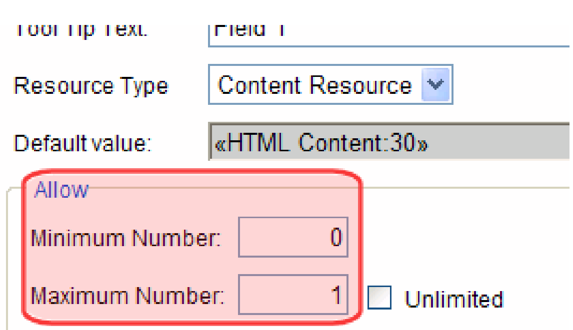
To specify a default folder, click the folder icon next to **Default Value**. The Select Folder dialog appears (shown below).



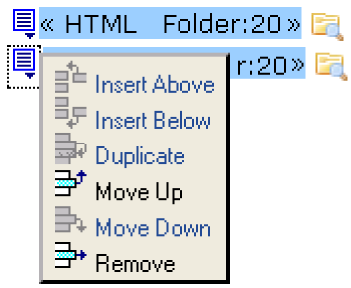
Use it to select the default folder.

Note: When browsing by folder, you only see content folders. You do not see eCommerce catalog, Blog, Community, or Discussion Board folders.

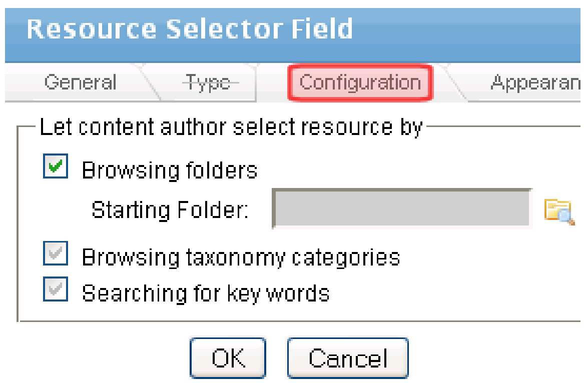
3. Use the **Allow** section of the dialog to define a minimum and maximum number of folder that can be placed on the screen where you are inserting this Resource Selector.

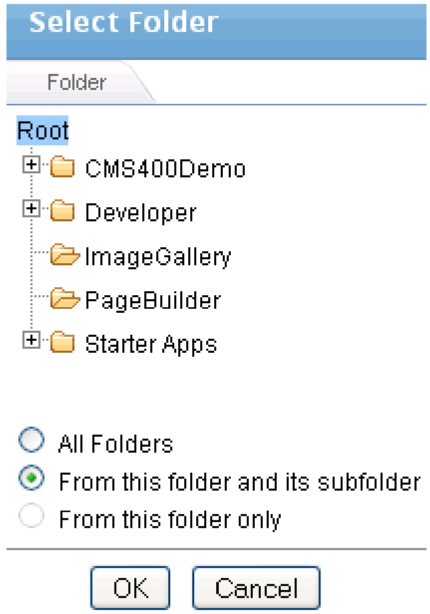


These settings affect the content author's work with this field on a Smart Form in the following way. Assume you set a **Minimum** of 1 and a **Maximum** of 2. After the content author adds two folders for this resource selector, his only options (shown below) are to remove or rearrange fields -- he cannot add more.



4. Click the **Configuration** tab. This tab lets you determine the starting folder for this resource.



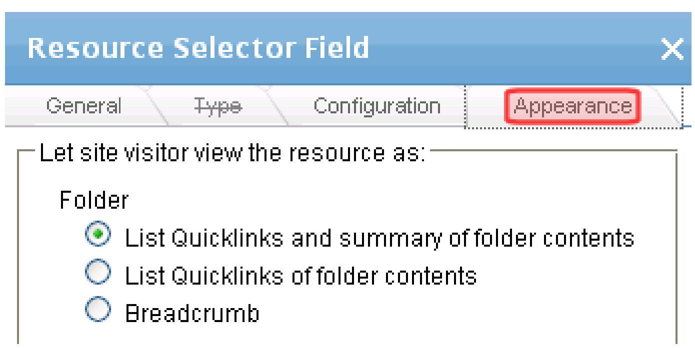


You can browse the folder structure to pick a starting folder. You can also determine if the content author will have access to

- all folders in the folder structure
- this folder and all of its subfolders
- this folder only

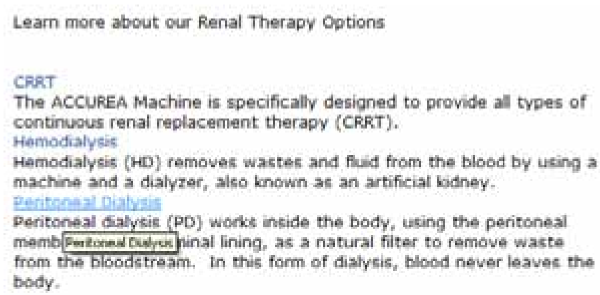
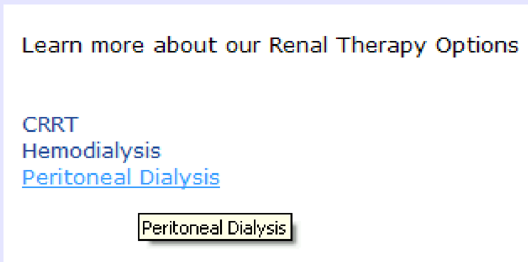
Note: When browsing by folder, you only see content folders. You do not see eCommerce catalog, Blog, Community, or Discussion Board folders.

5. Click the **Appearance** tab. This tab lets you determine the default appearance of this Smart Form on your Web site.



Note: Unlike other settings on this dialog, the content author is not involved in the **Appearance** settings.

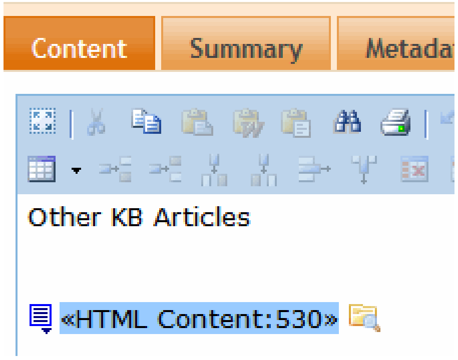
The table below provides a sample of each **Appearance** option.

Appearance option	How folder appears on Web site
List Quicklinks and summary of folder contents	 All content in folder appears in format shown above.
List Quicklinks of folder contents	 All content in folder appears in format shown above.
Breadcrumb	 The folder's breadcrumb path appears, as defined on the folder Properties screen's **Breadcrumb** tab. See Also: "Creating SiteMap Breadcrumbs" on page 9-278

6. Save the dialog and configuration.
7. To learn how a content author works with this configuration, see "How a Content Author Adds Resource Selector Field" on page 7-365.

How a Content Author Adds Resource Selector Field

When a content author creates a Smart Form whose configuration uses Resource Selector fields, they appear as shown below.



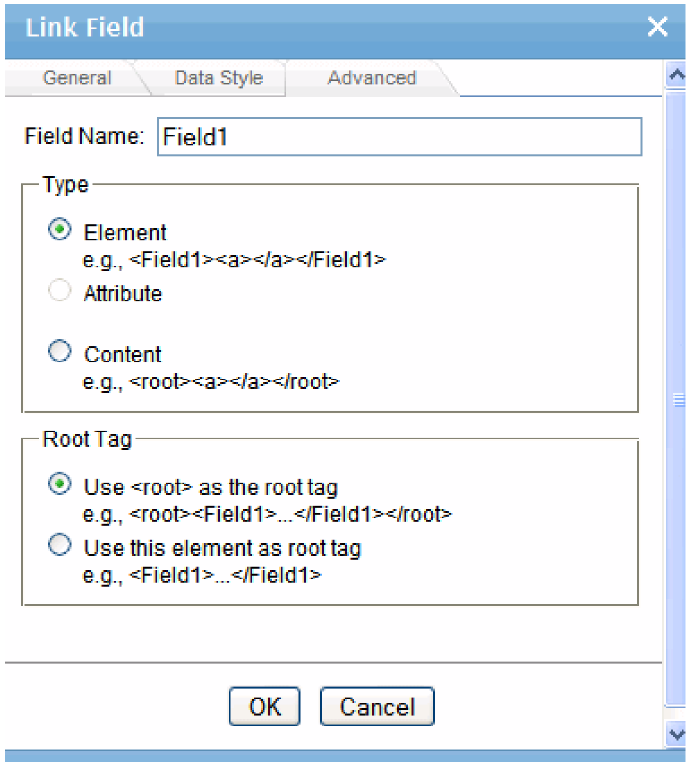
In the above example above, the top field lets the content author select content (id 30 is the default), and the lower one lets him select a folder (id 20 is the default).

To select either one, he clicks the folder to its right, then uses the dialog to make the selection. If working with content, the tabs which appear on the dialog are determined when the resource is placed on the Smart Form configuration. See Also: "Click the Configuration tab. This tab lets you determine how a content author can select content for the Smart Form." on page 7-357

Fields that Appear on Several Dialogs

Advanced Tab

The **Advanced** tab screen lets you control the XML that the field produces.



This dialog has two sections.

- Type - lets you generate XML microformats. See Also: "The Type Area of the Advanced Tab" on page 7-367
- Root Tag - lets you replace the `<root>` tag with another element name. See Also: "Using a Tag Other Than <Root>" on page 7-311

The Type Area of the Advanced Tab

The dialog lets you generate XML microformats made up of standard XHTML tags and attributes that contain a specific structure and values. The types are described below.

Warning! In order for Smart Form fields to searchable, they must be stored as elements *not* attributes. See Also: "Advanced Tab" on page 7-366 If you are upgrading to version 8.0, inspect your Smart Forms and change field properties as needed so they are stored as elements not attributes.

Type	This field defines	Example
Element	A unique tag. The user's response to the field becomes its value.	`<Lastname>Rogers</Lastname>`

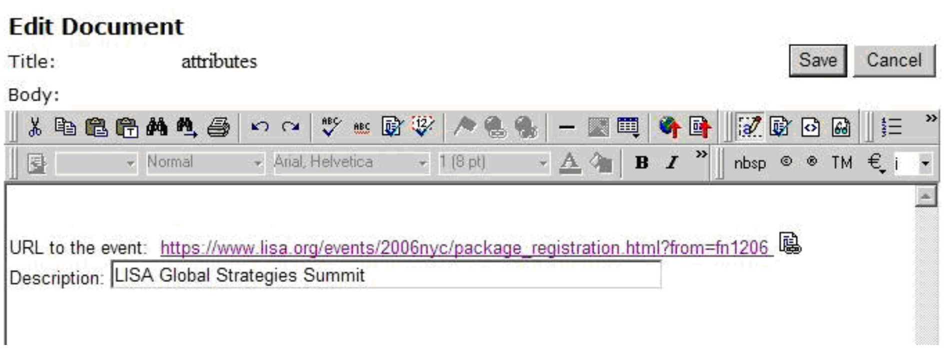
Type	This field defines	Example
Attribute	An attribute of the containing field. The containing field is typically a Group Box. If you insert an **Attribute** field type, the Field Name field on the dialog box is grayed out. The field name and type can only be edited on the Advanced Field properties screen.	`<PtInformation Lastname="Rogers"> </PtInformation>`
Content	The content of the containing field, typically a Group Box. Note that, in this case, field name is not used. As a result, the **Field Name** field is grayed out. The field name and type can only be edited on the Advanced Field properties screen. Since most fields define their own content, this option is typically used to define a value to a Group Box that contains other fields defined as attributes. **Warning!** Only one Content type field is valid within a containing field.	`<PtInformation> Rogers </PtInformation>`

Sample Microformat

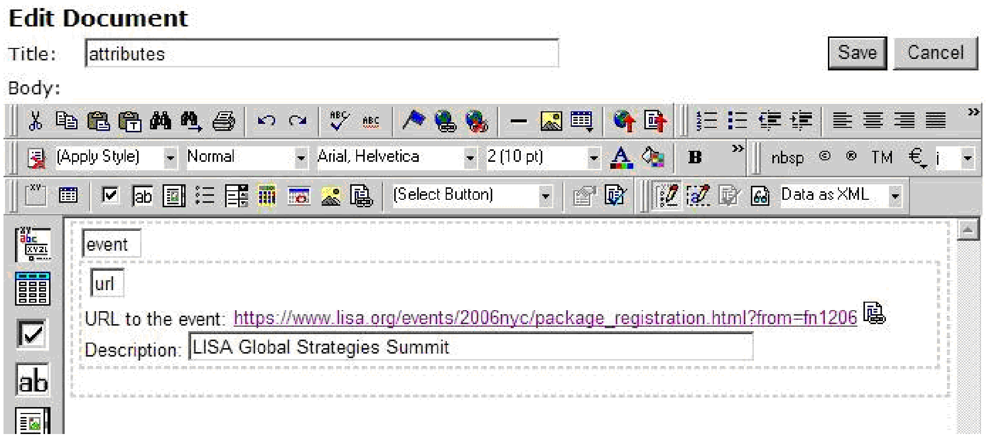
For example, the microformat of an event looks like this.

```
<span class="event">
<a class= "url" href="https://www.lisa.org/events/2006nyc/package_
registration.html?from=fn1206 ">LISA Global Strategies Summit</a>
```


The Data Entry view looks like this.



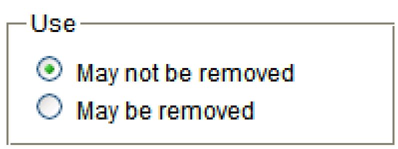
The Data Design view looks like this.



Additional Notes about the Type Area of the Advanced Tab

- If the element is a group box or table, its type must be **Element** because it surrounds other elements.
- If the element is a Rich Area field, its type must be **Element** or **Content**.

The Use Field

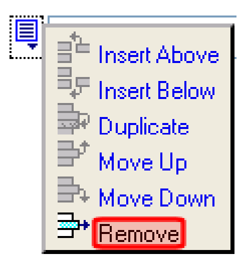


Click **May not be removed** if this field must be included on the screen. Otherwise, click **May be removed**.

If you check **May be removed**, when this field appears on a data entry screen, an icon

(**) appears to the left of the field.

If the user clicks the icon, a dropdown menu provides an option to remove the field, as shown below.



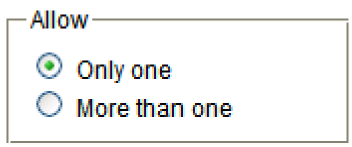
If the user removes the field, *field name* replaces the field on the data entry screen to indicate that the field was removed and can be re-added if necessary.

For example, if the field's display name is `street address`, and the user removes the field,

appears in place of the field.

Note: The menu icon ( ) can also indicate that the user can add instances of a field (see the Allow field, below). So, if a field is required, the icon could appear but omit a **Remove** option.

The Allow Field

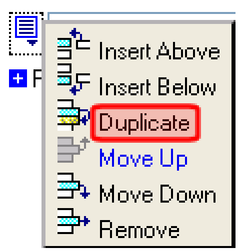


Check **more than one** if you want to let the user entering data add instances of this field. Otherwise, check **only one**.

Warning! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

For example, if a screen is collecting names and addresses and you want to let the user enter several of them, check **more than one**.

If you check **more than one**, when this field appears in Data Entry mode, appears to the left of the field, as shown below.

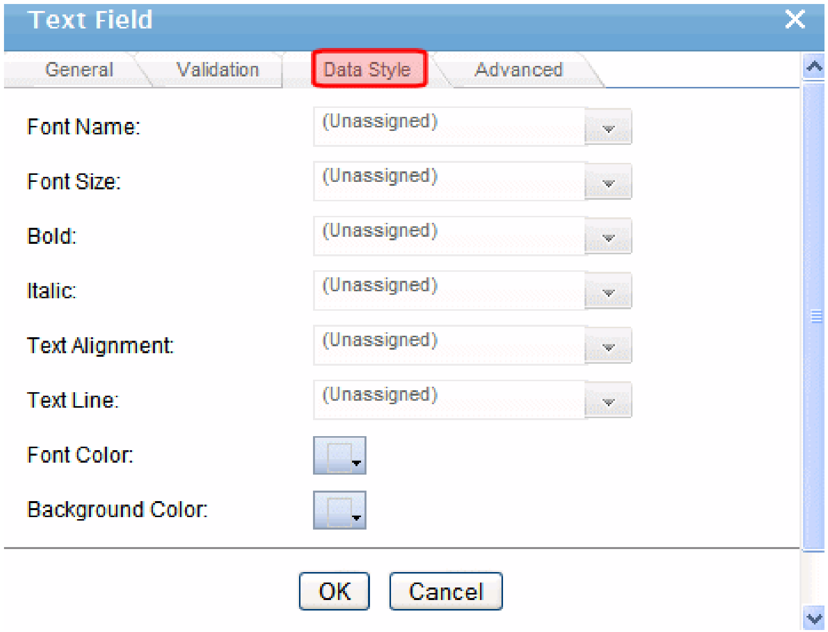


If the user entering data clicks , a menu appears (shown above), which lets the user click **Duplicate** to add instances of the field to the screen.

Note: The menu icon ( ) can also indicate that the user can remove a field (see the Use field, above). So, even if a field allows only one instance, the icon could appear but the menu would only display **Remove**.

The Data Style Field

Click the Data Style button to apply formatting to the field that accepts user input. When you do, the following dialog appears.



Use the dialog to assign the following formatting attributes to a user response field.

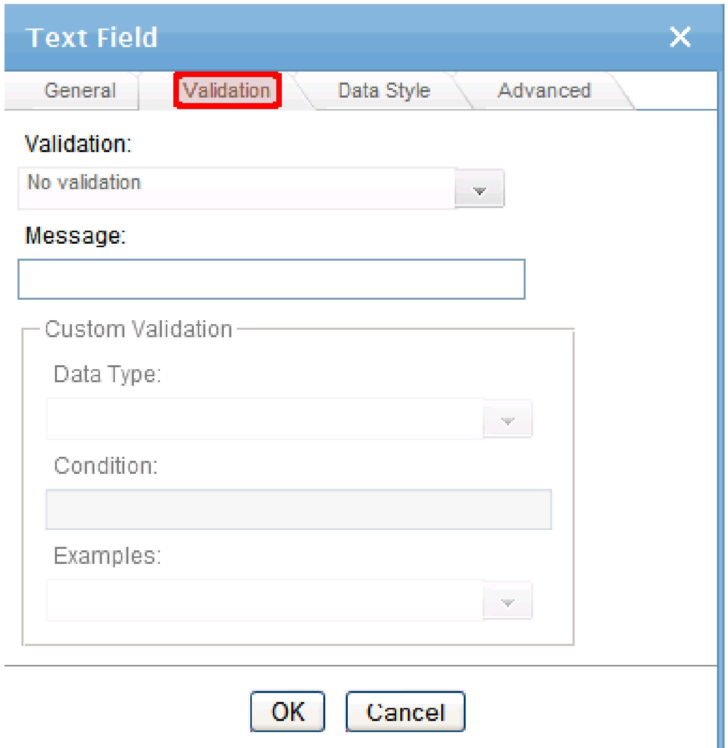
- Font style and size
- Bold and italic
- Text alignment (especially helpful for formatting dollar amounts in a plain text field)
- Underline or strikethrough
- Font color and background color

Note: The configuration data controls a command's appearance on the toolbar and on the Data Style dialog. For example, if `<button command="cmdfontname" />` is removed from configdatadesign.xml, it disappears from the toolbar and the Data Style dialog.

Below is an example of a response field whose font, size, alignment, background, and foreground colors were modified via this dialog.

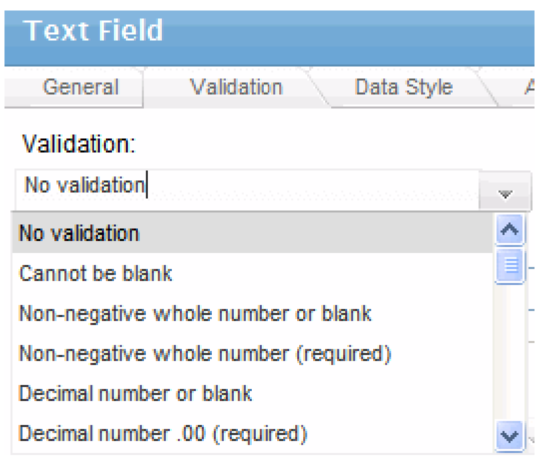
Custom Validation

The Plain Text and Calculation field dialogs feature a Validation tab (illustrated below).



Adding Standard Validation Options

By default, the Data Designer provides several standard validation options. You can see them by clicking the down arrow to the right of the **Validation** dropdown.



For a description of standard validation options, see "Validation" on page 7-326.

If you will frequently use a validation format that does not appear on the list, the following Ektron KB article provides instructions for creating additional validation options.

http://dev.ektron.com/kb_article.aspx?id=7420

Creating Custom Validation Criteria

If the standard validation options do not provide the flexibility you need, use the custom validation feature to ensure the following about the user's input.

- The data type - the default types are
  - text
  - URL
  - whole number
  - decimal number
  - floating point number (Floating point includes scientific notation, so is appropriate for scientific numbers. Decimals usually suffice for business numbers.)

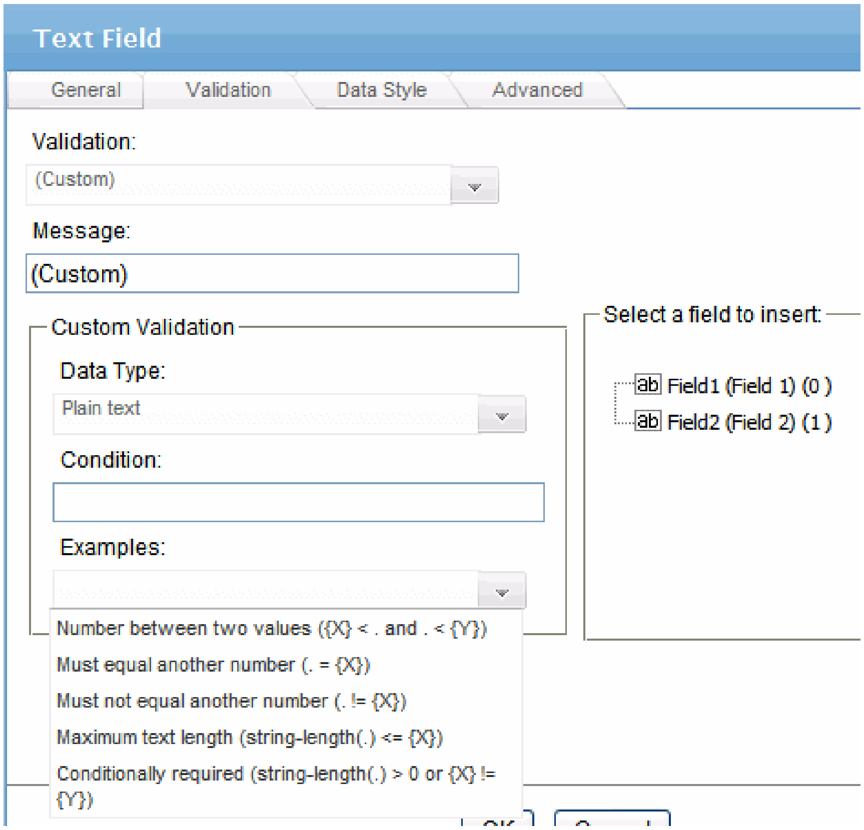
Note: Your system administrator may customize the choices.

- The field value has one of the following relationships with another field, a number, or an expression - the default expressions are
  - between two values (either another field or a number that you specify)
  - less than
  - equal to
  - not equal to
  - maximum length (usually for text responses)

Note: Your system administrator may customize the choices.

If the user's response fails to meet the criteria, you can compose an error message that appears when that happens. Your system administrator determines if a user can save the invalid data.

When the **Custom Validation** button is clicked, the Custom Validation dialog appears.

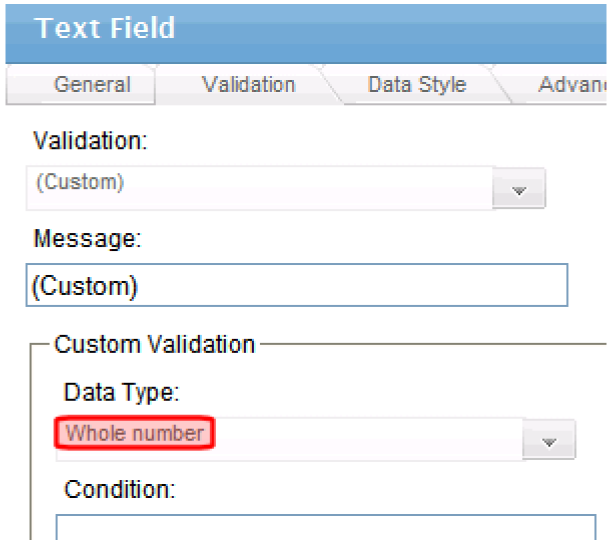


- The **Data Type** field is the value's basic type, for example, text number or URL.
- The **Condition** field displays the validation logic.
- The **Examples** drop-down list shows validation expressions that the data design creator can apply to the field.
- Any **Error Message** displays in Data Entry mode when the user inserts an invalid value.
- This dialog displays fields that can be inserted into the **Condition** field. Some field types, like the RichArea field, are not listed. See Also: "Referencing Other Calculated Fields" on page 7-336

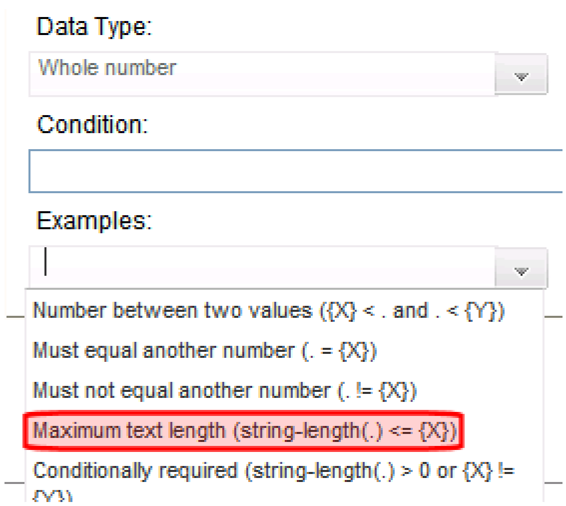
Example of Creating Custom Validation

As an example of custom validation, assume that a field collects telephone numbers, and you want to make sure the user enters 10 digits. To accomplish this, follow these steps.

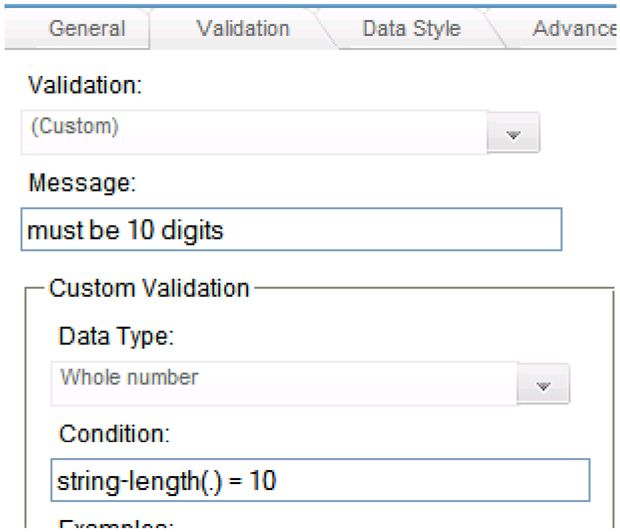
1. Click the Plain Text Field dialog and complete the screen.
2. In the validation section, click **Custom Validation**. The Custom validation screen appears.
3. In the **Data Type** field, select **Whole Number** from the drop down list. This ensures that the user can only enter digits.



4. Click the down arrow to the right of the **Examples** field to see sample logic.



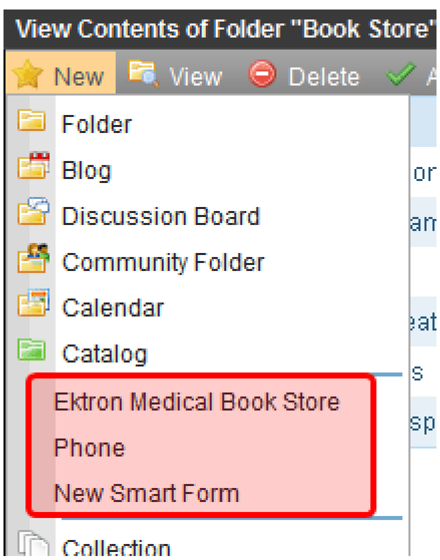
5. Click **Maximum text length...** . This option lets you specify the length of the user's response.
6. `string-length(.) <= {X}` appears in the **Condition** field.
7. Since you want the user's input to equal 10, remove the less than sign (<) from the calculation. Now it looks like this: `string-length(.) = {X}`.
8. Replace the `{X}` with 10. Now, it looks like this: `string-length(.) = 10`.
9. Move the cursor to the **Error Message** field and compose a relevant error message. For example: `must be 10 digits`.
10. Your screen should look like this.



11. Press **OK** and return to the **Plain Text** field dialog.
12. Press **OK** to save that dialog and test the validation on the phone number field. To do this, switch to Data Entry mode and enter more or fewer than 10 digits, as well as non-digit characters to verify that validation works as expected.

Assigning Smart Forms to a Folder

When creating new content in a folder, the **New** menu provides a list of Smart Forms that you can use to create new XML content. (See graphic below.)



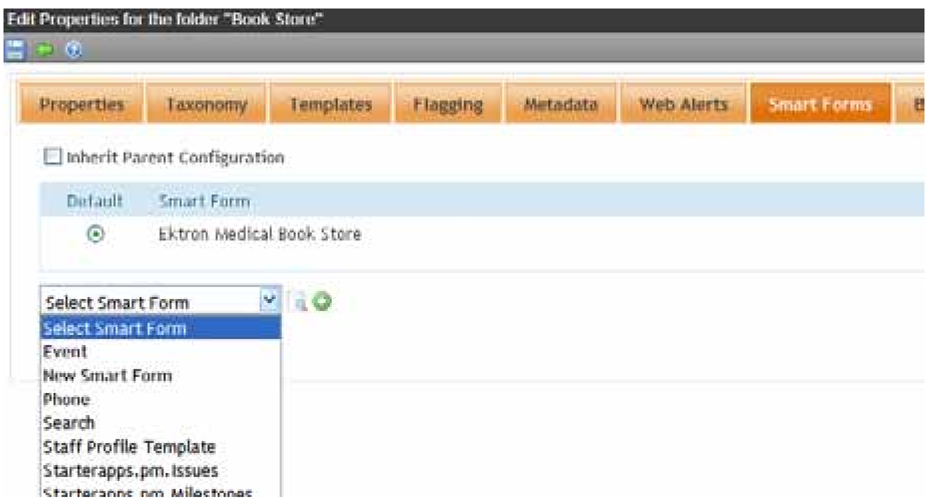
This section explains how to determine the list of Smart Forms available when creating content.

Inheritance and Smart Forms

A folder's Smart Forms can be inherited from the parent folder, or you can break inheritance and assign a unique group of Smart Forms. Use the **Inherit Parent Configuration** checkbox to retain or break inheritance.

Assigning Smart Forms to a Folder

If you break inheritance, you then select the Smart Forms that can be assigned to content in the folder using the Smart Forms dropdown list (shown below).

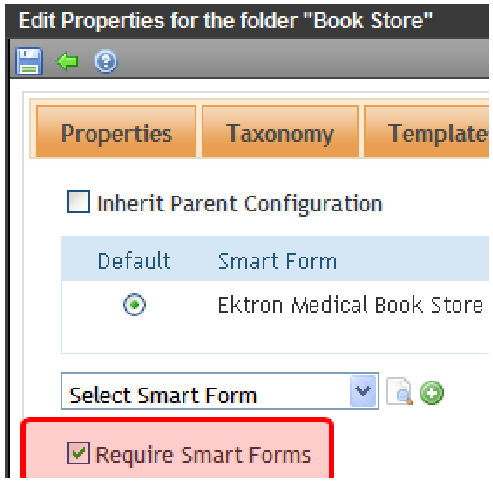


You can preview any Smart Form by clicking the Preview button (). To add any Smart Form, select it from the dropdown list and click **Add**.

To remove a Smart Form, click **Remove**.

Requiring Smart Forms

You can require a Smart Form to be the only type of content that can be added within a folder. To enable this, click the **Require Smart Forms** check box on the Smart Forms tab.

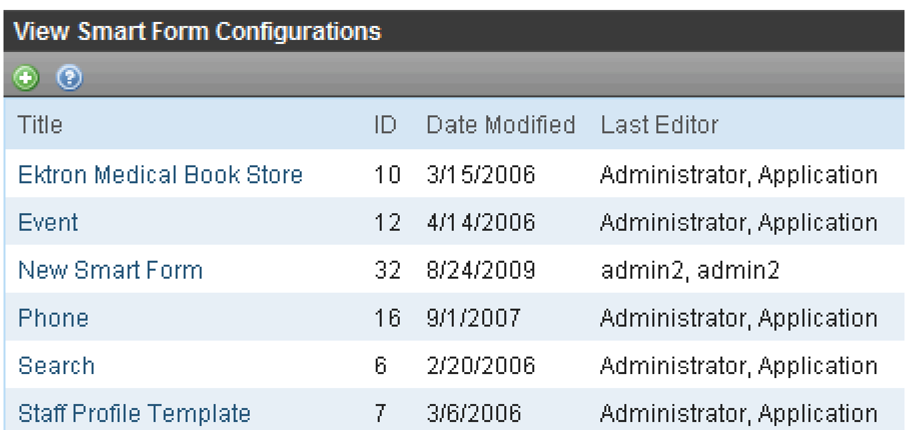


If you do, the user can only choose enabled Smart Forms when viewing that folder's **New** menu -- all other content types are suppressed.

Viewing Smart Forms

To view a Smart Form, follow these steps.

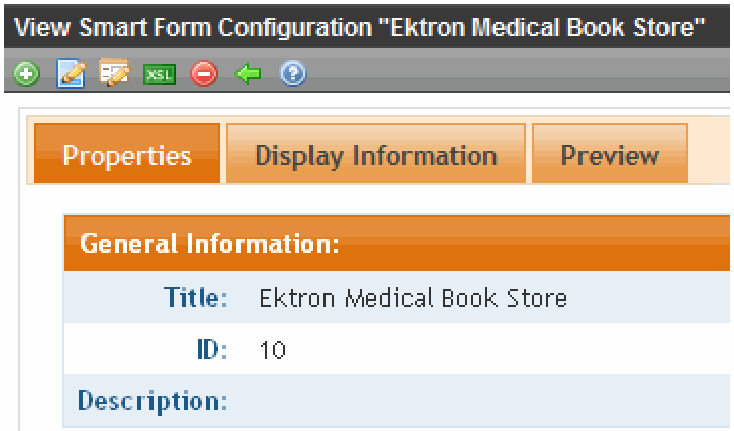
1. In the folder tree on the left side of the Workarea, go to **Settings** > **Configuration** > **Smart Form Configuration**.
2. Click the form you want to view.


View Smart Form Configurations

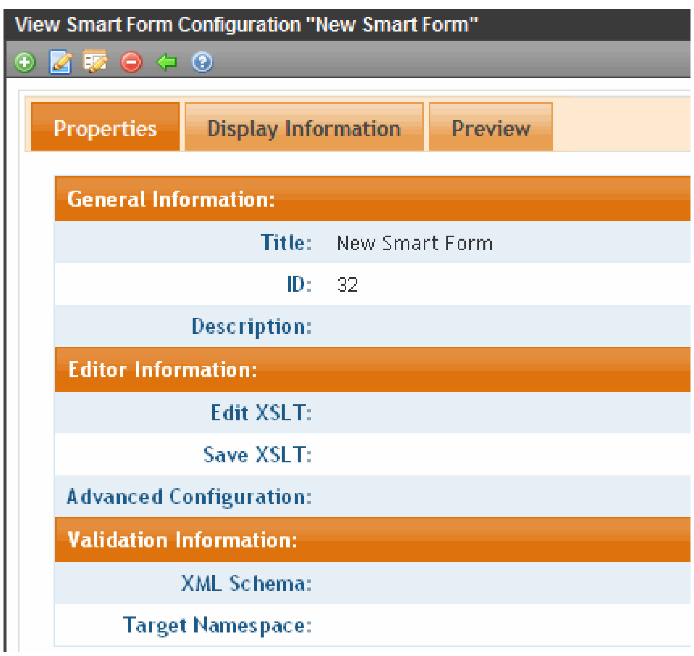
Title	ID	Date Modified	Last Editor
Ektron Medical Book Store	10	3/15/2006	Administrator, Application
Event	12	4/14/2006	Administrator, Application
New Smart Form	32	8/24/2009	admin2, admin2
Phone	16	9/1/2007	Administrator, Application
Search	6	2/20/2006	Administrator, Application
Staff Profile Template	7	3/6/2006	Administrator, Application

The View Smart Forms screen appears with a more detailed description of the configuration.

Smart Form Created with Data Designer



Smart Form Created with External Files



The View Smart Form screen has three tabs.

- "Properties Tab" on page 7-380
- "Display Information Tab" on page 7-382
- "Preview Tab" on page 7-382

Each tab is explained below.

After viewing, you can perform the following actions on the Smart Form.

Button	Name	Description	More Information
	Edit	Edit a Smart Form	"Editing Smart Forms" on page 7-383
	Edit Data Design	Open Data Designer	"Editing Data Design Packages" on page 7-383
	Add Smart Form	Create a new Smart Form from scratch or based on an existing one	"Viewing Smart Forms" on page 7-378
	View XSLT	Display a Smart Form's XSLT	"Viewing Data Designer XSLTs" on page 7-386
	Delete	Delete a Smart Form	"Deleting Smart Form Configurations" on page 7-387
	Back	Return to previous screen	

Properties Tab

Field	Description
Title	Name given to Smart Form.
ID	ID number assigned by Ektron CMS400.NET upon creation of the configuration.
Description	Detailed description of configuration given by creator or last editor.

If the Smart Form was created using external XML files (instead of the Data Designer), the following information also appears:

- "Editor Information" on page 7-381

- "Validation Information" on page 7-381

Editor Information

Note: This section only appears if you do not use the Data Designer to create your Smart Form.

The editor information contains the file names of the XSLTs used when editing and adding content in the editor.

Field	Description
Edit XSLT	XSLT applied to the content when being edited. Note: If no edit XSLT is specified, the Edit Data Design option is enabled in the toolbar.
Save XSLT	XSLT used to transform the XML created in the editor when the Smart Form is saved to the database.
Advanced Configuration	XML file that contains display information, schema validation, and other advanced XML data.

Validation Information

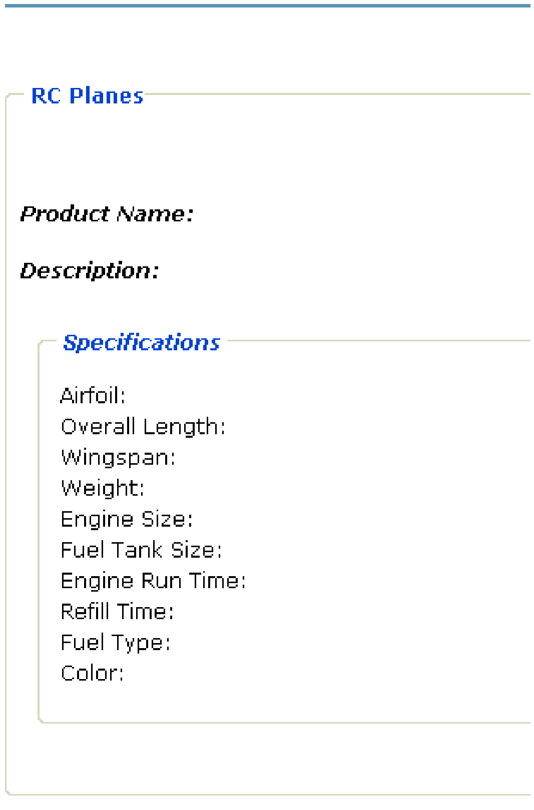
Note: This section only appears if you do not use the Data Designer to create your Smart Form.

You can validate the content created and edited with Ektron CMS400.NET with a schema if desired. The validation information contains information about the schema.

Field	Description
XML Schema	Specify the .xsd file used to validate the XML content that the Smart Form will be assigned to.
Target Namespace	Specify the default namespace used for outgoing XML.

Preview Tab

The **Preview** tab displays the XSLT applied to the editor when XML content is created. This is the XSLT that was created for the Smart Form.



Display Information Tab

The display information tab lists the XSLTs that are used when displaying XML in the respective environment.

Field	Description
XSLT1	Display XSLT 1
XSLT2	Display XSLT 2
XSLT3	Display XSLT 3
XSLT Package	Display XSLT Package (created using the Data Designer)

Note: When a Smart Form is created using the Data Designer, a default display XSLT is also created which looks similar to the edit XSLT created in the editor. This default XSLT can be applied to the XML content.

The asterisk (*) denotes the default XSLT for the Smart Form.

The tab also displays the Smart Form's xpaths.

Editing Smart Forms

After creating a Smart Form, you can modify it when files defined in the configuration have changed. Since there are two ways to create a Smart Form, there are two ways to edit one. See Also: "Editing Data Design Packages" on page 7-383, "Editing a Smart Form Created with External Files" on page 7-384

This section also explains how to customize the Smart Form's XSLT. See Also: "Editing a Smart Form's XSLT" on page 7-385

- "Editing Data Design Packages" on page 7-383
- "Editing a Smart Form Created with External Files" on page 7-384

Editing Data Design Packages

After you create a Smart Form, you can modify it.

Before You Edit the Data Package!

Before editing a Smart Form data package, it is important to understand the effects of the modifications. If an XML data package is edited, all content to which the configuration is applied is updated. Information that was originally created may be lost, depending on the changes you make to the package.

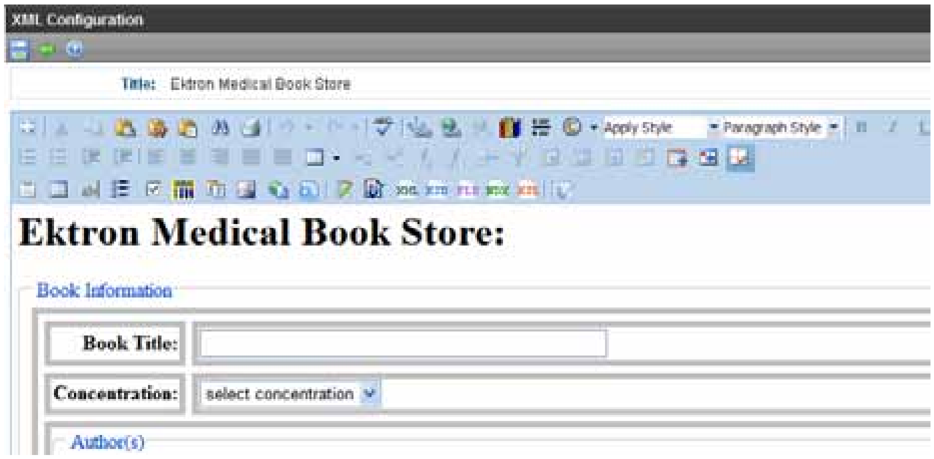
To ensure that information is not lost, use the Create New Smart Form Based on Existing Smart Form option on the view Smart Form screen. See "Creating Smart Forms Based on Existing Configurations" on page 7-385 for more information.

Editing a Data Design Package

To edit a data design package, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Smart Form configuration you want to edit.

3. The View Smart Form screen appears with a more detailed description of the configuration.
4. Click the Data Design Mode button ( ) at the top of the screen.
5. The Edit Data Design Package screen displays the current package.



6. Make the necessary changes to the Data Design package in the editor. See "Using eWebEdit400 to Create Smart Forms" on page 7-296 for information about creating XSLTs using the Data Designer.
7. Click the Update button ( ).

Editing a Smart Form Created with External Files

Warning! Release 7.5.2 and up of Ektron CMS400.NET supports two editors: eWebEditPro+XML and eWebEdit400. If you want users to insert Smart From information using eWebEdit400, you cannot create or edit Smart Forms using external files. You must create and edit them using Ektron CMS400.NET's Data Designer.

1. In the Workarea, go to **Settings** > **Configuration** > **Smart Form Configuration**.
2. Click the Smart Form configuration you want to edit.
3. The View Smart Form screen is displayed.
4. Click the Edit button ( ).
5. The Edit Smart Form screen is displayed.
6. Edit the necessary fields to update the Smart Form. See "Smart Form Fields" on page 7-295.
7. Click the Update button ( ).

Now, all content and folders that use the Smart Form take their properties from the updated configuration.

See Also: "XML File Verification" on page 7-296

Editing a Smart Form’s XSLT

Every Smart Form has a packaged XSLT, which is a default XSLT created from the configuration’s display information. If you want to modify the Smart Form’s appearance, follow these steps.

1. Go to **Settings > Configuration > Smart Form Configurations**.
2. Click the Smart Form configuration whose XSLT you want to customize.
3. Click the View XSLT button ( ).
4. Select and copy the XSLT.
5. Paste it into an XSLT editor.
6. Customize the file.
7. Save it with an .xslt extension to your `site root/xmlfiles` folder.
8. Return to the Smart Form configuration you selected in Step 2.
9. Click the Edit button ( ).
10. In the **XSLT1** field, enter the Xslt you saved in Step 5.
11. Click the radio button next to **XSLT1**.
12. Click Save ( ).

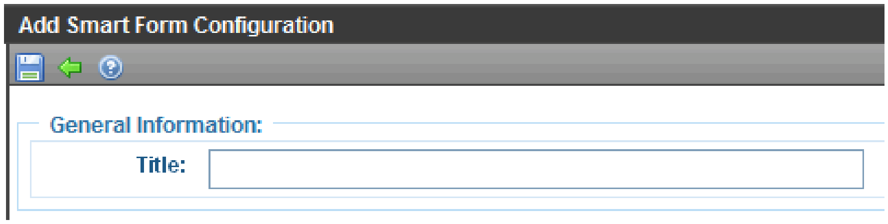
You can edit the custom XSLT at any time. The changes immediately affect the appearance of the Smart Form on your Web site. So, the XSLT is quite different from other aspects of the Smart Form configuration, which generally cannot be edited for existing content.

Creating Smart Forms Based on Existing Configurations

Whenever major changes must be made to a Smart Form, Ektron recommends making a copy of it and modifying the copy. In this way, you do not affect the content controlled by the original configuration.

To create a new Smart Form based on an existing one, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Smart Form configuration you want to view.
3. The View Smart Form screen appears with a more detailed description of the configuration.
4. Click the Create New Smart Form button ( ).
5. The Add Smart Form screen is displayed.



6. Enter a **Title** for the new Smart Form.
7. Click the Add Smart Form button ( ).
8. The View Smart Form screen for the new Smart Form is displayed. From here, you can perform the necessary actions on it.

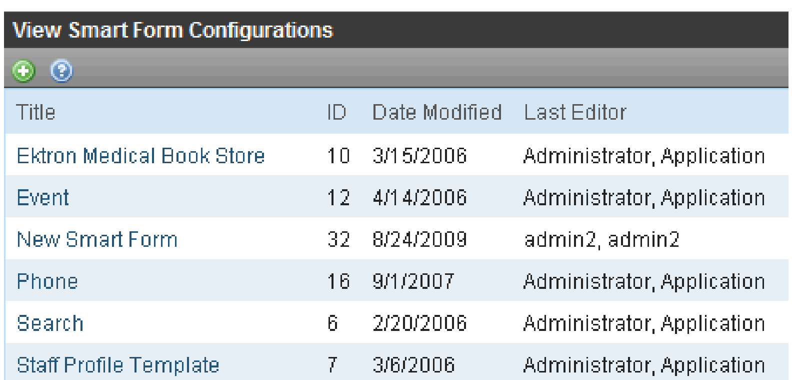
Viewing Data Designer XSLTs

When a Smart Form is created using the Data Designer, an XSLT is produced to assist you with creating your display XSLT. This XSLT includes the structure for your XML documents.

If a display XSLT is not applied to a Smart Form, content is displayed using the default XSLT displayed in the View XSLT screen.

To view the XSLT for a Smart Form, follow these steps.

1. In the folder tree on the left side of the Workarea, go to **Settings** > **Configuration** > **Smart Form Configuration**.
2. Click the Smart Form configuration whose XSLT you want to view.


View Smart Form Configurations

Title	ID	Date Modified	Last Editor
Ektron Medical Book Store	10	3/15/2006	Administrator, Application
Event	12	4/14/2006	Administrator, Application
New Smart Form	32	8/24/2009	admin2, admin2
Phone	16	9/1/2007	Administrator, Application
Search	6	2/20/2006	Administrator, Application
Staff Profile Template	7	3/6/2006	Administrator, Application

Note: The XSLT only appears if the Smart Form was created using the Data Designer.

3. The View Smart Form screen appears with a more detailed description of the configuration.
4. Click the View XSLT button ( ).

5. The View XSLT screen is displayed.

You can use this information to create your display XSLT.

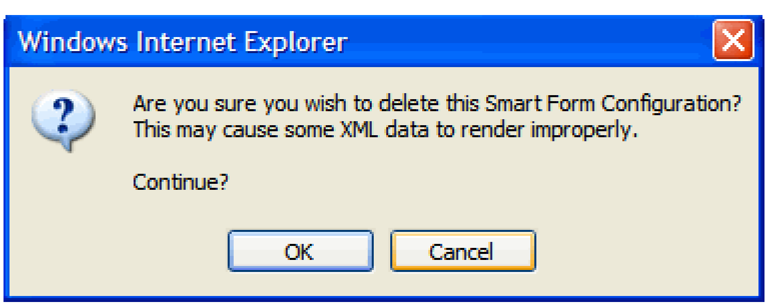
Deleting Smart Form Configurations

You can delete Smart Form configurations that are no longer needed. To do so, follow these steps.

Note: If any Smart Form that uses this configuration has one or more indexed fields, you must delete all content that uses the configuration before you can delete it. See Also: "Specifying Which XML Elements are Indexed" on page 7-391

---

1. In the Workarea, go to **Settings** > **Configuration** > **Smart Form Configuration**.
2. Click the Smart Form configuration you want to delete.
3. The View Smart Form screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.



6. Click **OK**.

XML Indexing

XML Indexing lets site visitors search XML information collected via Smart Forms and view the results. The results appear as a list of topic titles, optionally followed by the content summary.

The Data Designer lets you choose which XML fields to index. You can also validate those fields to be numbers, dates, Boolean, or string values. After you identify fields to be indexed, a search dialog is created. Where appropriate, the dialog automatically populates drop down lists from the indexed data.

Note: As the name implies, XML indexing is only available for information collected on XML Smart Forms. It cannot find information in XHTML content.

See Also:

- "User vs. Developer Selected Search Criteria" on page 7-389
- "Types of Search Criteria" on page 7-390
- "Setting up a User-Defined Search" on page 7-391
- "Setting up a Developer-Defined Search" on page 7-391
- "Specifying Which XML Elements are Indexed" on page 7-391
- "Search Dialog Setup" on page 7-393
- "IndexSearch Server Control" on page 7-394

- If you are upgrading from an earlier version of Ektron CMS400.NET to 7.5 or higher, the Knowledge Base article "INFO: 7.5 Upgrade: Changes to 7.5 XML Index Search" lists upgrade considerations.

User vs. Developer Selected Search Criteria

There are two ways that XML Indexing can make XML content available to your site visitors.

- *Present a screen of search criteria*. A site visitor uses the screen to select the kind of information he is looking for. For example, your site sells outdoor clothing, and a user searches for wool hats under $20.00.
- *Determine the search and display criteria programmatically using a custom function*. Your Web developer inserts a control that specifies search and display criteria. For example, your site sells books. A site visitor sees a navigation link **Find books under**

$5.00. When he clicks that link, the control searches your XML content and returns all books whose price is less than $5.00.

Note: The Ektron Windows Service manages the background processing that creates XML indexes. See Also: "Ektron Windows Service" on page 19-13.

Note: Ektron CMS400.NET content has a **Content Searchable** check box, which is checked by default. It must be checked if you want the Index Search to find Smart Form content. See Also: "The Content Searchable Field" on page 9-23

Types of Search Criteria

XML Indexing allows multi-dimensional searches on all types of XML data.

Data Type	XML Index Search can
Plain text	Use an exact phrase, or any word or letter in a phrase
Numerical and date information	Use expressions such as greater than, less than, or between two values
List and choice fields	Display the field values and let the user select relevant ones. Note: Choices field values can consist of single letter.
Image Only	Use the `alt` or `src` attribute value
Link	Use the text or `href` attribute value

For every search field, **NoSelection** is a value. If this is chosen, the search disregards that field when compiling results. However, the user must select a value (or range of values) in at least one field to get results.

Warning! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

Warning! In order for Smart Form fields to searchable, they must be stored as elements *not* attributes. If you are upgrading to version 7.5 or higher, inspect your Smart Forms and change field properties as needed so they are stored as elements not attributes.

Setting up a User-Defined Search

To create a user-defined search, follow these steps.

Step	For more information, see
1. Select a Smart Form	"Accessing Smart Forms" on page 7-291
2. Assign indexing to each field to be searched	"Specifying Which XML Elements are Indexed" on page 7-391
3. Set up the search screen	"Search Dialog Setup" on page 7-393
4. Have your Web developer set up a page that displays a search control and a results control	"IndexSearch Server Control" on page 7-394

Setting up a Developer-Defined Search

To set up a developer-defined search, which defines both the criteria and the results page, use the `SearchParmXML` property of IndexSearch Server Control. For more information, see "IndexSearch Server Control" on page 7-394.

Specifying Which XML Elements are Indexed

You can index the following types of fields:

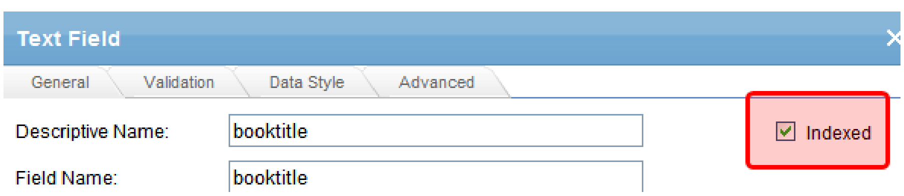
- Checkbox
- Plain Text

- Choices
- List
- Calculated
- Image Only
- Link
- Calendar

Warning! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

To enable indexing for any field on an XML Smart Form configuration, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Select a Smart Form configuration that you want to index. See Also: "Accessing Smart Forms" on page 7-291
3. Open its Data Design.
4. Move the cursor to the first field you want to index.
5. Right mouse click the field.
6. Choose **Field Properties**.
7. A dialog box appears.



8. Check **Indexed**.
9. Repeat these steps for every field by which you want site visitors to search the Smart Form.

Validation

Validation ensures that the user completing an XML form enters the right type of data. You can decide if the user's input should be a number, boolean, date, string, zip code, etc. If you do not specify type attributes using validation data, the field is a string.

Validation is especially important when users search XML data, because it helps the search find the correct information. For example, if a field collects a zip code but you set its type to plain text, a user completing the form can insert anything into the field. If the user inserts the letter “o” instead of the number zero (0), the field accepts that input but the search will not find that record. On the other hand, if you set validation to zip code, the user can only insert five or nine digits -- any other entry is rejected.

Search Dialog Setup

When you save a Data Design form, a dialog appears that lets you view all and modify indexed fields (illustrated below).

The information on this screen is explained below.

Screen section	Description
Xpath	The xpath to each indexed field.
Label	The index field’s field name, as defined on its dialog.
Multiple	Check this box if you want to allow the user performing the search to select more than one value. This checkbox only appears with List and Choice fields. Note: To select more than one value on the search screen, the user holds down the <Ctrl> key while selecting additional options.

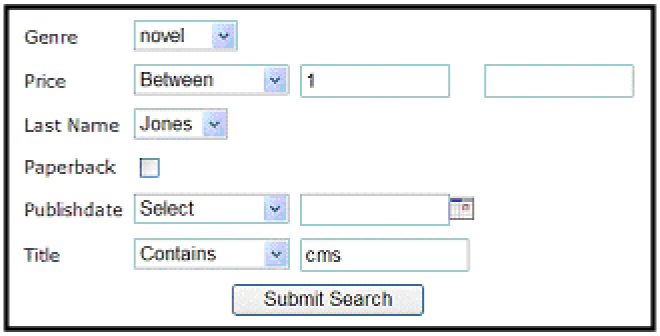
IndexSearch Server Control

Use the IndexSearch server control to display a Smart Form's search screen on any Web form. The control lets a site visitor search Smart Form content and displays the results.

Note: The `xmlConfigID` property identifies the Smart Form that appears on the page on which you are placing this server control.

See Also: "XML Indexing" on page 7-389

Below is a sample screen that the IndexSearch server control can generate.



Alternatively, you can predefine a search and have the results appear on a Web form via the `SearchParmXML` property. See Also: "SearchParmXML Property" on page 7-400

In addition, you can run an XML search programmatically. See "Using the IndexSearch Server Control Programmatically Example" on page 7-402 and "Programmatically Predefined General Search Results Replaced By Specific Search Results" on page 7-405.

This section contains the following topics:

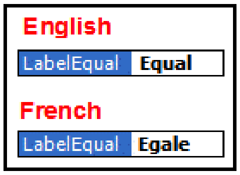
IndexSearch Server Control Properties

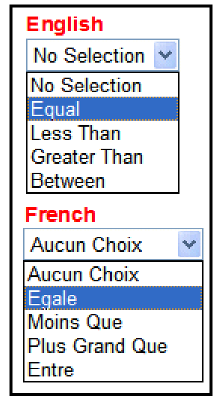
The IndexSearch server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

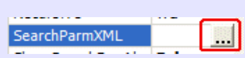
Property	Description	Data Type & Values
Authenticated	Indicates if you are logged in to CMS Explorer and can use it to browse to the folder needed for the `FolderID` property. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
ButtonImgSrc	If you want to display an image on the submit button, enter the server path to it.	String
ButtonText	Text that appears on the submit button.	String The default is: **Search**
ContentParameter	Checks the QueryString for the content block ID value and replaces the search with content when ID is specified. Leave blank to always display the search.	String None - Use Default ID - The server control uses the content block passed as a URL parameter.
CustomOrderBy	Provide the XPATH of an indexed field to order search results by that field. For example, if your XPATH is /root/Event/Location/city, results will be sorted by city. Results can be ascending or descending based on `OrderByDirection`. If you enter an invalid XPATH, results will be ordered by rank. If you specify `CustomOrderBy` and `OrderBy`, the `OrderBy` property is ignored.	String

Property	Description	Data Type & Values
DisplayXslt	Determines how search results display on the page **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String **None** - databind only **ecmNavigation** - lists the title of every content block in the folder See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page
EmptyResultMsg	The resource file string that appears if the search returns no hits. To learn about editing the resource file, see "Procedure for Translating Workarea Strings" on page 14-41.	String The default value is: **Your search did not match any documents.**
EncodeContentHtml	Determines if HTML content is encoded when returned	Boolean **True** = Content HTML is encoded **False** = Content HTML is not encoded
FolderId	The numeric id of the folder that you want to search. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9 The `Recursive` property determines whether the search includes this folder's child folders.	Long Any folder's numeric ID. **0** (zero) is the root folder.
Hide	Use to hide output of the index search in design time and run time. For example, you want to pass the results to code behind for further manipulation.	Boolean **True** = Hide results **False** = show results

<table>
<tr><th>Property</th><th>Description</th><th>Data Type & Values</th></tr>
<tr>
<td>Labelafter
Labelbefore
LabelBetween
LabelContains
LabeldateBetween
LabelEqual
LabelExactPhrase
LabelGreaterThan
Labelinputdate
Labelinputnumber
LabelLessThan
Labelon
LabelSelect</td>
<td>All properties let you change their label names. This is useful for multi-language issues.
For example, if you have a French site, change Equal to Égale.


Note: These labels do not change based on the <code>Language</code> property's setting. For example, setting the <code>Language</code> property to 1036 does not change these labels to French.</td>
<td>String
Examples of what the user sees on the site in French and English.

</td>
</tr>
<tr>
<td>Language</td>
<td>Set a language for viewing index search results. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).</td>
<td>Integer</td>
</tr>
</table>

Property	Description	Data Type & Values
LinkTarget	Use to define a link's behavior when clicked.	ItemLinkTargets **_blank** - Causes the link to always be loaded in a new blank window. This window is not named. **_self** - Causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - Causes the link to load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - Causes the link to load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. Useful for breaking out of an arbitrarily deep frame nesting.
MaxResults	The maximum number of content blocks returned (0=unlimited)	Integer

Property	Description	Data Type & Values
OrderBy	The search results' sort criterion. For example, to sort results by last modified date, choose **Date Modified**. Use the `OrderByDirection` property to determine the direction of the sort.	String ▪ **Title** - The content block title ▪ **ID** - The content ID number ▪ **Date Created** - The date the content block was created ▪ **Date Modified** - The date the content block was last modified ▪ **AuthorLName** - The last author's last name ▪ **AuthorFname** - The last author's first name ▪ **StartDate** - The GoL-ive Date
OrderByDirection	The sort direction of the search results. This property works with the `OrderBy` property.	String Ascending Descending
Recursive	Determines whether the search uses the selected folder's child folders. The folder is selected at the `FolderID` property.	Boolean True False
SearchParmXML	Opens a new window that lets you predefine a search. For example, you want mystery books from a Acme Publishing published in the current year to appear on a Web page. To access the window click the gray button.  For more information, see "SearchParmXML Property" on page 7-400	
ShowSearchBoxAlways	If set to **false**, the search box does not appear on PostBack.	Boolean True False
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**.	Boolean **True** - Suppress wrap tags. **False** - Allow wrap tags.

Property	Description	Data Type & Values
Weighted	By default, this property is **false**, which means the search only finds content that matches *all* search criteria. So, the search criteria have an AND relationship. If set to **true**, content items that meet *any* search criterion are found. This is an OR relationship.	Boolean **True** - return content that matches *at least one* search criterion **False** - return content that matches *all* search criteria
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**.	String **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.
xmlConfigID	ID of the Smart Form whose indexed fields appear on the search screen.	Long XML Smart Form ID numbers

SearchParmXML Property

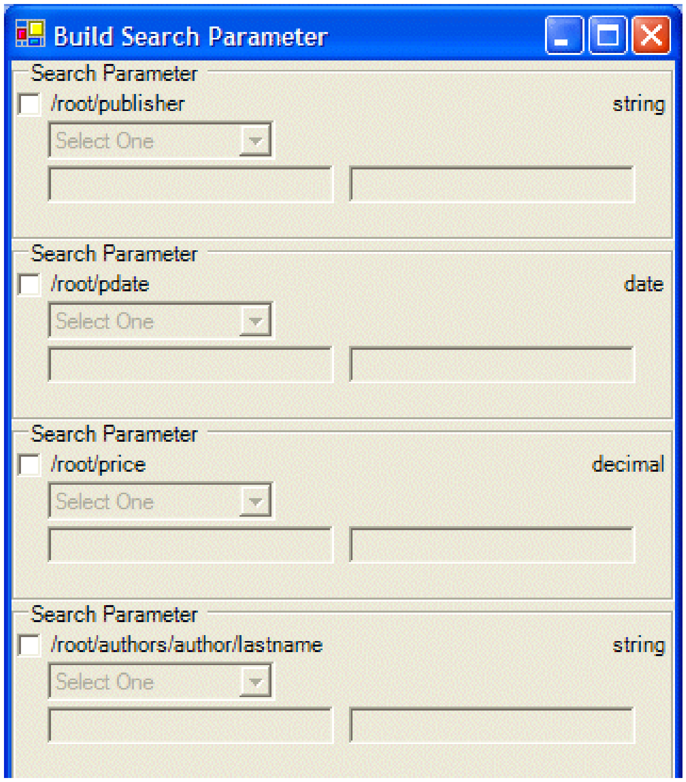
Use the `SearchParmXML` property to create a predefined XML search whose results appear upon page load. Click the gray box in this property to open a window where you define the search. The window's parameters are defined by the Smart Form Configurations selected at the `xmlConfigID` property.

If you are not logged in, this property launches the CMS Explorer login. For more information, see "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12

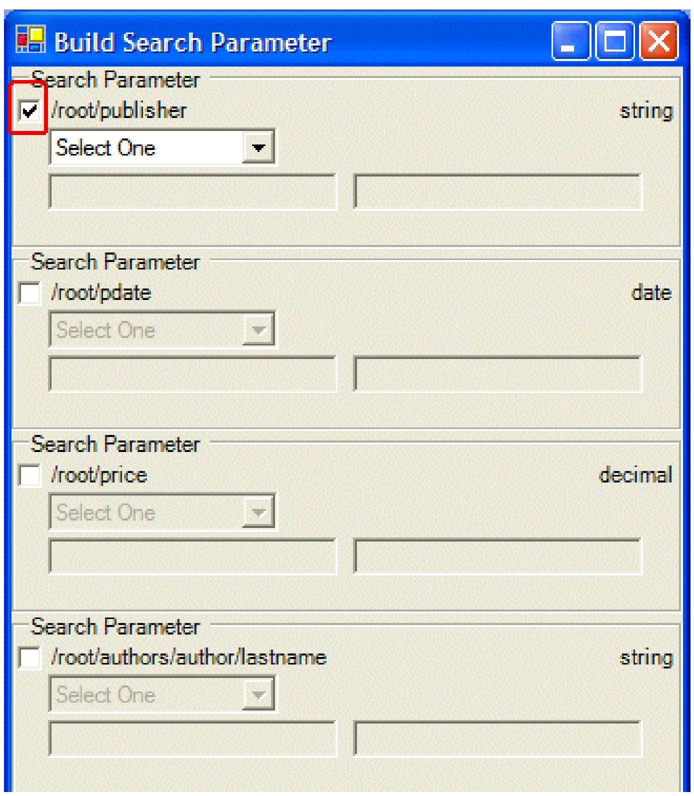
The following example uses the `SearchParmXML` property to create a list of books, based on publishers with "press" in their name.

1. To activate the window, click the gray box in the `SearchParmXML` property.

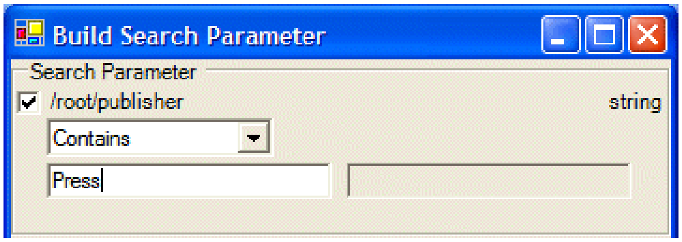
2. The Build Search Parameter screen appears.



3. Click the check boxes for the parameters you want to search with.



4. Define the parameter.



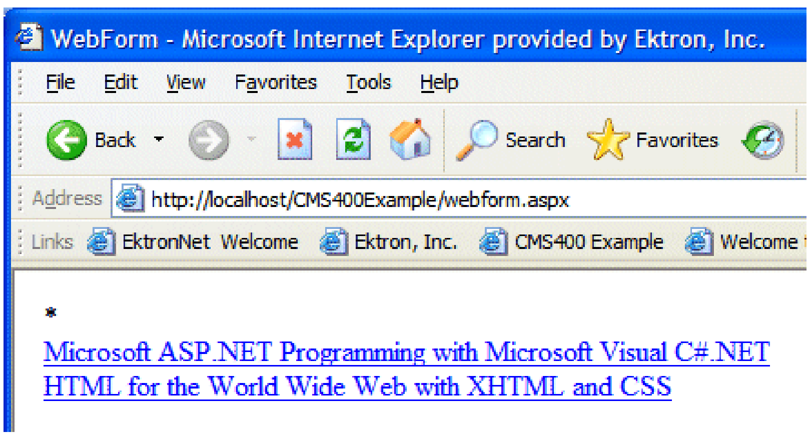
The drop down box in this example contains the following variables:

Select One - Prompts you to choose a variable

Exact Phrase - Enter a phrase and search for that exact phrase within the XML content

Contains - Enter a word or phrase and search for any XML content that contains that word or phrase

5. Click **OK**.
6. Build the Web form.
7. Browse to the Web page in your browser.



8. The page shows XML content on your site that matches the parameters.

Using the IndexSearch Server Control Programmatically Example

Note: When creating an IndexSearch server control form using code behind only, the control must be connected with the page events. Otherwise, you cannot submit search parameters.

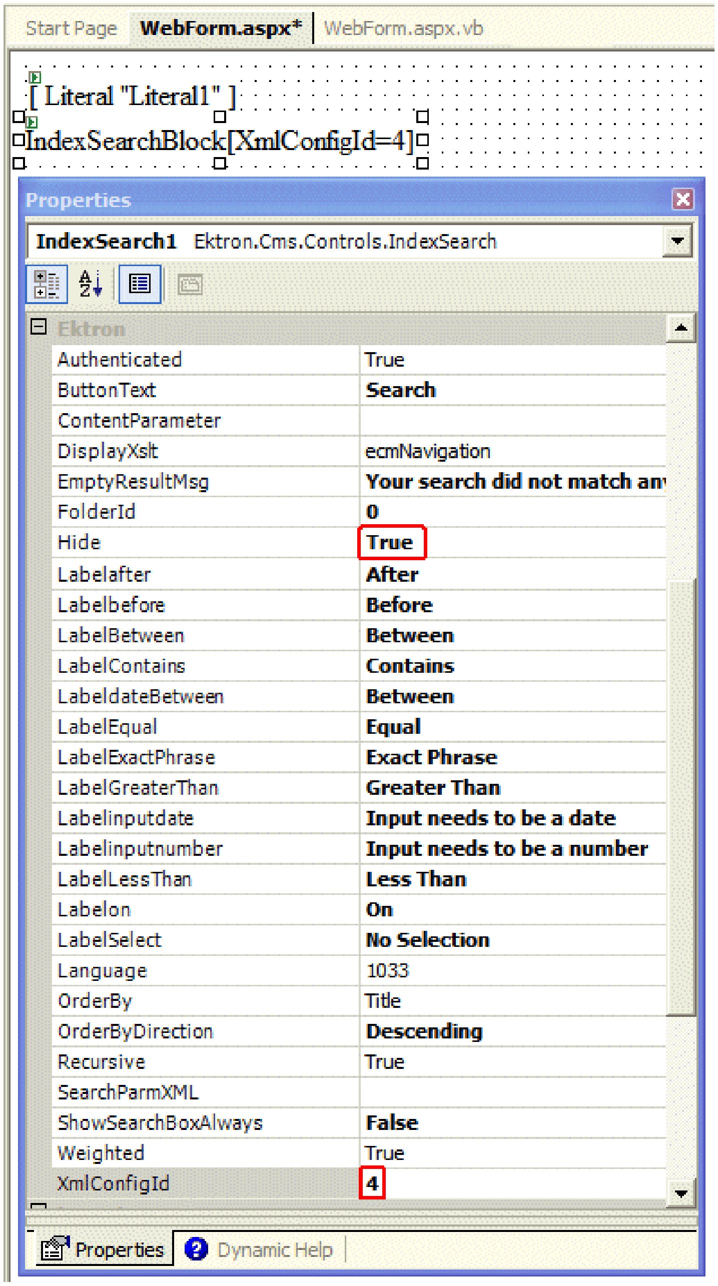
You can use the IndexSearch server control in code behind to manipulate how users view search results. The following example shows how to return values associated with an XPath. This example shows a list of book titles.

1. Open a Web form.

2. Drag and drop an IndexSearch server control onto it.
3. Set the properties in the properties window.

Note: In this example, the `hide` property must be **true**. Remember also to set the XmlConfigID. This example uses ID number **4**.

4. Drag and drop a Literal on the Web form.



5. Add the following to the code behind.

```
IndexSearch1.Parm.XPath = "/root/subject"
Dim arStr As String()
Dim Str As String
Dim strRet As String
arStr = IndexSearch1.GetXPathValues("/root/subject")
For Each Str In arStr
    strRet += Str & "<br/>"
Next
Literal1.Text = strRet
```

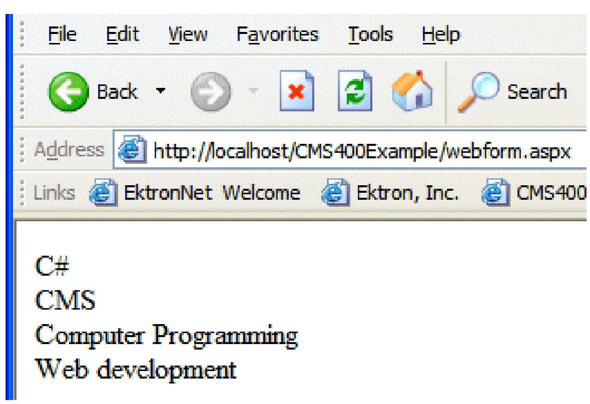
Here is a breakdown of the code.

Code snippet	Description
`IndexSearch1.Parm.XPath = "/root/subject"`	Defines the parameter XPath location:

`Dim arStr As String()`
`Dim Str As String`
`Dim strRet As String`
	Creates variables

`arStr =` `IndexSearch1.GetXPathValues("/root/subject")`	Sets the variable arStr as an array of the XPathValues
`For Each Str In arStr` `    strRet += Str & " "` `Next`	The for next loop iterates through the array of XPathValues
`Literal1.Text = strRet`	Displays values on your Web form

6. Build the project.
7. Browse to your web form.
8. The list of book subject titles appears.



Programmatically Predefined General Search Results Replaced By Specific Search Results

This code behind example shows a predefined search appearing on a Web page, then being replaced by more specific search results. This example creates a hyperlink list of book publishers. When you click a specific publisher, it replaces the publisher list with a book list from that publisher.

Follow these steps.

1. Add an IndexSearch server control to a Web form.
2. Set the following properties:

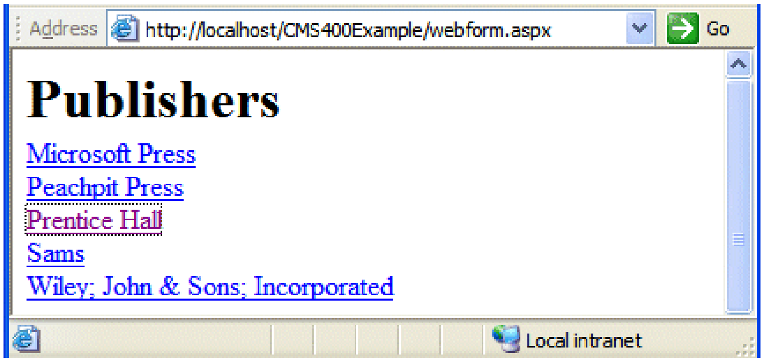
- `DisplayXslt = ecmTeaser`
- `Hide = True`
- `ShowSearchBoxAlways = False`
- `Weighted = True`
- `XmlConfigId = 4`

3. Add two Literals.
4. Add the following code to the Page Load Event in code behind.

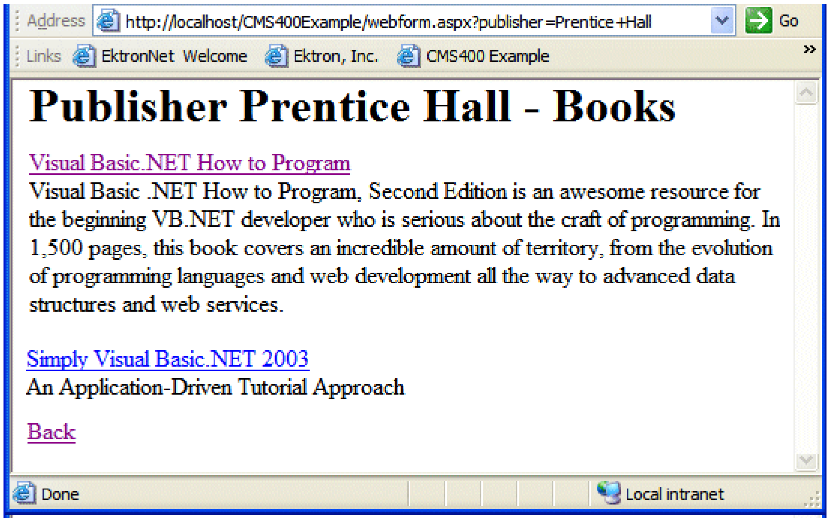
```
Dim bRet As Boolean
   If Request.QueryString("publisher") <> "" Then
      IndexSearch1.Hide = False
      IndexSearch1.Parm.XPath = "/root/publisher"
      IndexSearch1.Parm.DataType = Ektron.Cms.Common.EkEnumeration.XMLDataType.String
      IndexSearch1.Parm.SearchType =
Ektron.Cms.Common.EkEnumeration.XMLSearchRangeType.ExactPhrase
      IndexSearch1.Parm.Value1 = Request.QueryString("publisher")
      bRet = IndexSearch1.AddParm()
      IndexSearch1.Search()

      Literal1.Text = "<h1>Publisher " & Request.QueryString("publisher") & " -
Books</h1>"
      Literal2.Text = "<a href=""webform.aspx"">Back</a>"
   Else
      Literal1.Text = "<h1>Publishers</h1>"
      Dim arStr As String()
      Dim Str As String
      Dim strRet As String
      arStr = IndexSearch1.GetXPathValues("/root/publisher")
      For Each Str In arStr
        strRet += "<a href=""webform.aspx?publisher=" & Server.UrlEncode(Str) & """>" &
Str & "</a><br/>"
      Next
      Literal1.Text += strRet

   End If
```

5. Save your Web form.
6. Build your Web form.
7. Browse to the Web form in your browser.

8. The list of publishers appears.

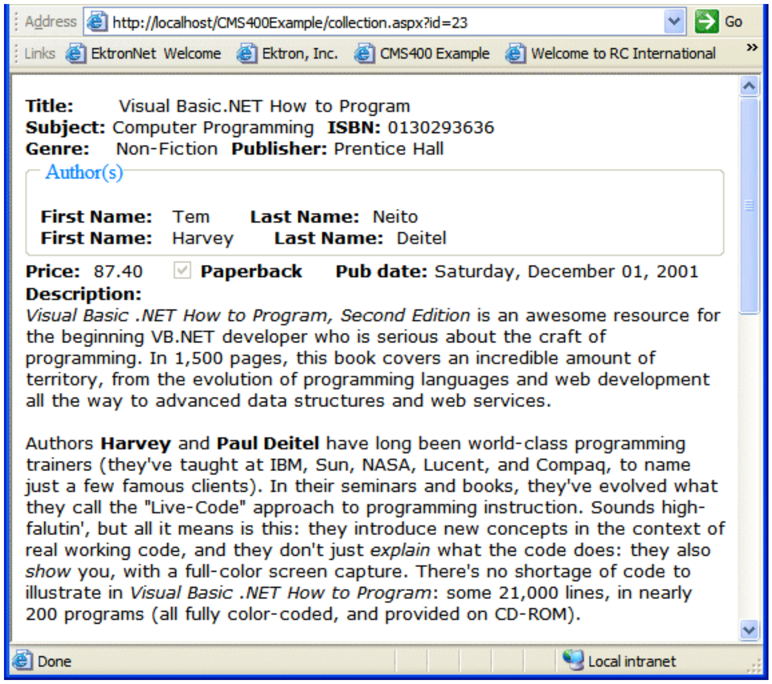


9. ** Click a publisher.
10. A list of books with teasers by that publisher appears.



Notice the second Literal now contains a hyperlink to go back.

11. Click on a book.
12. The XML content for that book appears.



Turn Off Caching In Mozilla Firefox

When using Mozilla Firefox to perform an index search some parameters become cached. To prevent caching in Mozilla Firefox, add the following line to the Page Load Event in code behind:

Response.Cache.SetNoStore()

Setting Page Size for Smart Form Search Results

Paging support is available for XML Index Search results. You set the number of results per page in this Web.config file tag:

```
<web search>
<providers>
<add name="MSIndexDialectServer"
pageSize
```

If the number of results exceeds the `pageSize` value, the display terminates and the user see **Next Page** below the last entry.

Using the Document Management System

The Document Management System (DMS) lets you import Microsoft Office files along with other types of files into Ektron CMS400.NET. (Non-Office files are known as *managed files*.) Collectively, these files are known as *assets*.

After being saved to Ektron CMS400.NET, assets can be updated and tracked like HTML and XML content. If you're familiar with how content is handled, most of what you know applies to assets. For example, assets

- can be stored in folders with other content, or in separate folders that you create just for them
- are assigned content ID numbers
- can have summary, metadata, comment, task, schedule, and taxonomy information
- inherit permissions and approvals from their folder properties
- progress through the workflow (check out, check in, publish)
- retain a history so you can restore earlier versions
- can be searched
- support foreign language editions
- can have a task assigned to them
- appear on content reports
- update the Smart Desktop listing of files awaiting approval, checked out, tasks, to expire

When an asset is imported to the CMS then saved, a copy of it is saved to the Document Management server. Then, whenever a user edits and saves the asset, a new copy is stored. In this way, you can review and, if needed, restore a prior version.

This chapter explains the Document Management Functionality through the following topics.

Supported Types of Assets

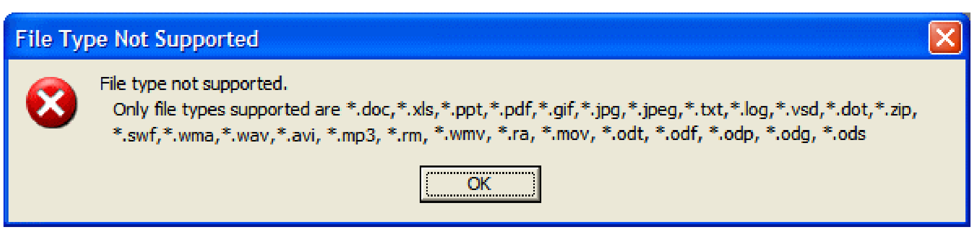
Ektron CMS400.NET can support all file types. By default, only the following types are supported. However, your administrator can add or remove any file type via the Asset Server Setup screen.

Exception!

Warning! Ektron CMS400.NET does not support double extensions, such as *filename*.aspx.vb.

- Microsoft Office 2000 or later documents: Word, Excel, Powerpoint, Project, Publisher, Visio, etc.
- Managed files: *.zip files, PDFs, *.txt files, graphic files such as *.gif and *.jpeg, Open Office documents such as *.odf, *.odt
- Multimedia files such as *.swf, *.mp3, *.wav. *.avi

Note: The file types that can be uploaded are determined by your administrator. If you try to upload the wrong type of file, the following error message appears.



Security

For the purposes of security, assets are treated like other content. Your system administrator applies security to each folder, determining which user groups can perform which tasks on the content in a folder. For more information, see "Folder Permissions" on page 5-43.

Software Requirements

Your production server must run Windows 2003 server or Windows 2000.

See Also:

- "Browser Requirements" on page 7-410
- "Installing FireFox Plug In" on page 7-411

Browser Requirements

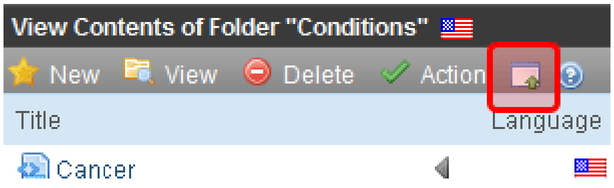
Feature	Browser Requirements	For more information, see
Edit Microsoft Office documents within CMS400.NET	Internet Explorer. Option does not appear with Firefox. Note: Firefox users can check an Office document out to their computer, edit it using Office, then drag and drop the file back into CMS400.NET. See "Editing a Managed File" on page 7-437. Note: If your computer has Windows Vista, you must turn off its User Account Control to use this feature. For details, see http://www.microsoft.com/technet/technetmag/issues/2007/06/uac/default.aspx	"Editing an Office Document" on page 7-427
Multiple DMS Documents Option	Internet Explorer. Option does not appear with other browsers.	"Adding Documents Using the Multiple DMS Documents Option" on page 7-418

Installing FireFox Plug In

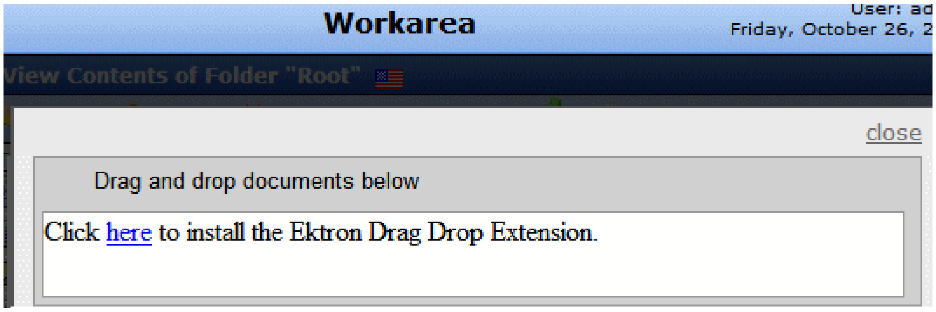
If you want to use the Document Management's drag and drop feature with the Firefox browser, you need to install software to enable it. You only need to do this the first time on a computer. Afterwards, the features are available to you with no additional effort.

Follow these steps to install the Firefox plug-in software.

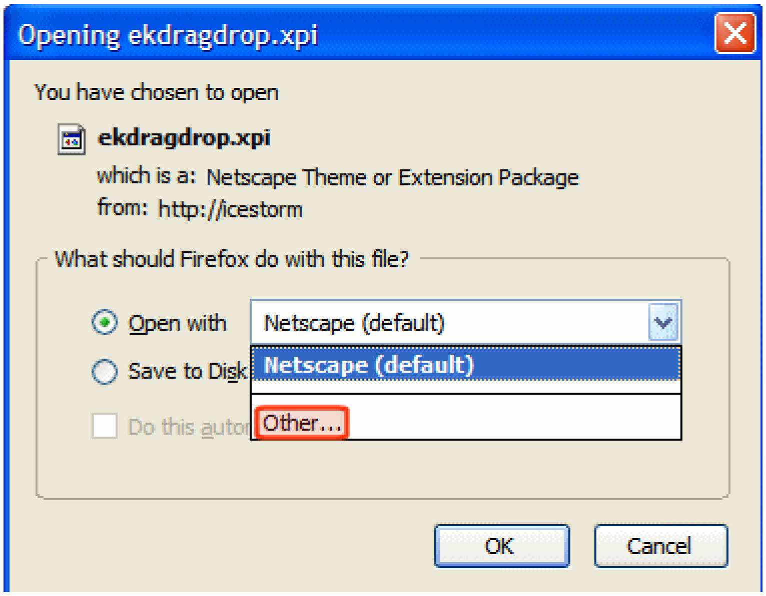
1. Launch the FireFox browser.
2. In the Ektron CMS400.NET Workarea, open a content folder.
3. Click the Add Assets button (circled below).



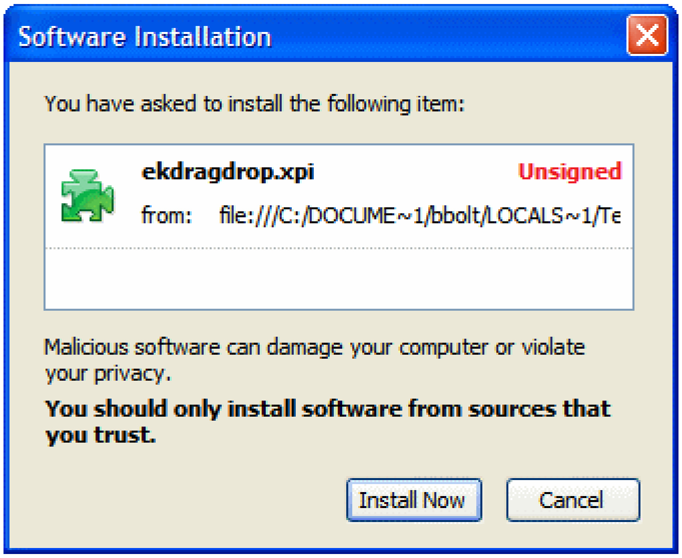
4. The following box appears in the center of the screen.



5. Click the word here.
6. The following dialog appears.



7. Click the down arrow next to **Netscape (default)** and select **Other**.
8. Browse to **C** > **Program Files** > **Mozilla Firefox** > **Firefox.exe**.
9. Click **Open**.
10. **Firefox.exe** appears next to the **Open with** field.
11. Press **OK**.
12. The following dialog appears.



13. Click **Install Now**.
14. Close then reopen the Firefox browser.

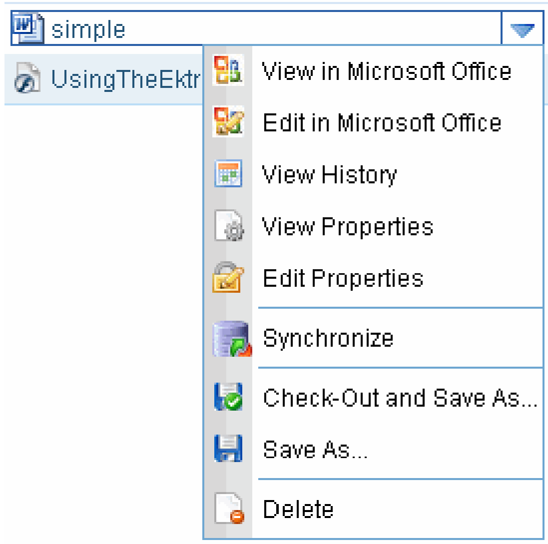
15. You can now drag and drop files into Ektron CMS400.NET.

Working with Microsoft Office Documents

This section explains how to work with Microsoft Office documents through the following subtopics.

MS Office Document Menu Options

Depending on a document's status, your role, and position in the document's approval chain, any of the following options may be available when you display the dropdown menu for an Office document.



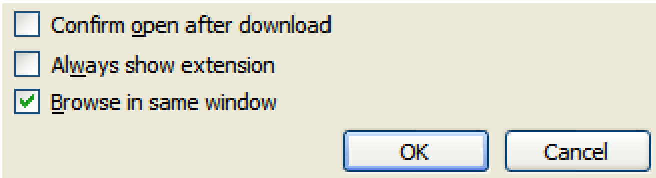
See Also: "Dropdown Menu Options" on page 5-10

Notes on Working with Microsoft Office Documents

- Prerequisites
  - Your computer has MS Office
  - Internet Explorer to work with Office documents within Ektron CMS400.NET.

Note: While you cannot edit within Ektron CMS400.NET using Firefox, you can save an Office document to your computer, edit it, then drag and drop the updated version to Ektron CMS400.NET.

- Verify the following settings for every Office document type that you work with.
  - Open Windows Explorer.
  - Click **Tools** > **Folder Options** > **File Types**.
  - Click an Office file type you work with (for example, DOC Microsoft Word Document).
  - Click the **Advanced** button.
  - Change the checkboxes at the bottom of the screen so they look like this.



  - Click **OK**

- Problems can arise if you try to open a document created with Office 2007 and your computer has an earlier version of Office. The best solution is to upgrade your computer to Office 2007.

If you cannot do this, the next best option is to install Microsoft Windows Compatibility Pack. See https://www.microsoft.com/downloads/details.aspx?FamilyId=941B3470-3AE9-4AEE-8F43-C6BB74CD1466&displaylang=en .

Once installed, you can work with Office 2007 documents even though you have an earlier version of Office.

- If you import an Excel spreadsheet then click it from its Ektron CMS400.NET folder, you see **Download *this file name***. Click the download link to view the file.

Importing Office Documents

DMS can store and help you manage Office documents. This section explains how to import any document into Ektron's Document Management System.

Ektron CMS400.NET provides several ways to import Microsoft Office documents. They are described below.

Warning! You cannot simply place files in the *siteroot*/assets or *siteroot*/PrivateAssets folder then manage them using Ektron CMS400.NET. You can only import documents using one of the methods listed below.

Note: Only users with **Add** permission for a folder can import documents into it. See Also: "Folder Permissions" on page 5-43

Method	Advantages	Disadvantages	For more information, see
New > DMS Document from View Contents of Folders screen	- Can enter Summary, Metadata information etc. for each document - Can create unique title for each document - You can check in or submit document for approval	- Slower when importing several Office documents - Cannot maintain Windows folder structure	"Adding Documents Using the Multiple DMS Documents Option" on page 7-418

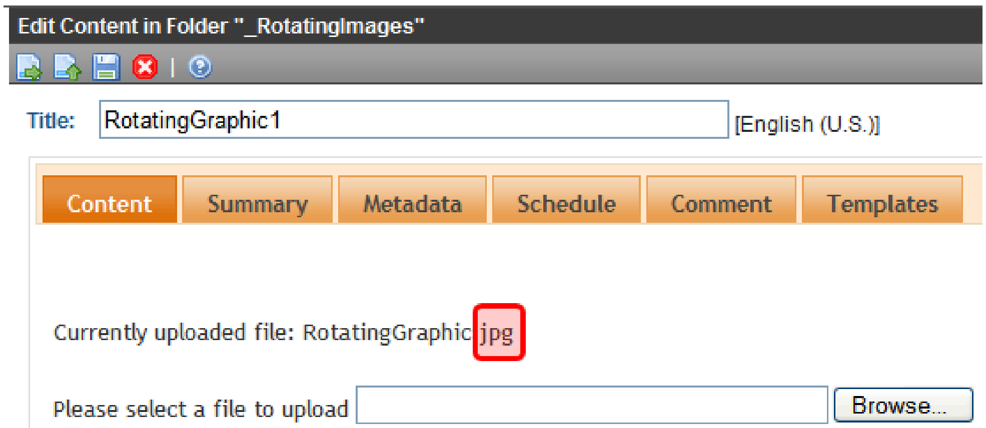
Method	Advantages	Disadvantages	For more information, see
New > Multiple DMS Documents from View Contents of Folders screen	Can upload several files at once, so it's faster than **New DMS Document** option More efficient when same summary, metadata, schedule, etc., apply to many documents You can check in or submit document for approval	Document title taken from Windows file name Requires Internet Explorer and MS Office	"Adding Documents Using the Multiple DMS Documents Option" on page 7-418
Drag and drop into CMS400.NET, from View Contents of Folders screen	Can upload several files at once, so it's faster than **New DMS Document** option Can drag/drop folder structure; CMS400.NET recreates it in Workarea More efficient when same summary, metadata, schedule, etc. apply to many documents	Content is in checked in status; submitting it for publishing is a separate step Document title taken from Windows file name	"Adding Documents Using Drag and Drop" on page 7-419
Drag and drop into a mapped network folder	User doesn't need to install or learn CMS software Can drag/drop folder structure; CMS400.NET creates it in Workarea	Document title taken from Windows file name Content is in checked in status; submitting it for publishing is a separate step Cannot assign language to content or work with content in a language other than your computer's default language	"Adding Documents to a Mapped Network Folder" on page 7-422

How Imported Documents are Named

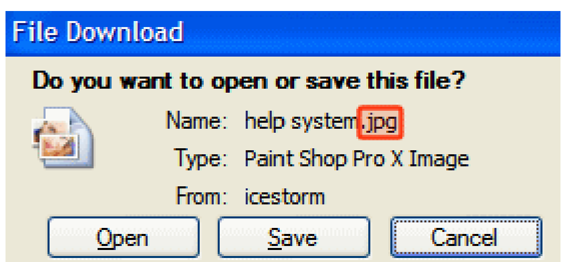
When you use the **New** > **DMS Document** file import option, you enter an Ektron CMS400.NET title for the file.

When you import an Office document or managed file into Ektron CMS400.NET using any other method, its name is the file name without the extension. So, a file named `mypicture.jpg` becomes `mypicture` in Ektron CMS400.NET.

While it may appear that the file extension was removed, it is retained and reappears for assets when you use the **Edit** option, on the View Contents of Folder screen (circled below).



The original file extension also appears when you check out.



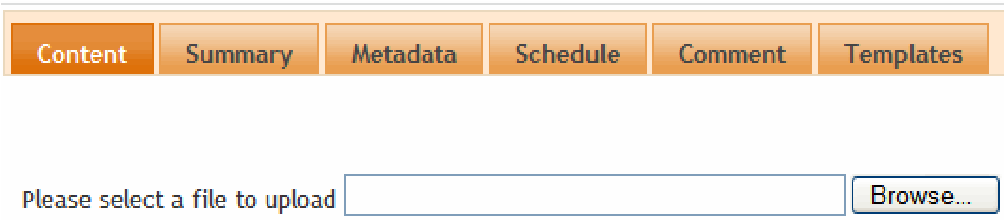
If you import a file of the same name but a different extension into the folder, the new file's name has the next available number appended to it. For example, `mypicture(2)`.

Adding Documents Using the DMS Document Option

To add a new Office document to Ektron CMS400.NET via the **New > DMS Document** menu option, follow these steps.

1. From the Workarea, select the **Content** tab.
2. Select the folder in which you want to place the document.
3. The default language icon appears next to the screen title. To create a document for a different language, click **View > Language** and select the language.

4. Click **New** > **DMS Document**.
5. The following screen appears.



6. Click the **Browse** button and browse to the file you want to import. Click **OK**.
7. Enter a **Title**. It cannot include these characters: \, /, *,>, <,|

Note: If you want to retain the original document name, insert the full filename into the **Title** field. For example, you could enter *mydocument.doc*.

8. Use the **Content Searchable** checkbox to determine if the content should be searchable. See Also: "Content Searchable" on page 7-14.
9. If desired, add a summary, metadata, a schedule, and comments. See Also:
   - "Working with Content Summary" on page 7-142
   - "Working with Metadata" on page 7-146
   - "Scheduling Content to Begin and End" on page 7-195
10. Check in or submit the content for publishing as you would HTML content.

Adding Documents Using the Multiple DMS Documents Option

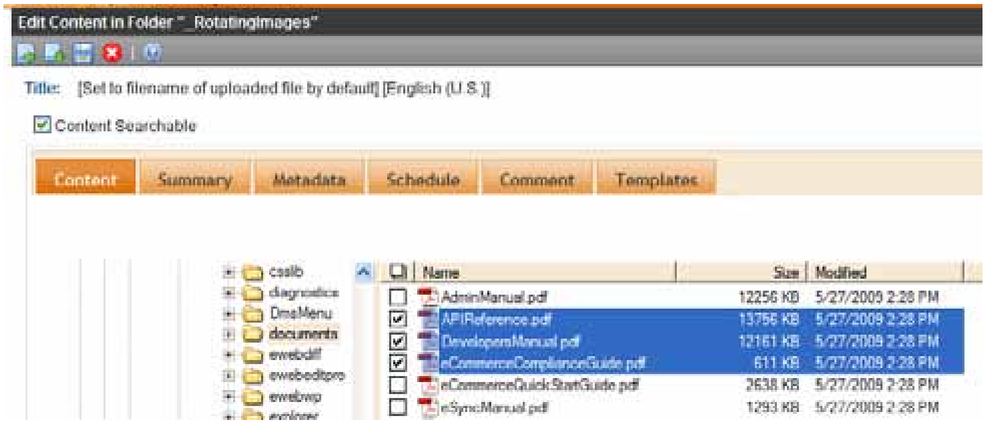
To add Office documents to Ektron CMS400.NET via the **New** > **Multiple DMS Documents** menu option, follow these steps.

Note: This option is only available if you are using Internet Explorer and Office 2003 or higher is installed on your computer.

Warning! If you will apply the same information (Summary, Metadata, Categories, etc.) to several files, place those files in the same Windows folder before starting this procedure.

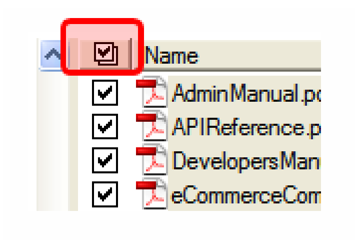
1. From the Ektron CMS400.NET Workarea, select the **Content** tab.
2. Select the Ektron CMS400.NET folder in which you want to place the documents.
3. The default language appears next to the screen title. To create a document for a different language, click **View** > **Language** and select the language.
4. Click **New** > **Multiple DMS Documents**.

5. The Edit Content in Folder screen appears. The lower portion of the screen resembles Windows Explorer.



The left frame shows folders in your computer. The right frame shows files in the selected folder.

6. In the left frame, select the folder that contains files you want to upload.
7. In the right frame, check the box next to each file you want to upload. To select all files in the folder, check the box in the header (circled below).



Note: You can only import files from one folder at a time.

8. If appropriate, enter the files' summary, metadata, schedule, tasks, comments, or category. Any information you enter is applied to all selected files.
9. To *check in* the files, click the Check In button ( ) from the top left corner.

   To *submit* the files into the approval chain, click the Submit ( ) or Publish ( ) button.

Adding Documents Using Drag and Drop

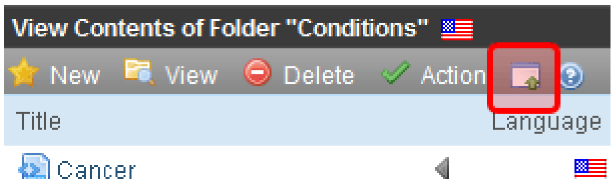
When using drag and drop, you can choose individual files or a folder. If you choose a folder, its structure is recreated in Ektron CMS400.NET even if it is several levels deep.

1. From the Ektron CMS400.NET Workarea, select the **Content** tab.

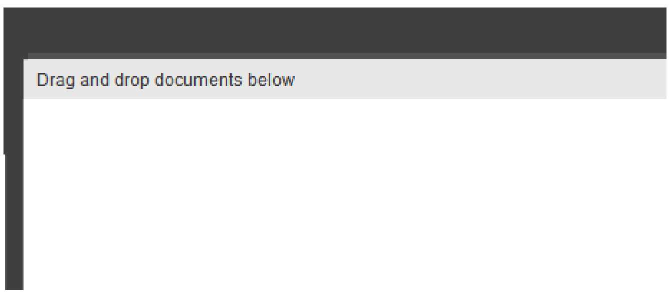
2. Select the Ektron CMS400.NET folder in which you want to place the documents.

Note: You cannot drag and drop a file into a folder for which XML Smart Forms are required.

3. The default language appears next to the screen title. To create the documents in a different language, click **View > Language** and select the language.
4. Click the Add Assets button (circled below).

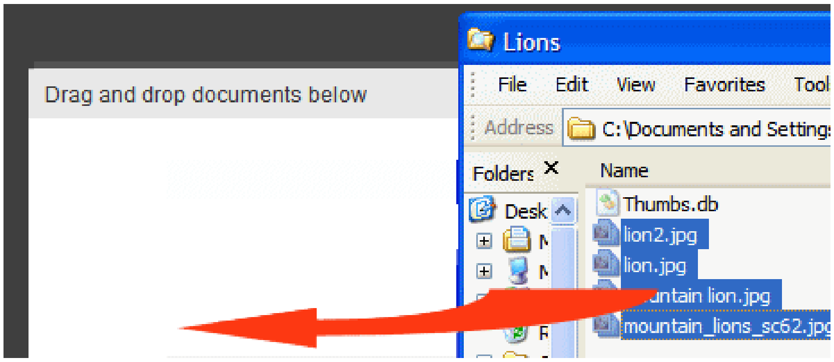


5. The drag and drop window appears.



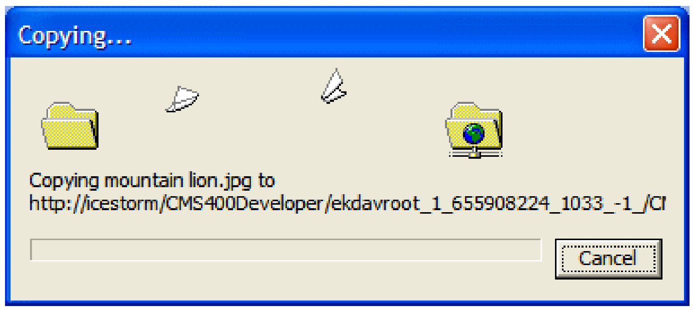
Note: If you are using Ektron CMS400.NET with the FireFox browser for the first time, see "Installing FireFox Plug In" on page 7-411.

6. Resize Ektron CMS400.NET so that it occupies the left half of the screen.
7. Open Windows Explorer. Resize it so it occupies the right half of the screen.
8. Find the folder or assets you want to upload.
9. From Windows Explorer, select then drag and drop the folder or assets onto the drag and drop window.



10. The following screen appears.

.

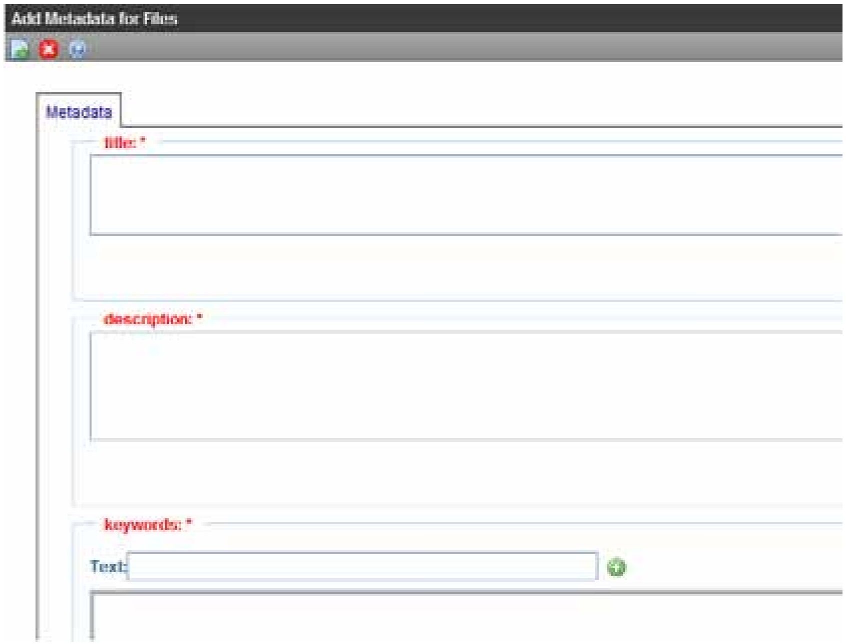


If any asset being uploaded is not supported, an error message appears: **An error occurred copying some or all of the selected files**. However, all supported files are uploaded. See Also: "Importing Office Documents" on page 7-415

Note: If your Web site uses an https secure site setting, you may see errors after dragging an dropping assets. If this occurs, open your site's web.config file and change the value of the `add key="ek_UseSSL"` setting to `true`.

11. If Ektron CMS400.NET requires you to apply metadata or a taxonomy category to the content, the following screen appears.

Note: Your system administrator creates the metadata screen. The image below is only an example of what it might look like.



12. Required metadata field labels are red and have an asterisk (as **title** does above). Complete all required metadata. See Also: "Working with Metadata" on page 7-146
13. If the **Category** tab appears, apply at least one taxonomy category to this asset. See Also: "Taxonomy" on page 9-200

The status of a dragged and dropped document depends on the approval chain.

- If you are the last approver, or if there is no approval chain, its status is *Approved*.
- If there is an approval chain and you are not the last approver, its status is *Checked In* (I).

Adding Documents to a Mapped Network Folder

You can set up a mapped network folder then drag and drop folders or assets into it. The advantage of this method is that you can upload documents without installing or learning how to use Ektron CMS400.NET.

When using drag and drop, you can choose individual assets or a folder. If you choose a folder, Ektron CMS400.NET recreates that folder structure, even if it is several levels deep. After the assets are uploaded, they are set to Checked In status.

You can also delete and move assets using the mapped network folder.

This section explains these procedures.

- "Language Restrictions on Content in a Mapped Network Drive" on page 7-423
- "Setting up a Mapped Network Drive" on page 7-423
- "Dragging and Dropping Assets into a Mapped Network Drive" on page 7-425

- "Viewing Managed Files in a Mapped Network Drive" on page 7-426
- "Removing Mapped Network Drives" on page 7-426

Language Restrictions on Content in a Mapped Network Drive

You cannot choose a language for assets in a mapped network folder-- they are automatically assigned the Ektron CMS400.NET default language (set in the siteroot/web.config file at the `ek_DefaultContent Language` element).

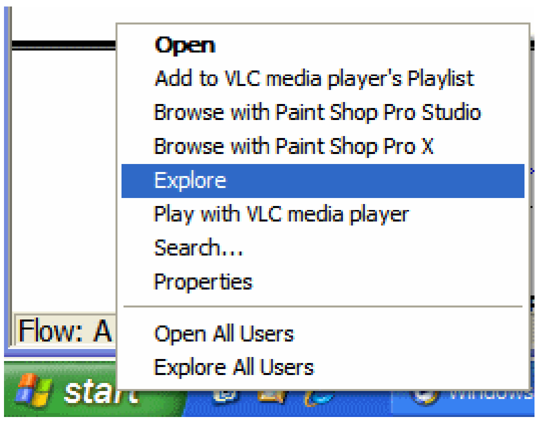
And, you cannot work with assets of a language other than your computer's default language. For example, if your computer's default language is English and your version of Ektron CMS400.NET has Spanish content, you cannot edit that content in a mapped network folder.

Setting up a Mapped Network Drive

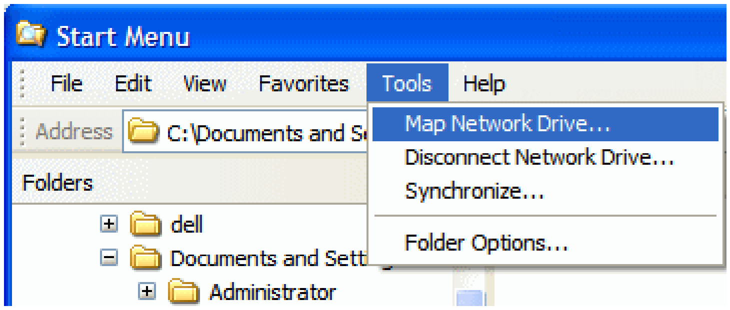
Prerequisites:

- The path to your Ektron CMS400.NET Web site. It is something like this: `http://server23/CMS400`. If you do not know the path, ask your system administrator.
- an Ektron CMS400.NET user name and password

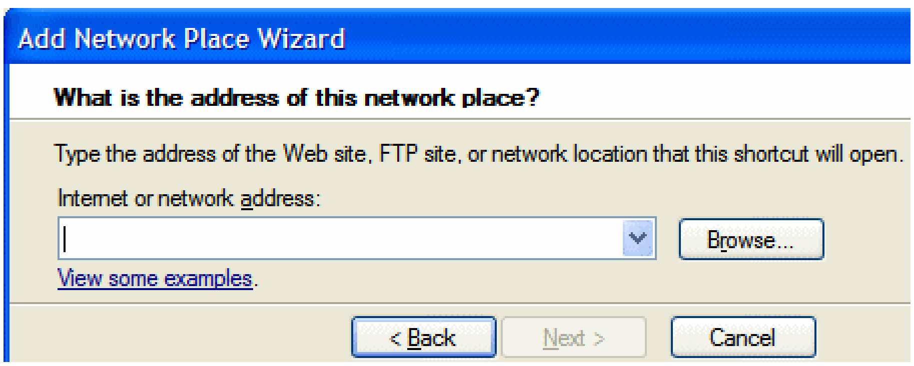
1. Right click the Windows Start button.



2. Choose **Explore**. Windows Explorer opens.
3. Click **Tools > Map Network Drive**.

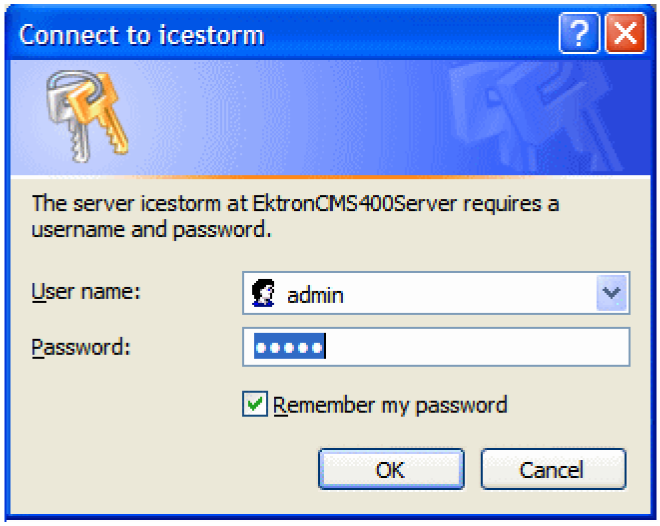


4. The Map Network Drive screen appears. Click **Sign Up for Online Storage or Connect to a Network Server**.
5. A wizard screen appears. Click **Next**.
6. Another wizard screen appears. Click **Choose another network location**. Click **Next**.
7. A third wizard screen appears. Enter the path to your Ektron CMS400.NET site, followed by the ekdavroot folder. For example, `http://server23/CMS400/ekdavroot`. Click **Next**.



Warning! If your computer runs Microsoft Vista and you see this error message **The folder you entered does not appear to be valid. Please choose another**, refer to this Ektron KB article: http://dev.ektron.com/kb_article.aspx?id=15176.

8. A login screen appears (see below). Enter your Ektron CMS400.NET username and password. Click **OK**.



9. Another wizard screen appears. Name the folder. You will use this name to identify the folder when you want to drag and drop assets to it. Click **Next**.
10. The Finish screen appears.

Dragging and Dropping Assets into a Mapped Network Drive

Use Windows Explorer to drag and drop folders or assets into the mapped network folder.

Warning! If a Windows folder has more than 1500 files, Windows Explorer may time out while trying to open it. To remedy this problem, divide your files in that folder into several child folders.

1. Open Windows Explorer. Resize it so it occupies the left half of the screen.
2. Open the folder that contains the folders or assets you want to upload to Ektron CMS400.NET.
3. Open a second instance of Windows Explorer. Resize it so it occupies the right half of the screen.
4. In that window, open **My Network Places**. Under that, find the mapped network folder you created in "Setting up a Mapped Network Drive" on page 7-423.
5. A login screen appears. Enter your Ektron CMS400.NET username and password. Click **OK**.
6. Open the Ektron CMS400.NET folder into which you want to upload assets or folders.
7. From the left window, drag and drop assets or folders into the mapped network folder.

If any of the assets being uploaded is not supported, an error message appears: **An error occurred copying some or all of the selected files**. However, all supported assets are uploaded. See Also: "Importing Office Documents" on page 7-415

Viewing Managed Files in a Mapped Network Drive

If you want to view individual managed files within a mapped network drive folder, follow this procedure.

1. Open the *site root*/web.config file.
2. Go to this line:

```
<!--remove verb="GET,HEAD,POST" path="*"/-->
```

3. Remove the comment characters (in red above).
4. In the following lines, insert beginning and ending comment characters as shown in red below.

```
<!--add verb="GET,POST" path="*.doc"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.docx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.xls"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.xlsx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.ppt"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.pptx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.vsd"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.vsdx"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/-->
<!-- Enable the line below and remove all office specific mappings above for Server 2003
with
private assets and enable remove verb command-->
```

5. Go to this line:

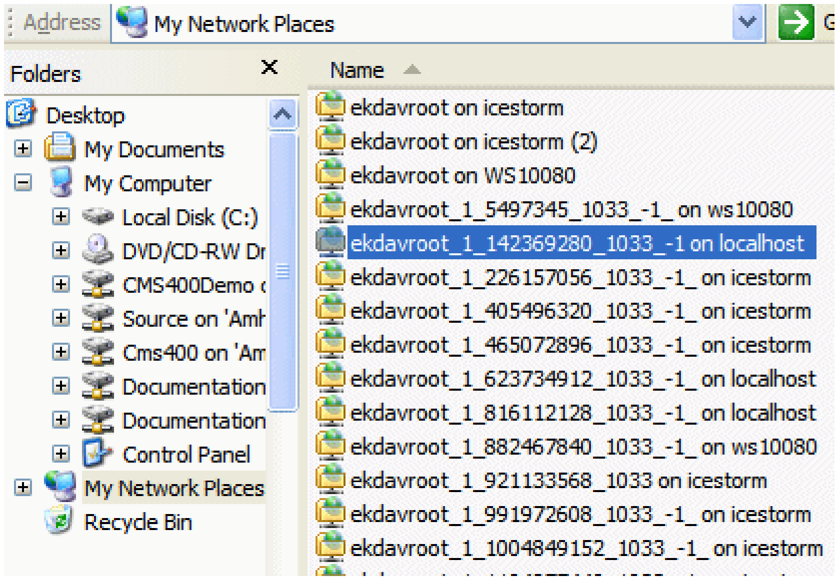
<!--add verb="GET,HEAD,POST" path="*" type="-
Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/—>

6. Remove the comment characters (in red above).

After you make this change, you can click to view any image file in the ekdavroot folder.

Removing Mapped Network Drives

Ektron CMS400.NET’s DMS feature creates a mapped, `ekdavroot` network drive for many functions. For example, if you sign on to Ektron CMS400.NET and create a new folder, a new mapped, `ekdavroot` network drive is created.



If you find that `ekdavroot` folders clutter up your My Network Places folder, you can delete them. Deleting `ekdavroot` folders has no impact on your ability to use Ektron CMS400.NET.

Editing an Office Document

There are two ways to edit an Office document if you are using the Internet Explorer browser and Office is installed on your computer.

- "Edit in Microsoft Office" on page 7-427
- "Edit Using a Mapped Network Folder" on page 7-428

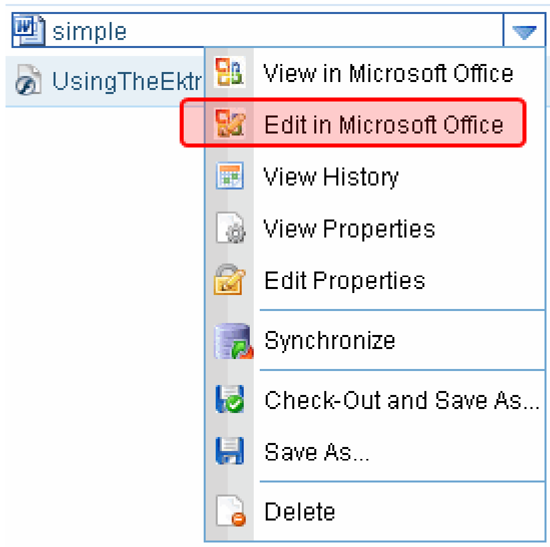
Note: Firefox users should download the Office document to their computer, edit it using Office, then drag and drop the asset back into CMS400.NET.

Edit in Microsoft Office

Prerequisites

- Your computer has MS Office.
- The Internet Explorer browser. You cannot use Firefox.

To use this option, click the document from the Ektron CMS400.NET folder and select **Edit in Microsoft Office** from the dropdown menu.



The document opens within Office. Make your changes and save it. When you do, the revised version is saved to Ektron CMS400.NET.

Note: If you want to edit the document's Summary, Metadata, Schedule, Comment, Task, or Taxonomy category information, click the asset from the Ektron CMS400.NET folder, then select **Edit Properties** from the dropdown menu.

When you begin to edit the document, its status changes to Checked Out (0). When you make your changes and save, it is Approved.

See Also:

- "Working with Content Summary" on page 7-142
- "Working with Metadata" on page 7-146
- "Managing Tasks" on page 11-1
- "Scheduling Content to Begin and End" on page 7-195
- "Web Alert Feature" on page 20-1

Edit Using a Mapped Network Folder

You can edit an Office document directly from a mapped network folder. To do that, follow these steps.

1. Set up a mapped network folder, as described in "Setting up a Mapped Network Drive" on page 7-423.
2. Use Windows Explorer to open the folder.

Note: If any Windows folder has more than 1500 files, Windows Explorer may time out while trying to open it. To remedy this problem, divide your files in that folder into several child folders.

3. Open a document using Office, make changes, and save it.

You can also delete and move documents using the mapped network folder.

The document is now in checked into Ektron CMS400.NET, and can appear on your Web site when approved. Also, a history of every saved version is retained so you can restore previous ones if necessary. You cannot enter or change Ektron CMS400.NET document information (Summary, Metadata, etc.) in the mapped network folder -- someone must use Ektron CMS400.NET to do that.

Status of Document Saved to Mapped Network Folder

The status of a document saved to a mapped network folder depends on the approval chain and the user who signed in when the mapped network folder was created.

- If you are the last approver, or if there is no approval chain, its status is *Approved*.
- If there is an approval chain and you are not the last approver, its status is *Checked In* (I).

Also, if the content's folder requires metadata or a taxonomy category which has not been entered, its status is *Checked In* (I).

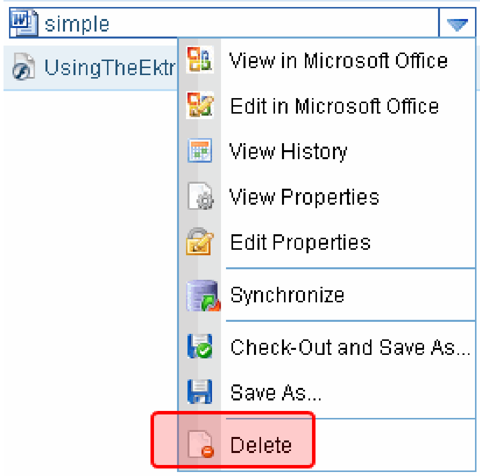
Deleting an Office Document

Note: You must have delete permissions for the folder that contains the document. See Also: "Folder Permissions" on page 5-43.

Note: It is good practice to check for broken quicklinks before deleting documents. See "Link Checking" on page 7-132.

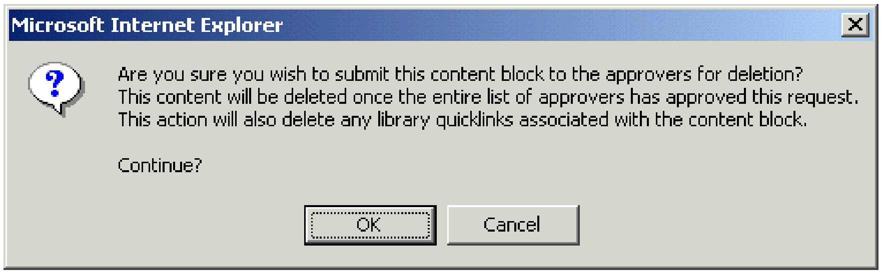
To delete an Office document, follow these steps.

1. Navigate to the Workarea's **Content** folder.
2. Open the folder that contains the document.
3. Place the cursor over the document
4. Hover the cursor over the triangle ( ) on the right end of the document and click. A dropdown menu appears.
5. Click **Delete**.



Note: If you do not see **Delete**, either you lack permission to delete the content or its status makes it ineligible for deleting.

6. The following message appears.



7. Click **OK** to delete the document.

Like publishing, deleted content must go through the approval chain before it is removed. If you are the last approver in the approval chain, the content is deleted immediately. See Also: "Approve/Decline One Content Item" on page 5-35

Checking Out, Saving, and Replacing an Office Document

If you check out and save an Office document to your computer, you would typically edit it using Office. While it is checked out, only you or a system administrator can check it back in. Other users cannot edit it. You may use this feature to work on the document on your computer, copy it to another computer, or even email it to someone who does not have access to Ektron CMS400.NET.

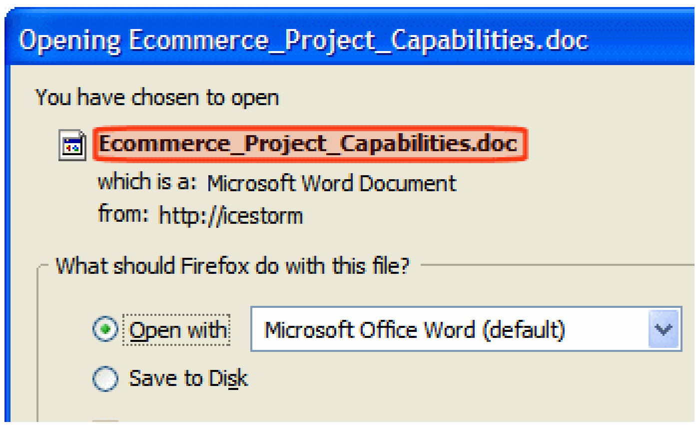
You can also use the **Check Out and Save As** option to edit an Office document if you use the Firefox browser. Firefox does not let you edit Office documents within Ektron CMS400.NET, as you can with Internet Explorer. To work around this limitation, check out the Office document, save it to your computer, and edit it.

When all edits have been entered, drag and drop the document back to Ektron CMS400.NET.

Follow these steps to copy an Office document to your computer, edit it, then replace the version in Ektron CMS400.NET.

Warning! There are several ways to import a document into Ektron CMS400.NET. Some methods retain the original file name while others let the user assign a name.

Warning! When you check out and save a document to your computer, it is saved under the *original file name*, which may be different from its Ektron CMS400.NET name. The original file name is on the screen that appears after you select **Check out and Save as** (circled below).



Warning!
Make note of the original file name, because you use it to identify the file after it is saved to your computer.

1. In Ektron CMS400.NET, open the folder that contains the Office document.
2. Hover the cursor over the triangle ( ) on the right end of the document and select **Check out and Save As**.
3. You are prompted to open or save the document. Click **Save**.
4. Select a folder to which you want to save the document.
5. The document's status changes to *checked out* (O).
6. Edit the document in Office.

Note: If you change your mind and do not change the document, but simply close Office, the document remains Checked Out (O). Use the **Check In** menu option to check it in.

7. Drag and drop the edited document. See "Adding Documents Using Drag and Drop" on page 7-419.
8. You are asked to confirm the file replace. Click **Yes**.
9. The document is submitted for approval.
10. The revised document is saved in Ektron CMS400.NET.

Saving an Office Document

You would typically save an Office document to your computer in order to distribute it to others, or if you want a personal copy. You should *not* save a document to your computer if you plan to edit it then replace the version in Ektron CMS400.NET -- doing this may overwrite edits made by other users.

If you want to edit a document, use the **Edit in MS Office** or **Check out and Save As** menu option. Both options set the content to checked out status, which prevents non-administrator users from editing it until you check it back in.

Follow these steps to save an Office document.

1. In Ektron CMS400.NET, open the folder that contains the Office document.
2. Hover the cursor over the triangle ( ) on the right end of the document and click **Save As**.
3. You are asked if you want to open or save the document. Choose **Save**.
4. Select a folder to which you want to save the document.

Saving an Office Document in .html Format

This feature converts Office documents to HTML format, which means they are formatted to display within a browser. As a result, anyone visiting your site can view the document, whether or not Microsoft Office is installed on their computer.

Warning! Only Microsoft Word and Excel documents can be published as HTML. Ektron CMS400.NET does not support saving Powerpoint or Visio documents as HTML.

There are two ways to save an Office document in .html format.

Method	Advantages	For details, see
1. Drag and drop Office document into CMS400.NET. 2. Use **Edit in MS Office** option to save it in html format.	You don't need to know the path to your Web site's root folder.	"Saving an Office Document as .html from Ektron CMS400.NET" on page 7-434
1. Open an Office document on your computer. 2. Save it in html format to the ekdavroot folder in your Web root.	You don't need to drag and drop document to CMS400.NET	"Saving Office Document as .html from Your Computer" on page 7-434

Warnings About Saving in .html Format

Regardless of how you save Office documents as HTML, be careful to set up procedures that prevent HTML content from being overwritten. For example:

1. You save a Word document as .html.
2. Someone edits the .html version.
3. You save the original Office Document as .html again.

In this scenario, the edits made in step 2 are overwritten by step 3.

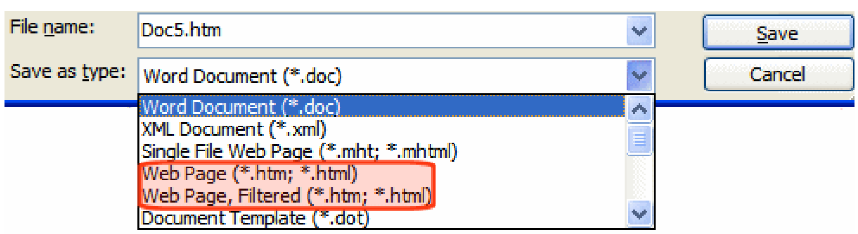
It is important to establish procedures that avoid such problems.

Saving an Office Document as a Web Page

When saving a Word document, after you choose **Save as** from Word's File menu, there are two choices for saving as .html.

Note: When saving an Excel document, **Save as Web Page (*.htm, *.html)** is the only option.

- save as Web Page
- save as Web Page Filtered



Note: For a description of the differences between these options, see http://office.microsoft.com/en-us/help/HP030852781033.aspx.

Ektron recommends **save as Web Page, Filtered** because the resulting HTML is almost identical to the original document. The **save as Web Page** is not a good option because its HTML content does not match the original document and may cause problems when being edited.

Handling Images Embedded within a Word Document

If you save an Office document that includes images, they appear when anyone is editing the document as well as when it appears on your Web site. In addition, the images are saved to the corresponding Ektron CMS400.NET Library folder. In this way, other Ektron CMS400.NET users can apply the images to HTML content as needed.

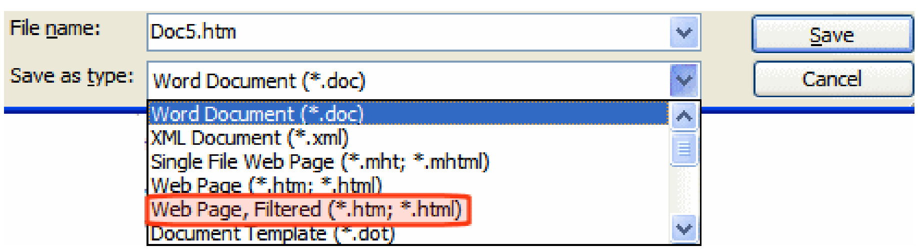
See Also: "Library Folder" on page 8-1

Saving an Office Document as .html from Ektron CMS400.NET

This procedure assumes the Office document has been saved to Ektron CMS400.NET. Procedures for doing this are explained in "Importing Office Documents" on page 7-415.

See Also: "Warnings About Saving in .html Format" on page 7-433

1. Within the Ektron CMS400.NET Workarea, open the Content area.
2. Open the folder that contains the Office document you want to save as .html.
3. Hover the cursor over the triangle ( ) on the right end of the document you want to save
4. Click **Edit in Microsoft Office**. The document opens within Office.
5. From Office's **File** menu, select **Save as Web Page**.
6. In the **Save as Type** field, select **Web page, Filtered (*,htm, *.html)**. See Also: "Saving an Office Document as a Web Page" on page 7-433



7. Click the **Save** button.
8. You may be warned about formatting features not supported in HTML. Press **Continue**.
9. A dialog prompts you to enter your Ektron CMS400.NET user name and password.
10. Ektron CMS400.NET's folders appear in a Save as window. The folder that contains the Word document is the default folder. Select that or any other Ektron CMS400.NET folder and click **Save**.
11. The Office document is saved as an .html file into Ektron CMS400.NET.
12. Close the document and exit from Office.

Saving Office Document as .html from Your Computer

1. Open the Office Document.
2. Click **File** > **Save as (*,htm, *.html)**.

3. Click **My Network Places** and navigate to `ekdavroot` folder on the server that hosts Ektron CMS400.NET.
4. Ektron CMS400.NET's folders appear. The folder that contains the Word document is the default folder. Select that or any other Ektron CMS400.NET folder.
5. In the **Save as Type** field, select **Web page (*.htm, *.html)** or **Web Page, filtered (*.htm, *.html)**. See Also: "Saving an Office Document as a Web Page" on page 7-433.
6. Click the **Save** button.
7. You may be warned about formatting features not supported in HTML. Press **Continue**.
8. A dialog prompts you to enter your Ektron CMS400.NET user name and password.
9. The Office document is saved as an .html file into Ektron CMS400.NET.
10. Close the document and exit from Office.

The status of the document depends on the approval chain and the user who signed in when the mapped network folder was created.

- If you are the last approver, or if there is no approval chain, its status is *Approved*.
- If there is an approval chain and you are not the last approver, its status is *Checked In* (I).

Working with Managed Files

Ektron CMS400.NET can also track and manage any non-Office type of file that runs on your computer (for example, .PDF, .gif and .zip).

You use a host application to create the file. For example, you might use Photoshop to create a .jpg file. Next, save it to Ektron CMS400.NET using any method explained in "Importing Office Documents" on page 7-415. While importing, add supporting information, such as summary, metadata, taxonomy category and schedule. Use standard toolbar buttons to perform actions like view history, submit for publishing, and delete.

If you want to edit a managed file, use the **Check out and Save As** menu option to place a copy of it on your computer. Then, edit it using the host application. When done, drag and drop the changed file to Ektron CMS400.NET.

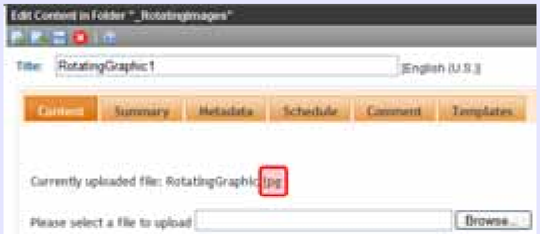
This section explains how to work with managed files through the following subtopics.

- "Managed File Menu Options" on page 7-436
- "Creating a New Managed File" on page 7-437
- "Importing Managed Files" on page 7-437
- "Editing a Managed File" on page 7-437
- "Deleting a Managed File" on page 7-438

Managed File Menu Options

Depending on a managed file’s status, your role, and position in the document’s approval chain, any of the following options may be available when you display the dropdown menu for a managed file. See Also: "Workarea Content Menu" on page 5-9.

Note: These sections describe working with Office documents. Everything works the same with managed files.

Menu option	Description	For more information, see
View	View and edit managed file and its CMS400.NET information (Summary, Metadata, History, etc.). Can also be used to replace file.	
Save As	Save copy of managed file to your computer	"Saving an Office Document" on page 7-432
Check Out and Save As	Change a managed file’s status to checked out and save a copy to your computer	"Checking Out, Saving, and Replacing an Office Document" on page 7-430
Edit	Overwrite a managed file in CMS400.NET with a version on your computer. The file name can be different but its type must match the file being edited. A file’s type appears after you click **Edit**, on the Edit Content in Folder screen (circled below). 	"Checking Out, Saving, and Replacing an Office Document" on page 7-430
Check In	Change a checked-out managed file’s status to checked in. Useful if you checked out and saved a managed file then it became lost or corrupted. This option lets you change its status back to checked in.	
Submit/Publish	Submit managed file into approval chain	"Asset Workflow" on page 7-439
Delete	Delete managed file; deleted file cannot be retrieved	"Deleting a Managed File" on page 7-438

Creating a New Managed File

You cannot create a managed file within Ektron CMS400.NET. Instead, create it on your computer using the host application then import it into DM.

Importing Managed Files

Warning! You cannot import files whose name includes a percentage sign (%) or ampersand (&).

You import managed files into Ektron CMS400.NET using the same methods you use to import MS Office documents. See "Importing Office Documents" on page 7-415.

If you do not see a file you uploaded, verify that the View Menu box is displaying the type of file you are looking for. Files upload to the correct type regardless of what is selected when you drag and drop them.

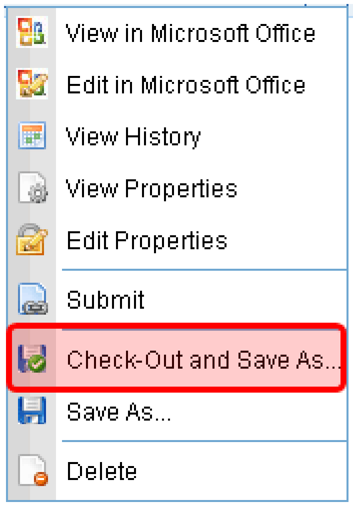
Editing a Managed File

You do not edit a managed file within Ektron CMS400.NET. Instead, you check it out, save it on your computer, edit it using the host application, then check it back in to Ektron CMS400.NET. While it is checked out, only you or a system administrator can edit the managed file within Ektron CMS400.NET.

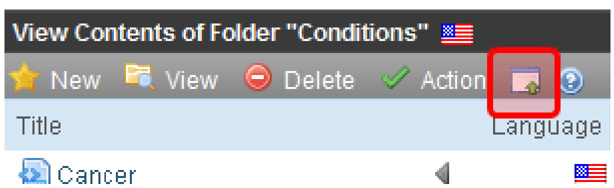
Note: Alternatively, you can edit within a mapped network folder. See "Edit Using a Mapped Network Folder" on page 7-428.

Follow these steps to edit a managed file.

1. From the Workarea, select the **Content** folder.
2. Select the managed file's folder.
3. Select the managed file you want to edit.
4. Hover the cursor over the triangle ( ) on the right end of the file and click.
5. Click **Check out and Save As** from the dropdown menu.



6. Select a folder on your computer in which to save the file.
7. Open the host application.
8. Edit and save the file.
9. Return to Ektron CMS400.NET and open the file's folder.
10. Click the Add Assets button (circled below).



11. Drag the changed file to the Assets area in the middle of the screen.

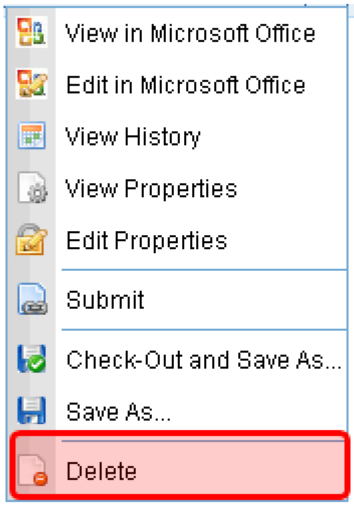
Deleting a Managed File

Note: You must have delete permissions for the folder that contains the document. See Also: "Folder Permissions" on page 5-43.

Note: It is good practice to check for broken quicklinks before deleting documents. See "Link Checking" on page 7-132.

1. From the Workarea, select the **Content** folder.
2. Select the managed file's folder.
3. Find the managed file you want to delete.
4. Hover the cursor over the triangle (◀) on the right end of the file and click.

5. Click **Delete** from the dropdown menu.

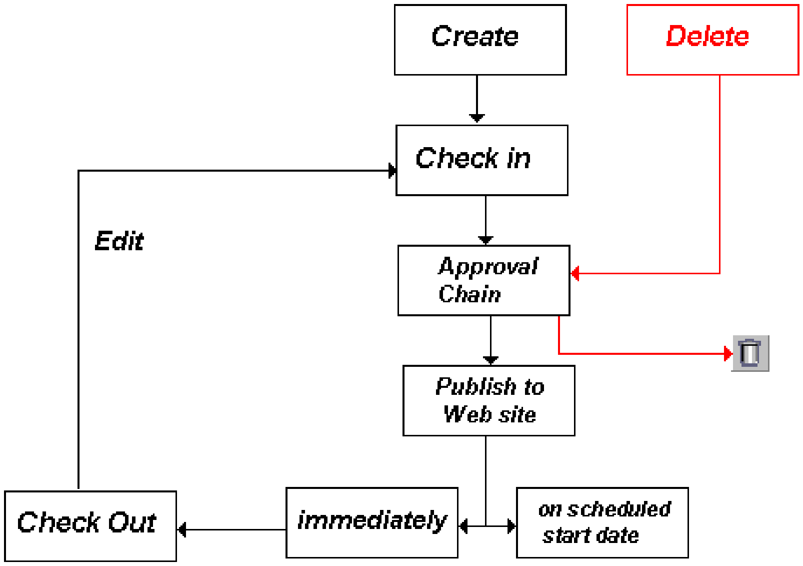


6. You are asked to confirm the deletion. Press **OK**.
7. The asset enters its approval chain.

Like publishing, deleted content must go through the approval chain before it is removed. If you are the last approver in the approval chain, the content is deleted immediately. See Also: "Approve/Decline One Content Item" on page 5-35

Asset Workflow

An asset proceeds through the same workflow as any other type of content. A diagram is below.



See Also:

- "Approving Assets" on page 7-440
- "Adding Assets to Collections and Menus" on page 7-440

Approving Assets

Assets are placed into the approval chain, like other types of content. For more information, see "Approve/Decline One Content Item" on page 5-35.

Adding Assets to Collections and Menus

You can add an asset to a collection or menu as you would any other type of content. For more information, see "Working with Collections" on page 9-99 and "Working with Menus" on page 9-129.

Asset Reports

Ektron CMS400.NET provides several reports that track assets by status.

Report	Displays assets in this status	For more information, see
Approvals	Requiring your approval	"Approvals Reports" on page 7-710
Checked In Content	Checked in	"Checked In Report" on page 7-712
Checked Out Content	Checked out	"Checked Out Report" on page 7-713
New Content	New (that is, created and saved but never published)	"New Content Report" on page 7-714
Submitted Content	Submitted for publication	"Submitted Report" on page 7-715
Pending Content	Approved and pending a start date	"Content Pending Start Date Report" on page 7-716
Refresh Reminder Report	End date has been reached	"Refresh Reminder Report" on page 7-717
Expired Content	Expired date has been reached	"Expired Content Report" on page 7-718
Content to Expire	Will expire within specified number of days	"Content to Expire Report" on page 7-719

Document Management Configuration

This section explains configuring the Document Management feature. By changing these settings, you can

- update Document Management server settings
- change which file types are allowed on the Document Management server
- set the View Type

There are two ways you can configure a Document Management server:

- the Asset Server Setup screen in the Workarea See Also: "Updating Asset Configuration Settings" on page 7-442
- the AssetManagement.Config fileSee Also: "The AssetManagement.Config File" on page 7-442

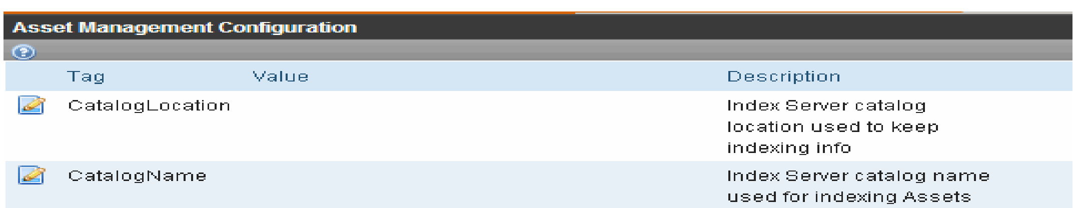
In either case, you are editing the AssetManagement.Config file. While the Workarea screen provides a simple way to update this information, some tags can only be updated in the AssetManagement.Config file. The table in "The AssetManagement.Config File" on page 7-442 indicates which tags can be edited in the Workarea.

Updating Asset Configuration Settings

You can update some AssetManagement.Config tags from the Ektron CMS400.NET Workarea. To do that, follow these steps.

Note: Only members of the Administrator User Group can view, add, or edit the Asset Server Setup.

1. In the Workarea, go to **Settings** > **Configuration** > **Asset Server Setup**.
2. The **Asset Management Configuration** screen appears.



3. The **Value** field for that tag changes to a text box.
4. Change the information in the text box.
5. Click the Save button ( ).

For more information on each tag, see "The AssetManagement.Config File" on page 7-442.

The AssetManagement.Config File

The following table describes the AssetManagement.Config file's tags.

Element	Description	Editable within Workarea?
CatalogLocation=	The folder location of the Asset Catalog. This location is used when setting up the index service. For example: "`C:\assetcatalog\`".	✓
CatalogName=	The name of the Asset Catalog. This name is used when setting up the index service.	✓
DomainName=	Can be Domain Name, IP Address or Machine Name. An example is: localhost. This is the address a Web client system uses to open managed documents through HTTP.	✓
FileTypes=	Files types that users are allowed to upload to Document Management. For more information, see "Allowing File Types" on page 7-443. The default file types installed are *.doc,*.xls,*.ppt,*.pdf, *.gif,*.jpg,*.jpeg,*.txt, *.log,*.vsd,*.dot,*.zip,*.swf,*.wma,*.wav, *.avi, *.mp3, *.rm, *.wmv, *.ra, *.mov, *.odt, *.odf, *.odp, *.odg, *.ods, *.odb	✓
LoadBalanced=	Enables Load Balancing for assets. Set to "1" to enable. See Also: "Load Balancing Assets" on page 19-34	✓
Password=	The password for the user created during the install. This password is encrypted during the install. If you are changing the user and need to encrypt a new password, use the `dms400encryptpassword.exe` encryption tool located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities\DMS`.	✓
ServerName=	The name of the server that hosts Ektron CMS400.NET.	
StorageLocation=	The folder location where published assets are stored. For example: "`C:\assetslibrary`".	✓
UserName=	The user created during the install.	✓
WebShareDir=	The folder where temporary data files that are waiting to be checked in, saved, or published are stored. For example: "`dmdata`".	✓

Allowing File Types

Administrators control which file types are allowed in the Document Management functionality by editing the AssetManagement.config file. Reasons for limiting the file types include:

- Security - For example, you do not want users to load .exe files to your Document Management server
- Ease of Management - For example, you want your Document Management server to store .doc files only

The `<FileTypes>` tag in the AssetManagement.config file contain the file types users can upload. The default file types are:
`*.doc,*.xls,*.ppt,*.pdf,*.gif,*.jpg,*.jpeg,*.txt,*.log,*.vsd,*.dot,*.zip,*.swf,*.wma,*.wav,*.avi, *.mp3, *.rm, *.wmv, *.ra, *.mov, *.odt, *.odf, *.odp, *.odg, *.ods, *.png,*.docx,*.xlsx,*.pptx, *.vsdx, *.htm, *.html *.js,*.wmf,*.css,*.xml.`

Adding or Removing a File Type

To add or remove a file type from the list, follow these steps.

1. Edit the **Workarea** > **Settings** > **Configuration** > **Asset Server Setup** > **Update Asset Configuration Settings** screen.

   Or

1. Open the `AssetManagement.config` file. The default location is `(webroot)/(site root)`.
2. Find the `FileTypes=""` element. All file types must appear between the quotes. For example, `FileTypes="*.doc,*.xls"`.

Note: Use a comma to separate file types. Also, file types must be formatted as wildcard.extension. For example, adding an .mp3 file type to the list after *.zip looks like this: `*.zip,*.mp3`

3. Add or remove any file type.
4. Save and close the `AssetManagement.config` file.

Checking Document Management Permissions

If you are having any problems with permissions, use this section to verify that your user and folder settings are assigned properly.

See Also:

- "User Permissions" on page 7-445
- "Folders Used by Document Management" on page 7-446

User Permissions

When the Document Management functionality is installed, permissions are granted to several users for the following folders:

- *webroot**site root*\AssetManagement\dmdata
- *webroot**site root*\Assets
- *root*\assetlibrary

The assigned permissions vary depending on your server's operating system.

The following table lists users and their permissions. Scan down the column of your server's operating system to determine which users and permissions should be enabled for the folders listed above.

You can use this information to help troubleshoot potential permission problems.

User	Needs these permissions	Windows 2000 Pro or XP Pro	Windows 2003 Server	Windows 2003 Enterprise Edition
IIS_WPG User	See "Advanced Permissions" on page 7-446		✓	✓
IUSR_ (The IUSR_ account is required only if `Impersonate` is set to `True` in web.config, and its username and password attributes are not specified. If `impersonate` is set to `false` (default setting), the IUSR_ account may be harmlessly removed from the folders listed.)	See "Advanced Permissions" on page 7-446	✓	✓	
IUSR_Group	See "Advanced Permissions" on page 7-446			✓

User	Needs these permissions	Windows 2000 Pro or XP Pro	Windows 2003 Server	Windows 2003 Enterprise Edition
ASP.NET User	See "Advanced Permissions" on page 7-446	✓		
User Defined (The User Defined user account is required only if `Impersonate` is set to `True` in web.config, and its username and password attributes are specified.)	See "Advanced Permissions" on page 7-446	✓	✓	✓

Advanced Permissions

The following are extended permissions for use with the Document Management functionality.

- Traverse Folder / Execute File
- List Folder / Read Data
- Read Attributes
- Read Extended Attributes
- Create Files / Write Data
- Create Folders / Append Data
- Write Attributes
- Write Extended Attributes
- Delete Subfolder and Files
- Read Permissions

Folders Used by Document Management

Folder	Set by	Description
assetLibrary	User	Defined by user during installation. The path to this folder can be viewed and changed in the Workarea under **Settings > Configuration > Asset Server Setup > Storage Location**. See Also: "The assetLibrary Folder" on page 7-447
dmdata	Ektron CMS400.NET	Defined during Ektron CMS400.NET installation. Located in the AssetManagement folder. Has settings for both the File System and IIS.
assets	Ektron CMS400.NET	Defined during Ektron CMS400.NET installation. Located in site root folder.

The assetLibrary Folder

The Asset Library folder contains file assets uploaded to and managed by DMS. You can view and update the path to this folder in the Workarea under **Settings > Configuration >Asset Server Setup > Storage Location**.

Managing Multimedia Assets

Multimedia files contain audio, video, or both. File types include .wav, .mpeg., .swf, .avi, and .wma.

Because of their unique characteristics, these files warrant special treatment within Ektron CMS400.NET. This section explains how multimedia files are handled through the following subtopics.

- "Supported Multimedia Players" on page 7-447
- "Multimedia File Types" on page 7-448
- "Working with Multimedia Files in Ektron CMS400.NET" on page 7-449

Supported Multimedia Players

Ektron CMS400.NET supports the following media players.

- WindowsMedia®
- Quicktime®
- Realplayer®
- Flash®

This means that Ektron CMS400.NET only supports multimedia files that run on one of these players. If you import a multimedia file that cannot play on any supported player, it is treated like any other asset but cannot be played within Ektron CMS400.NET.

Downloading Media Players

If a Ektron CMS400.NET user within the Workarea, or a site visitor, tries to play a file and no supporting media player exists on the user's computer, the user is prompted to download and install the player.

If the file uses the *Quicktime* or *Flash* media player, the web.config file contains information that prompts the user to immediately download and install the player.

If the file uses the *Realplayer* or *WindowsMedia* media player, the user must go to the host Web site and download them.

Multimedia File Types

Every multimedia file type has a corresponding MIME type. For example, an mp3 file's MIME Type is audio/mpeg.

All supported MIME types are defined within the `mediasettings` element of the web.config file. That section of the web.config file is reproduced below.

```
<add key="application/x-shockwave-flash" value="Flash" />
<add key="audio/x-wav" value="WindowsMedia, Quicktime, Realplayer" />
<add key="audio/x-wav-default" value="WindowsMedia" />
<add key="audio/x-pn-realaudio" value="WindowsMedia, Quicktime, Realplayer" />
<add key="video/x-avi" value="WindowsMedia, Quicktime, Realplayer" />
<add key="video/x-avi-default" value="Quicktime" />
<add key="video/x-msvideo" value="WindowsMedia, Quicktime"/>
<add key="video/x-msvideo-default" value="WindowsMedia"/>
<add key="audio/x-ms-wma" value="WindowsMedia"/>
<add key="audio/mpeg" value="WindowsMedia,Quicktime"/>
<add key="video/x-realvideo" value="Realplayer"/>
<add key="video/x-ms-wmv" value="WindowsMedia"/>
<add key="audio/x-realaudio" value="Realplayer"/>
```

<add key="video/quicktime" value="Quicktime"/>

Note: A good reference of file and corresponding MIME types is http://www.w3schools.com/media/media_mimeref.asp.

To determine if a multimedia file type is supported, go to the Web site listed above to find its MIME type. Then, go to the web.config file section show above to see if the MIME type exists and, if so, the supported media players.

Adding Players for a MIME Type

You can add to the list of supported media players for any MIME Type. To do so, open the web.config file, find the MIME type, and add the player name within the value element.

Here is an example: `<add key="audio/mpeg" value="WindowsMedia"/>`

As shown, `WindowsMedia` is the only supported player for mp3 files. If you know that other players can run mp3 files, insert additional media players after `WindowsMedia`. To get the exact name of the player, review the `value` elements in web.config file section shown above.

Adding MIME Types

If you want Ektron CMS400.NET to support additional MIME Types, add them within the `<mediaSettings>` element using the following syntax:

```
<add key="MIME type/subtype" value="supported media player(s)"/>
```

For example

```
<add key="video/x-ms-asf" value="WindowsMedia"/>
```

You must also add the file type to the list of supported file types in the assetmanagement.config file. See Also: "Allowing File Types" on page 7-443

Adding a MIME Type's Default Player

To identify a player as the default for a MIME type, use the following syntax within web.config.

```
<add key="MIME Type/subtype" value="default player"/>
```

For example

```
<add key="video/x-msvideo-default" value="WindowsMedia"/>
```

Working with Multimedia Files in Ektron CMS400.NET

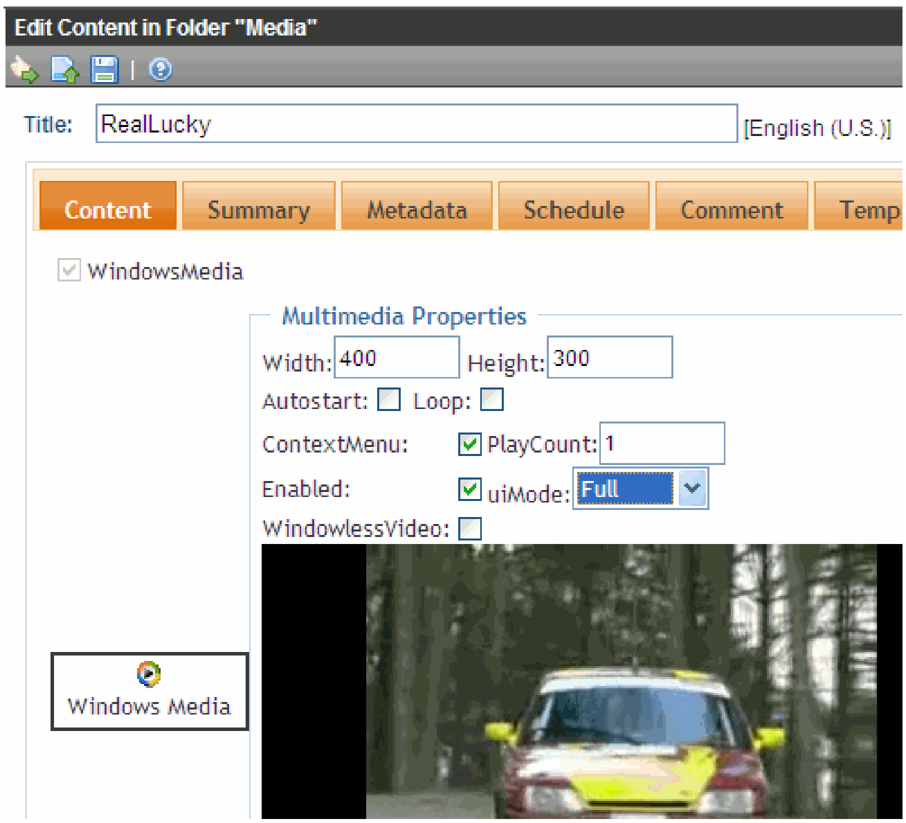
Importing Multimedia Files into Ektron CMS400.NET

You import multimedia files into Ektron CMS400.NET the same way you import other assets. See "Working with Managed Files" on page 7-435 and "Adding Documents Using Drag and Drop" on page 7-419.

Once imported into Ektron CMS400.NET, a document proceeds through the same workflow as any other type of content. See Also: "Approval Chains" on page 5-28

Changing Supported Media Players

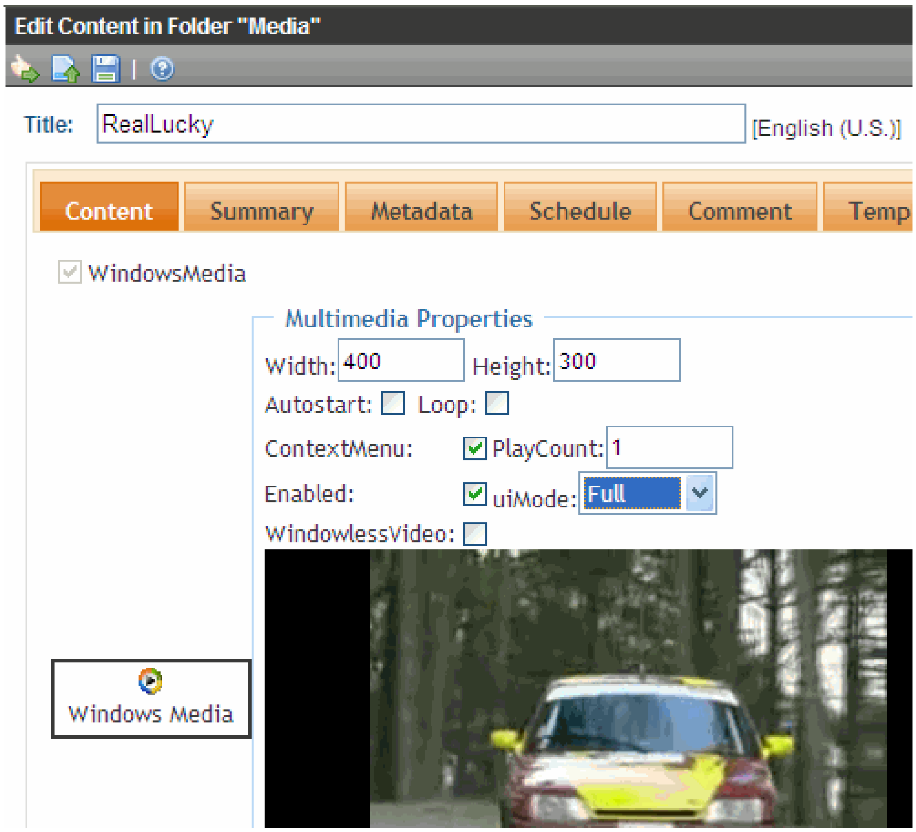
After a multimedia file is imported into Ektron CMS400.NET, you can view supported media players' properties on the **Content** tab of the Edit Content screen. All players defined for the file's MIME type are checked. You can uncheck any media players that you do not want to operate a particular file.



If a default media player is defined for a MIME type in web.config, you cannot uncheck its checkbox. In the above graphic, WindowsMedia is the default player.

Changing File Properties

After a multimedia file is imported into Ektron CMS400.NET, you can edit its properties on the **Content** tab of the Edit Content screen.



If the file is supported by several players, first check the player whose properties you want to modify, then edit its properties.

The **Width** and **Height** fields determine the size (in pixels) of the media player when it appears in the Workarea and on your Web site. The remaining properties are determined by the media player (QuickTime in the example above).

Inserting a Multimedia File into Content

To insert a multimedia file into content, follow these steps.

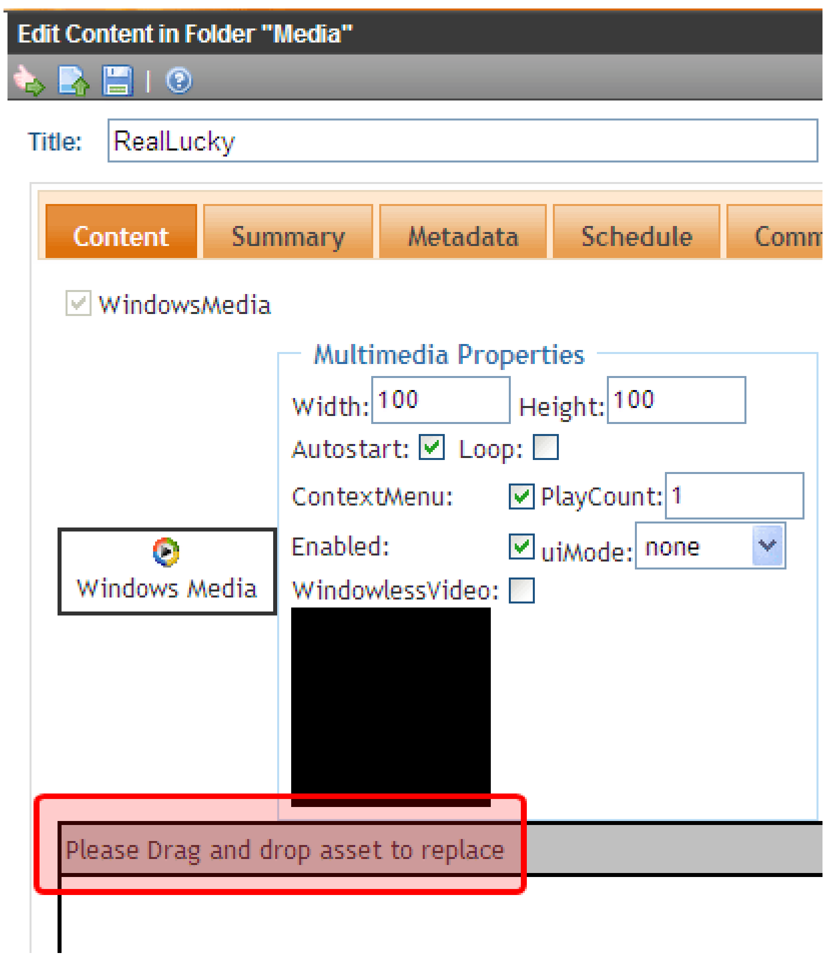
1. Either create a new HTML content item or edit an existing one.

2. Within the content, type text or insert an image that you want site visitors to click to launch the multimedia file. For example: **Click here to begin playing**.
3. Select the image or text you inserted in Step 2.
4. Apply a quicklink to the multimedia file to the selection. This procedure is described in "Quicklinks and Forms" on page 8-22.

Replacing Multimedia Files

If you want to replace a multimedia file but maintain all CMS information about that file (for example, its properties, summary, metadata, etc.), follow these steps.

1. Browse to the folder that contains the multimedia content item.
2. Double click the item.
3. The bottom of the Edit screen has a gray rectangle with the text **Drag files into this window and drop to add**.



4. Open Windows Explorer and navigate to the folder that contains the updated multimedia file.
5. Drag and drop the file into the lower section of the Edit Content screen.
6. Save, Check In, or Approve the content.

Note that after you complete the replacement, you can play and restore older versions of the file through the content's history. For more information, see "Viewing and Restoring Previous Content" on page 7-117.

Viewing and Listening to Multimedia Files

Users in the Workarea and visitors to your Web site play interact with multimedia files in the same way.

When either type of user visits a page that hosts a multimedia file, Ektron CMS400.NET tries to match media players on the user's computer with those defined in the web.config file for the file's MIME type. Ektron CMS400.NET then displays a list of choices for every supported media player for the file. The user selects the preferred one.

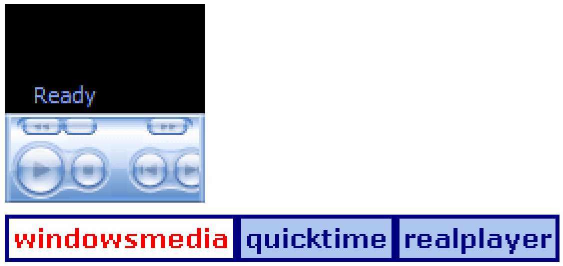
Modifying Style Properties of the Multimedia Player

You can change the multimedia player's style properties by modifying the EKTTabs.css style sheet. This file is installed to `site folder/Workarea/csslib`.

For example, you can change the color of the text that selects a player to red by changing the property highlighted below.

```
.EktTabActive
{
padding: 2px 2px 2px 2px;
top:10px;
text-decoration:none;
position: relative;
background-color:white;
border: solid thin navy;
color:Red;
font-weight:bolder;

}
```

Here is the result.



PDF Generation

PDF (Portable Document Format) is a file type designed for distributing compact, platform-independent documents. Each document is self-contained, packing text, graphics, and fonts into a single file.

You can automatically convert Office documents stored in Ektron CMS400.NET to the PDF format. As a result, when a site visitor accesses a page containing such a document, he sees the PDF version. Since most computers have a PDF reader, the visitor needs no additional software to view the file.

Warning! Upon installing Ektron CMS400.NET, the Ektron Windows service begins communicating with Ektron's external PDF-generation server. To terminate this communication, disable PDF generation. See "Disabling PDF Generation" on page 19-14. Alternatively, you can generate PDFs locally. See "Local PDF Generation" on page 7-455.

Why use PDF?

- Files easily cross multiple platforms, including Microsoft, Apple, Linux, and Unix.
- Documents keep their formatting and appear the same on a computer screen or when printing.
- File size is typically smaller, which means less bandwidth usage.
- Converted Office documents can be viewed by anyone with a PDF viewer.
- Site visitors do not need a different viewer for each file type.

Note: Ektron CMS400.NET also supports saving MS Office documents in .html format, which is also formatted for a browser.

The following sections explain creating PDFs with the Document Management feature:

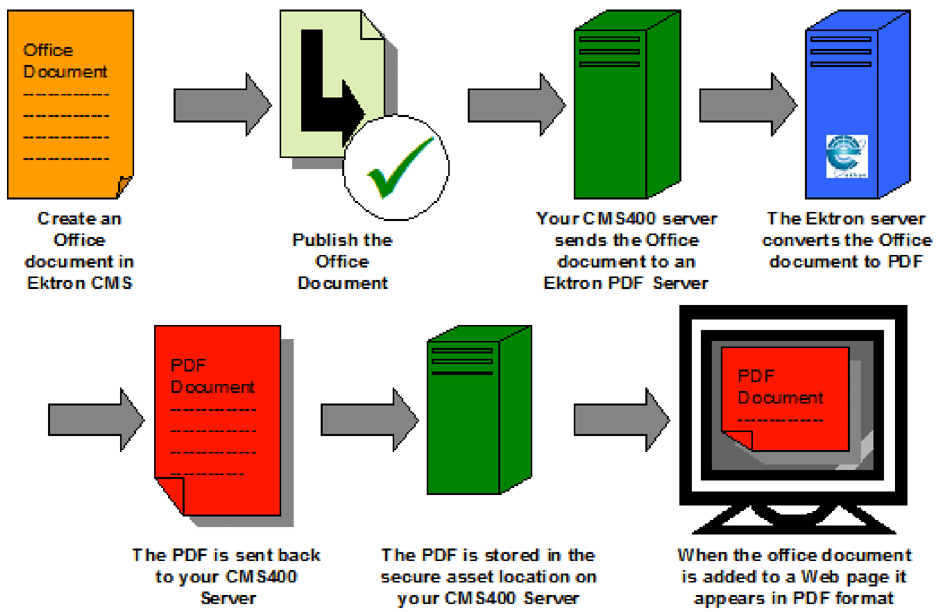
- "PDF Conversion Process" on page 7-454
- "Local PDF Generation" on page 7-455

- "Enabling or Disabling PDF Generation" on page 7-456
- "Designating a Folder to Generate PDFs Automatically" on page 7-456

PDF Conversion Process

The PDF conversion of an Office document starts when it is published. At that point, a copy of the file is sent to an Ektron server for PDF generation. After the server generates the PDF, it is returned to your Document Management server.

The PDF file doesn't appear in the CMS400.NET Workarea -- only the originally-published Office document appears. Ektron CMS400.NET stores the PDF file in a secure location. Subsequent editing is done in the original Office document. Each time it's published, a new PDF is generated.



Once the Office document is added to a Web page, the Web page shows the PDF version. This means site visitors only need a PDF viewer to view any Office document on your site.

The Ektron Windows Service runs the Office-to-PDF conversion process. See Also: "Ektron Windows Service" on page 19-13

Local PDF Generation

If you purchase software from a PDF generation software vendor, you can create PDF documents on a local network instead of sending them an Ektron server. Reasons for generating a PDF locally include:

- Speed: Office documents can be converted more quickly
- Security: Office documents never leave the local network
- Quality: You can configure the output quality

The following sections explain setting up local PDF generation.

Modifying the PdfGenerator Information in AssetManagement.config

When setting up local PDF generation, use the `PdfGenerator` parameter in the AssetManagement.Config file to provide the location of the local PDF generator. To modify the file, follow these steps.

1. Open the `AssetManagement.Config` file, located in your site root folder.
2. Change the location of the PDF generator.

   For example:

```
PdfGenerator="http://aspnet20.ektron.com/PdfManager/PdfGeneratorService.asmx"
```

   might become

```
PdfGenerator="http://localhost/PdfManager/PdfGeneratorService.asmx"
```

3. **Save** and **Close** the file.

Enabling or Disabling PDF Generation

Administrators decide if this feature is enabled and to which folders it applies. After enabling this feature, administrators can change any folder's properties to allow PDF generation.

Follow these steps to enable or disable this feature.

1. In the CMS Workarea, go to **Settings** > **Configuration** > **Setup**.
2. Click the **Edit** button ( ).
3. Click the **Enable Office Documents to be Published in other Format** checkbox.
4. Click the **Save** button ( ).

Designating a Folder to Generate PDFs Automatically

By setting a folder's properties to allow PDF generation, all Office documents published in that folder have a PDF created for them. For an introduction to PDF generation, see "PDF Generation" on page 7-454.

The steps below explain how to change the folder property for PDF generation.

Note: Existing subfolders do not inherit PDF generation. Each subfolder needs to be set individually. However, a new subfolder inherits the PDF generation setting from its parent folder. Administrators can change the setting while creating a new subfolder.

1. In the Workarea, click the **Content** folder button.
2. Click the folder for which you want to enable PDF generation.
3. Click **View** > **Properties**.
4. Click the **Edit Properties** button ().View > Properties
5. Click the **Publish Office Documents as PDF** radio button.
6. Click **Save** ().

Adding Assets Automatically

The Auto Add Asset feature automatically transfers assets placed in a specified folder into Ektron CMS400.NET.

It's a very helpful feature if, for example, several users work with assets, you want to manage them with Ektron CMS400.NET, but the users creating or updating the assets have neither Ektron CMS400.NET licenses nor the client software installed. These users simply place the assets in a folder, and the Auto Add Asset feature moves them to Ektron CMS400.NET.

The Auto Add Asset feature is very flexible. While setting it up, you can determine the following aspects of how it works.

- whether it uploads a single asset, multiple assets, a folder, or a folder and its subfolders
- the location of the uploaded assets
- if subfolders are included, do you want to mirror that structure within Ektron CMS400.NET?
- file types that can be uploaded
- how frequently the specified assets or folders are checked for new content

The rest of this section explains the Auto Add Asset feature through the following topics.

- "Installing the Auto Add Asset Feature" on page 7-457
- "Updating the Configuration File" on page 7-458
- "Start the Auto Add Asset Service" on page 7-461
- "Testing the Auto Add Asset Feature" on page 7-462

Installing the Auto Add Asset Feature

Follow these steps to install the Auto Add Asset Feature.

1. Verify that Ektron CMS400.NET is running basic authentication in IIS. For information on how to do this, see
   - IIS 6 - http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/abbca505-6f63-4267-aac1-1ea89d861eb4.mspx?mfr=true.
   - IIS 7 - http://technet.microsoft.com/en-us/library/cc772009.aspx
2. Create the following directories in the file system of the computer that will transfer the assets to Ektron CMS400.NET.

- **Input** - place assets in this directory before uploading them to Ektron CMS400.NET
- **Backup** - assets are moved to this directory after they are uploaded to Ektron CMS400.NET
- **Error** - assets are moved to this directory if there was a problem moving them to the `input` folder

3. To each computer that will run the Auto Add Asset Feature, copy the `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities\AssetWorkerSetup.msi` file and run it.

   This program creates a new folder, `C:\Program Files\Ektron\AssetWorkerSetup`.
4. Test that the Web Services are working. To do that, browse to the following page:

   http://*localhost/cms400min*/workarea/webservices/assetservice.asmx

Note: Replace **localhost** with your server name and **CMS400min** with your site name.

The page displays two Web services: **AddAsset** and **MakeFolderIfNoExists**.

Updating the Configuration File

After installing the Auto Add Asset feature, you can modify the configuration file, which lets you customize the feature to fit your particular needs.

The file's name and folder path is `C:\Program Files\Ektron\AssetWorkerSetup\maindata.config`. The following table describes its elements.

Element	Description
DmsUserName	The user created during the install.
DmsPassword	The password for the user created during the install. This password is encrypted during the install. If you are changing the user and need to encrypt a new password, use the `dms400encryptpassword.exe` encryption tool located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities\DMS`.
DmsUserDomain	The domain for the user created during the install.
DmsServer	The name of the server on which DMS is running.
CmsUserName	By default, Ektron CMS400.NET inserts the user name **vs**. This is a special user that lets you work in Visual Studio.net while signing into CMS as an administrator. Note:See "Remove Sample Users and Sample Membership Users" on page xxivSee "Securing your Ektron CMS400.NET" on page xxiii advises you to remove the VS user. If you do, you must create a new user, assign him to the Administrators groups, and enter his username and password in these fields.
CmsPassword	By default, Ektron CMS400.NET inserts the password of the VS user. If you change the VS user's password, or change the CMS UserName, enter the new password here. Note: See "Remove Sample Users and Sample Membership Users" on page xxivSee "Securing your Ektron CMS400.NET" on page xxiiiadvises you to remove the VS user. If you do, you must create a new user, assign him to the Administrators groups, and enter his username and password in these fields.
CmsUserDomain	Enter the Domain Name, IP Address or Machine Name. An example is `localhost`. A Web client system uses this address to open managed documents through HTTP.
Protocol	Enter the protocol used to transfer the assets: `http` or `hhtps`.
CmsSite	Enter the path to your Web site root. For example, one of Ektron CMS400.NET's sample site's root is `http://localhost/CMS400min`.
DmsSite	Enter the path to your Asset Management folder. For example, one sample site's Asset Management folder is `http://localhost/CMS400min/AssetManagement`.
ConfigType	Enter the type of file upload you want. Choices are: - file - multifile - folder - autofile - autofolder

Element	Description
	■ autofoldercreate ■ multifolder ■ automultifolder ■ automultifoldercreate These choices are explained in "File Upload Types" on page 7-460.

Folder:
■ Input
■ Backup
■ Error
	Enter paths to the folders you created in Step 2 of "Installing the Auto Add Asset Feature" on page 7-457. An example is below.
	`<Input>C:\Test\Input</Input>`
	`<Backup>C:\Test\Backup</Backup>`
	`<Error>C:\Test\Error</Error>`

MultiFolder	If your choice at the `ConfigType` element is listed below, use this element to specify the folders.
	■ multifolder
	■ automultifolder
	■ automultifoldercreate
	Separate each folder with the pipe character (|). Here is an example.
	`C:\AutoAddAsset\InputPhotos`
	`|C:\AutoAddAsset\InputWorddocs|C:\AutoAddAsset\InputPDFs`

CreateFolder	
FileTypes	Enter all file types that can be added using the Auto Add Asset feature. To identify a file type, enter an asterisk(*), a period (.) and the file's extension. Separate each file type with a comma. Here is the sample list that appears by default: `*.doc,*.xls,*.ppt,*.pdf,*.gif,*.jpg,*.jpeg,*.txt,*.log,*.vsd,*.dot,*.zip` Note: The **FileTypes** field in the Assetmanagement.config file determines which files can be used within Ektron CMS400.NET. You should not enter file types here that are not listed in AssetManagement.config. See Also: "Allowing File Types" on page 7-443

File Upload Types

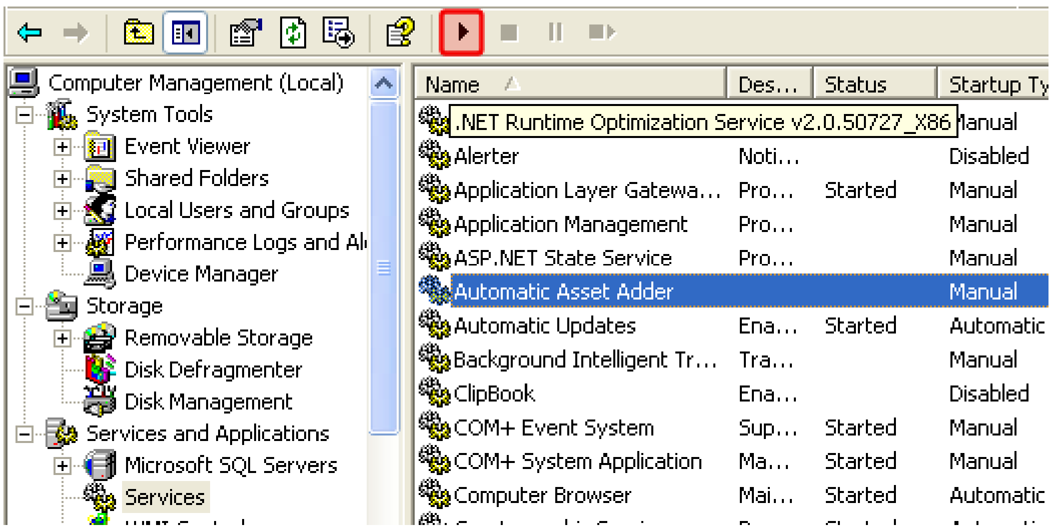
There are nine methods for uploading files from the input folder into Ektron CMS400.NET. The following table explains the options and how each works.

File Upload Type	What is uploaded	If folder, are subfolders also scanned for assets?	Are new files uploaded automatically?	CMS folder structure set up to match your file system?
File	One file	na	no	no
Multifile	Multiple individual files separated by a pipe	na	no	no
Folder	One folder	no	no	no
Autofile	One folder	no	yes	no
Multifolder	All specified folders Note: Specify the folders at the Multifolder element. See "MultiFolder" on page 7-460	yes	yes	no
Autofolder	All files in specified folder	yes	yes	no
Autofoldercreate	All files in specified folder	yes	yes	yes
Automultifolder	All files all specified folders Note: Specify the folders at the Multifolder element. See "MultiFolder" on page 7-460	yes	yes	no
Automultifoldercreate	All files all specified folders Note: Specify the folders at the Multifolder element. See "MultiFolder" on page 7-460	yes	yes	Yes Note: Changes to files already uploaded are considered new assets

Start the Auto Add Asset Service

The Auto Add Asset feature uses a Windows Service to transfer assets to Ektron CMS400.NET. You must begin the service manually every time you start Windows. Follow these steps to start the Auto Add Asset Service.

1. Go to Windows **Control Panel** > **Administrative Tools** > **Computer Management**.
2. Click **Services and Applications** > **Services**.
3. Click the start button (circled below) to start the Automatic Asset Adder service.



Testing the Auto Add Asset Feature

After completing the above steps, you should verify that the Auto Add Asset feature is working. To do this, follow these steps.

1. Place files of the appropriate type into the specified input folder.
2. Open `C:\Program Files\Ektron\AssetWorkerSetup\AssetWorker.exe.config` with a text editor such as Notepad.
3. Change the value of the `PollInterval` element to 10000. Save and close the file.
4. The input folders will be checked for files every 10 seconds. They should appear within the Ektron CMS400.NET shortly.

Merging Indexing Service Catalogs

This section explains how to merge two Windows Indexing Service catalogs. You need to do this if your server has more than the maximum allowed number of 26 catalogs.

Note: The maximum number of catalogs is determined by Microsoft's Windows Indexing Service.

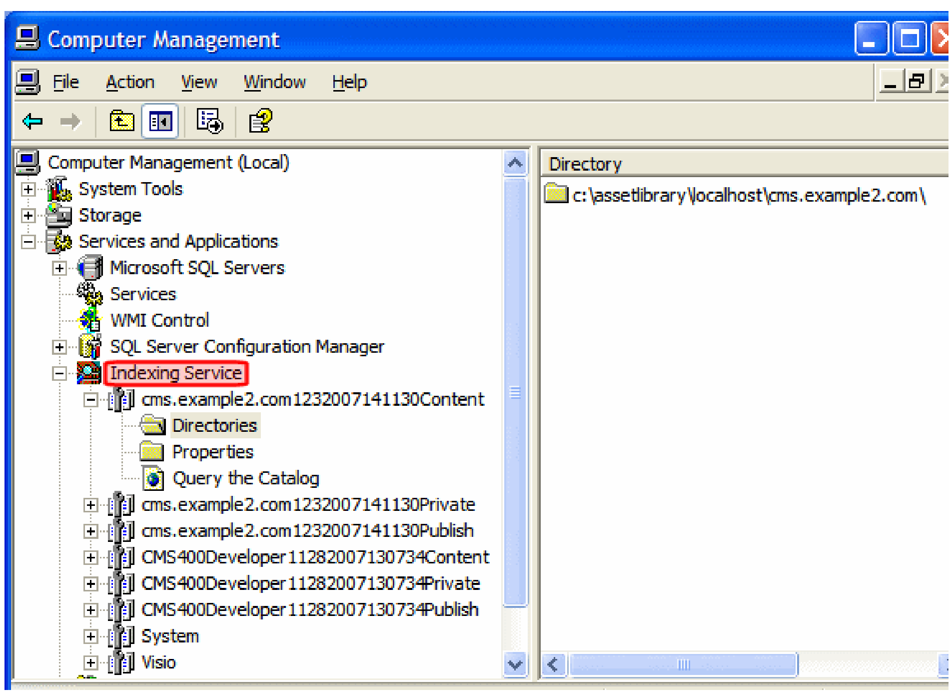
See Also:

- "Windows Indexing Service Catalogs" on page 7-463
- "Conditions for Merging Catalogs" on page 7-464
- "Procedure for Merging Catalogs" on page 7-464

Windows Indexing Service Catalogs

Warning! When you install more than three Web sites to a server, the catalogs for additional sites are automatically merged with one of the three existing Web site's catalogs. An existing Web site's catalogs are chosen for merging based on the site with the least amount of directories to index. When a Web site's catalogs are merged with another, the information for each site is kept separate.

Each Ektron CMS400.NET site has three catalogs. In addition, your server may have catalogs for other applications that use the Windows Indexing service. Below is an example of what your Indexing Service catalogs might look like.



Note that the first six catalogs support two Ektron CMS400.NET web sites: Cms.example2.com and CMS400Developer. Each site has three catalogs:

- Content
- Private (assets)
- Publish (assets)

Each catalog has a **Directories** folder, which lists the directories of the content being indexed.

Why Merge Catalogs?

The merge reduces the number of catalogs on your server, yet still indexes each site's content for the search. After you merge the catalogs, each site's search is still limited to content on that site -- the search does not find content from other sites even though several sites now reside in one catalog.

When merging catalogs, you copy the directory of the "merge from" catalog to the Directories folder of the "merge to" catalog. Then, you delete the "merge from" catalog.

Conditions for Merging Catalogs

- You can only merge Ektron CMS400.NET catalogs if the Web sites use the same major point release. For example, you can merge catalogs from two sites with Release 7.0.4, or a 7.5.0 site with a 7.5.1 site. But you cannot merge a 7.0.4 site with a 7.5 site, because catalog properties change between releases.
- Each Ektron CMS400.NET site has three catalogs.
  - publish
  - private
  - content

You must merge the same catalog type between sites. So, for example, you cannot merge a publish with a private catalog.

Procedure for Merging Catalogs

As an administrator, you can merge different Web sites' catalogs by using Ektron's MergeCatalog.exe command line utility or by performing the merger manually. For information on

- Ektron's MergeCatalog.exe command line utility - see "Using the MergeCatalog.exe Utility" on page 7-464
- performing the catalog merger manually - see "Manually Merging Catalogs" on page 7-465

Using the MergeCatalog.exe Utility

There are two ways to use this utility. The first allows you to merge all of your Web sites' catalogs until you have only three catalog sets. For example, if you have five Web sites, you can merge their catalogs down to the equivalent of three sites. To merge your catalog sets down to three, run the MergeCatalog.exe file located in the following folder.

```
C:\Program Files\Ektron\CMS400v8x\Utilities\MergeCatalog.exe
```

The second way allows you to merge catalogs from one specified Web site to another. For example, you want to merge the catalogs from your CMS400Developer site to your eIntranet site. See Also: "Merging Catalogs from One Web Site to Another" on page 7-465

Merging Catalogs from One Web Site to Another

To use Ektron's MergeCatalog.exe utility, follow these steps:

1. Open a command prompt.
2. Change the directory to `C:\Program Files\Ektron\CMS400v8x\Utilities.`
3. Run the `MergeCatalog.exe` utility.

   Usage: `MergeCatalog "<fromCMS400dir>" "<toCMS400dir>"`

   Below is an example of using the MergeCatalog.exe command line utility to merge the *CMS400Developer* Web site's catalogs with the *eIntranet* site's catalogs.

   ```
   MergeCatalog "I:\inetpub\wwwroot\CMS400Developer" "I:\inetpub\wwwroot\eIntranet"
   ```

Once the merge is complete, the following message appears in the command box.

"Switching shared catalogs for site at <fromCMS400dir> into site at <toCMS400dir>
Restarting Ektron Windows Service
Catalogs Merged"

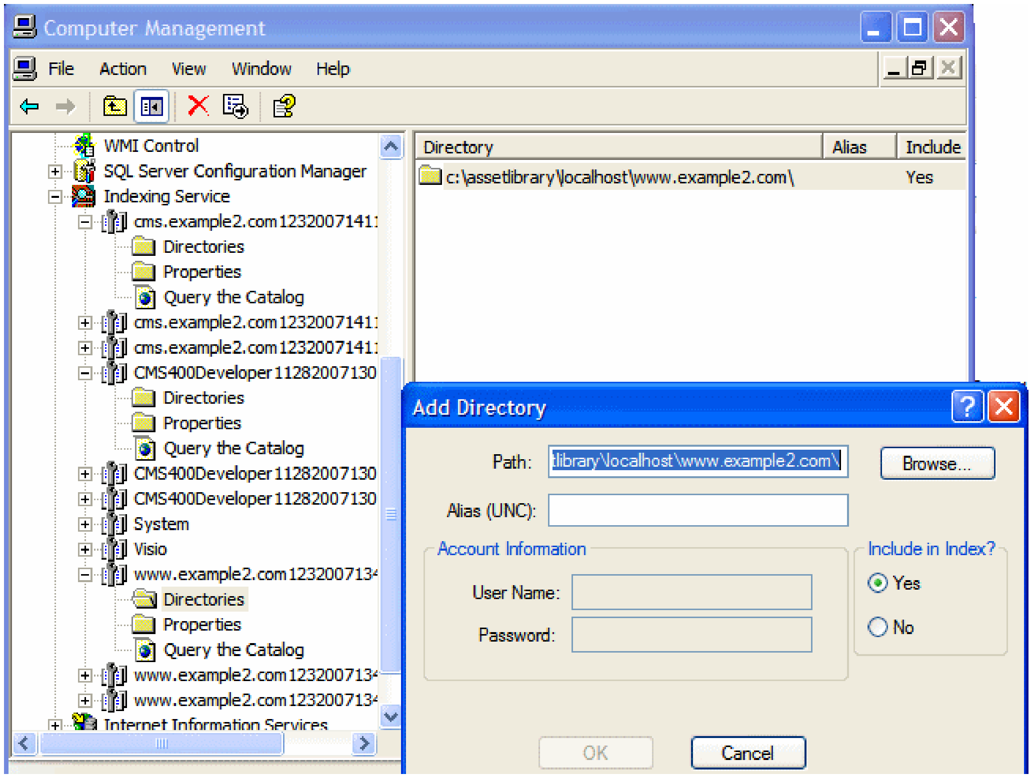
Manually Merging Catalogs

Follow these steps for all three catalogs on each site: Content, Private and Publish.

Part 1: Copy the "From" Catalog Path to a New Directory in the "To" Catalog

In this part, you create a new directory in the "to" catalog. Point the new directory to the "from" catalog folder. Then, delete the "from" catalog.

1. Open Computer Management > Services and Applications > Indexing Service.
2. Select the first catalog that you want to merge *from* (that is, the catalog you will delete after merging).
3. Click its **Directories** folder.
4. The directory appears in the right pane.
5. Double click it. The Add Directory dialog appears.



6. Press <Ctrl> + <C> to copy the **Path** field.
7. In the left panel, select the corresponding "to" catalog, the one into which you will merge the "from" catalog.

Warning! Make sure the catalog types match: content > content, publish > publish, private > private.

8. Right click the mouse and select **New > Directory**. The Add Directory dialog appears.
9. In the **Path** field, paste the path you copied in Step 7 and press **OK**.
10. Repeat these steps for the other two catalogs on the site that you are merging.
11. Click **Indexing Service** then stop the Indexing service.
12. Delete the three "from" catalogs.
13. Click **Indexing Service** then restart the Indexing Service. This action begins indexing the files in the new directory.

Part 2: Update .Config Files with the New Catalog Location

In this part, you open Windows Explorer and navigate to "from" Web site, that is, the site whose catalog you deleted above. There, you point its web.config and assetmanagement.config files to the new catalog.

1. Open Computer Management > Services and Applications > Indexing Service.

2. Find the catalogs that you have merged into.
3. Resize the window so that it occupies the left half of the screen.
4. Open Windows Explorer.
5. Navigate to the Web site whose catalog you deleted in "Part 1: Copy the "From" Catalog Path to a New Directory in the "To" Catalog" on page 7-465.
6. In the site root folder, open the web.config file.
7. Resize the window so that it occupies the right half of the screen.

   You should see the Computer Management screen on the left, and the web.config file on the right.
8. In web.config, find the element `<webSearch defaultProvider="MSIndexDialectServer">`.

Note: Don't confuse the `MSIndexDialectServer` tag with `MSIndexServer`. You only need to change `MSIndexDialectServer`.

9. Shortly after that are `catalogName` and `privateCatalogName`.
10. Replace the value of `catalogName` with the name of the publish catalog, visible in the Computer Management screen. For example:

catalogName="CMS400Developer11282007130734Publish"

11. Replace the value of `privatecatalogName` with the name of the private catalog. For example:

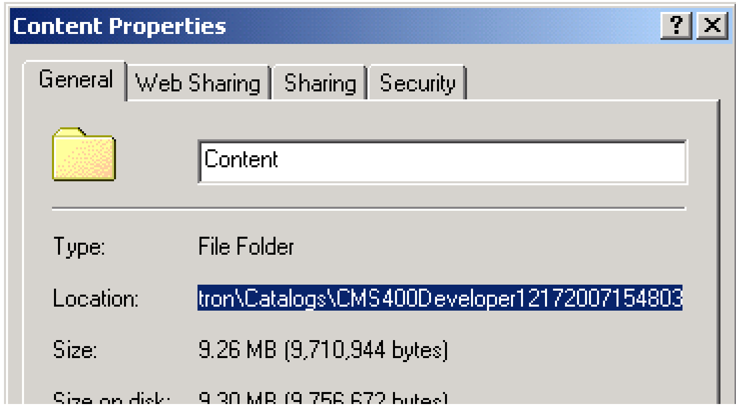
catalogName="CMS400Developer11282007130734Private"

12. Save the web.config file.
13. In the site root folder, open the AssetManagement.config file.
14. Resize the window so that it occupies the right half of the screen.

    You should see the Computer Management screen on the left, and the AssetManagement.config file on the right.
15. In AssetManagement.config, find the element `CatalogName`.
16. Replace the value of `CatalogName` with the name of the content catalog, visible in the Computer Management screen. For example:

catalogName="CMS400Developer11282007130734Content"

17. Replace the value of `CatalogLoc` with the path to the newly-merged catalog. To get the path:
    - open Windows Explorer.
    - navigate to the folder to which the catalog is being copied. For example, `C:\Program Files\ Ektron\Catalogs\CMS400Developer11282007130734\Content`
    - right click the folder and select **Properties**.
    - copy the **Location** field.



- Select the assetmanagement.config file's `CatalogLoc` tag.
- replace the path with the copied one. For example.

catalogName="`C:\Program Files\ Ektron\Catalogs\CMS400Developer11282007130734\Content`"

18. Copy the "to" catalog name and path entered in steps 16 and 17 to the other catalogs and locations: `PublishCatalogName`, `PublishCatalogLoc`, `PrivateCatalogName`, and `PrivateCatalogLoc`.
19. Save the AssetManagement.config file.
20. Stop and restart the Ektron Windows Service.

TIP!

Note: If you still have the Computer Management screen open, you can quickly navigate to Services and Applications > Services > Ektron Windows Services 2.0.

Troubleshooting

This section explains how to fix problems that may occur with Ektron CMS400.NET assets.

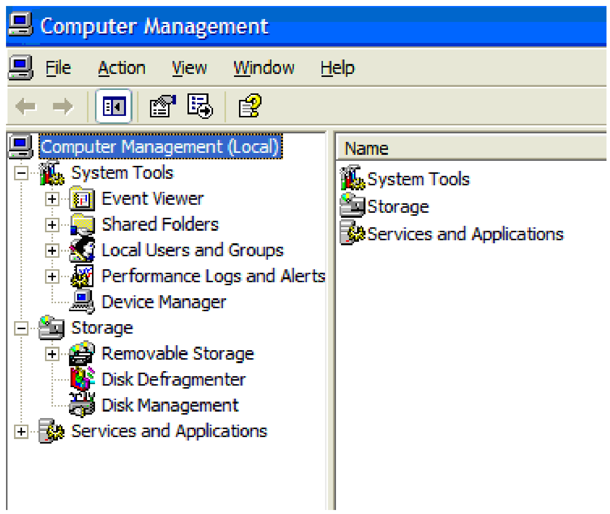
Symptom	See this section
Error message: Install Indexing Service	"Setting Up the Indexing Service" on page 7-469
A search of asset files finds no assets on your Web site	"Turning on the Asset Indexing Service" on page 7-480 or "Troubleshooting" on page 7-468
You cannot drag and drop assets into Ektron CMS400.NET	"Removing Front Page Server Extensions" on page 7-485

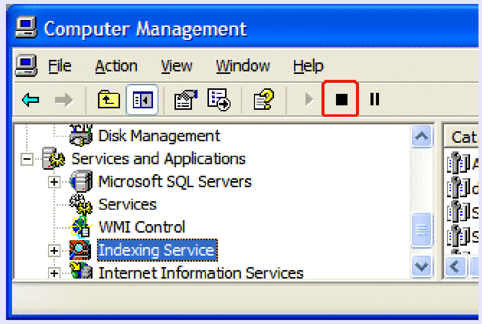
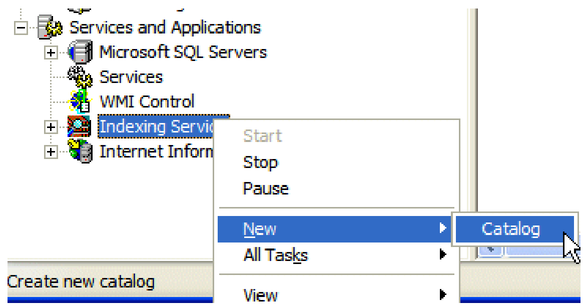
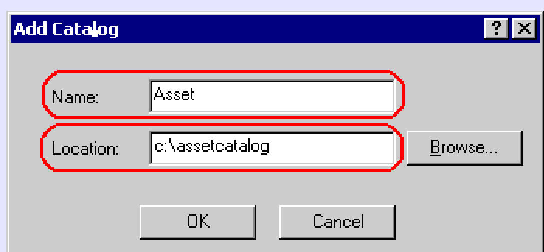
Symptom	See this section
When a user drags a document, the file opens in the browser instead of generating an “Uploading” notification	Ektron KB Article: http://dev.ektron.com/kb_article.aspx?id=14204
The server running Ektron CMS400.NET is running slowly; much of its resources are being used even though the computer is idle	"Disabling the System Indexing Service" on page 7-476
Error message after trying to upload documents: **Failed with error -2147217911**	"Removing aspnet_isapi.dll from the List of Wildcard Application Maps" on page 7-478
Error message: Windows Server 2003 no longer ships MSDAIPP.DLL, thus connecting to an FPSE server through Webfolders, is no longer possible.	"Using Microsoft Windows Server 2003 as a Client (Web Folders Setup)" on page 7-481
While trying to drag and drop an asset, an error message appears: **The target directory already exists**.	Check the `impersonate` element of the web.config file. If it is set to `true`, make sure the anonymous access account has at least write access to the `dmdata` and `assets` directories.
When you try to publish DMS documents, Ektron CMS400.NET sometimes does not allow them to update.	Make sure your production server is not running Windows XP. You cannot use XP as a production server for DMS.
After recently moving the ASM database to a new SQL server that has never hosted an ASM database, the following error appears while adding a DMS asset: AssetManagement error: Failed to save asset. Internal Message: RAISERROR could not locate entry for error 2000000002 in sysmessages. at Ektron.ASM.Documents.Asset.Create(enAssetStatus state) at	"ERRMSG: AssetManagement error: Failed to save asset" on page 7-483

Setting Up the Indexing Service

If you see the following error during installation, you need to set up the indexing service manually.

The following steps explain how to do that.

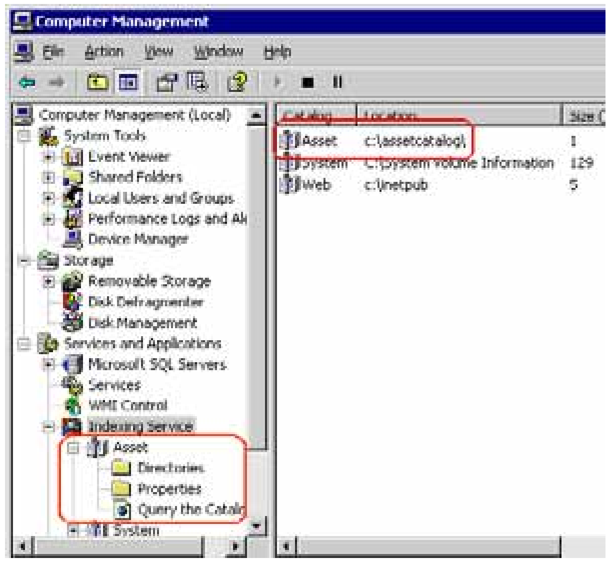
Step	Screen
1. Click **Start > Control Panel > Administrative Tools > Computer Management**. The Computer Management screen appears.	
2. Click the plus sign (**+**) next to **Services and Applications**.	
3. Click **Indexing Service**.	

Step	Screen
4. Click the stop button to halt the indexing service if it is running. Note: If the Index service is running, the start button is grayed out.	
5. Right click **Indexing Service,** then click **New > Catalog**.	
6. At the Add Catalog Screen: - In the **Name** field, add the catalog name. - In the **Location** field, identify the folder that will store the asset catalog. Note: By default, during installation, Ektron CMS400.NET names the catalog **Asset** and associates it with the location `c:\assetcatalog`. The installer can change the default location.	

Step	Screen

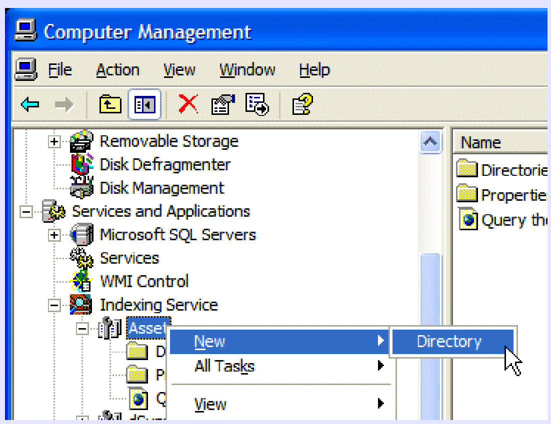
7. Click **OK**.

The Computer Management screen shows your new Indexing Service.



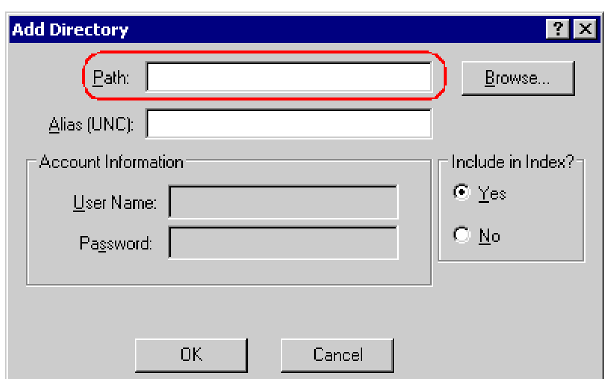
8. Right click the **Asset** catalog, then click **New > Directory**.

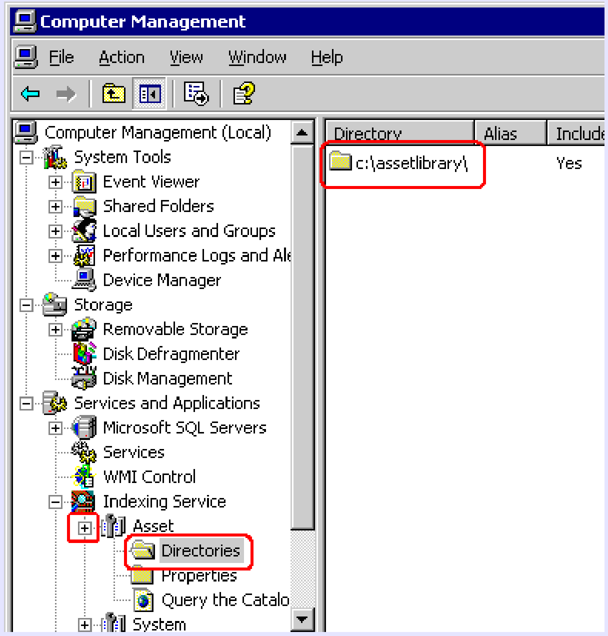
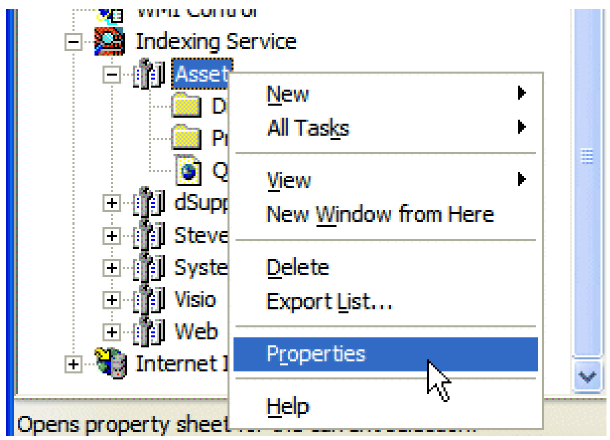
This is the directory the service indexes.

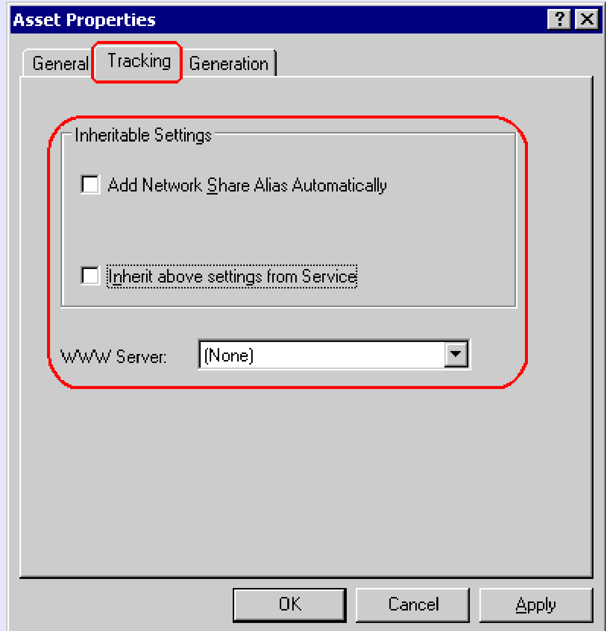
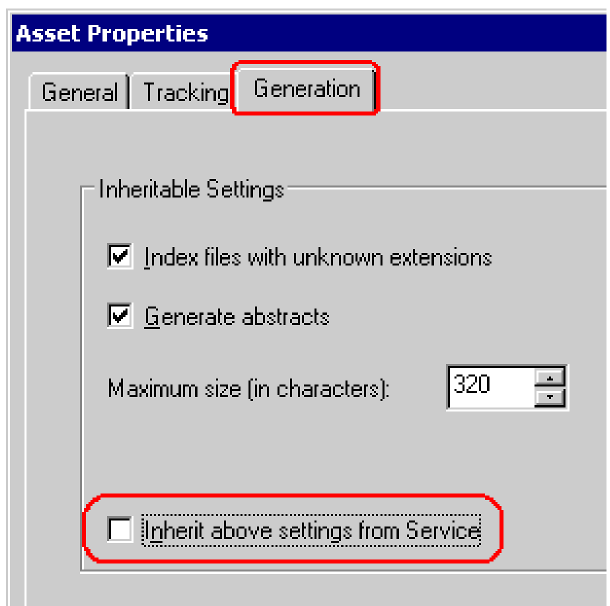


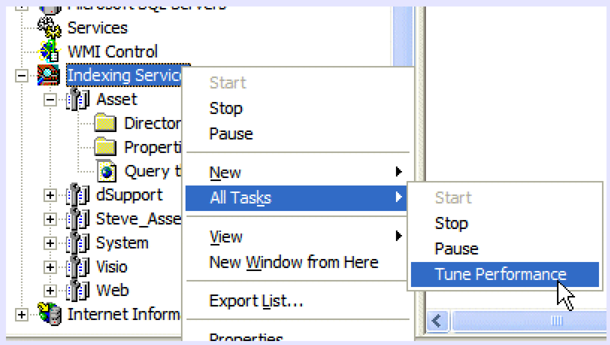
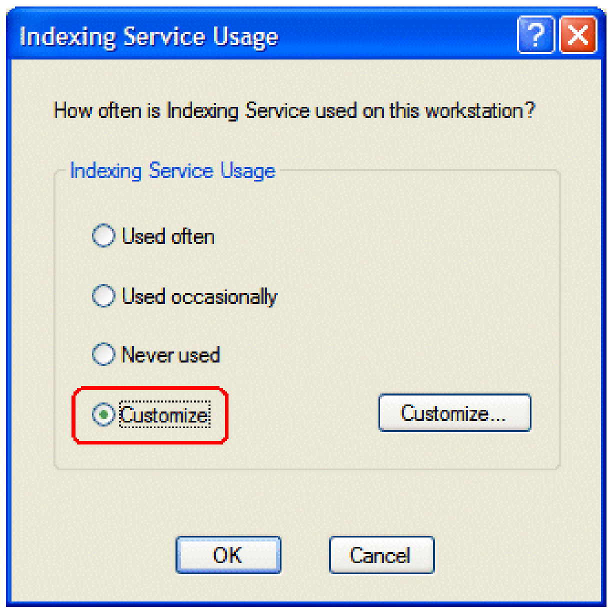
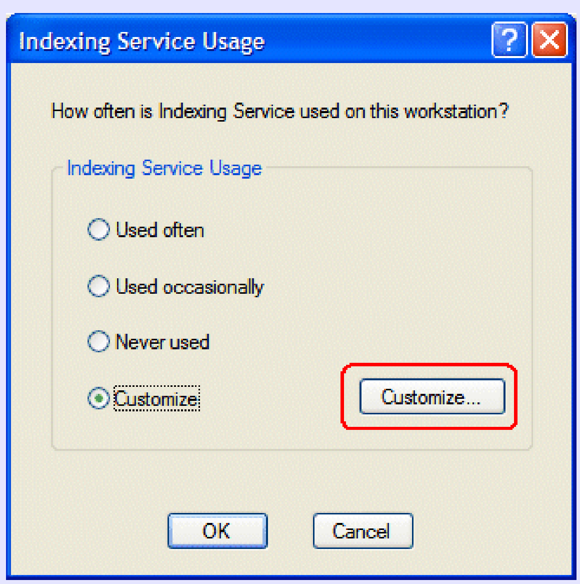
9. In the **Path** text box, add the folder of the secure storage location. Make sure the **Include in Index** radio button is marked **Yes**.

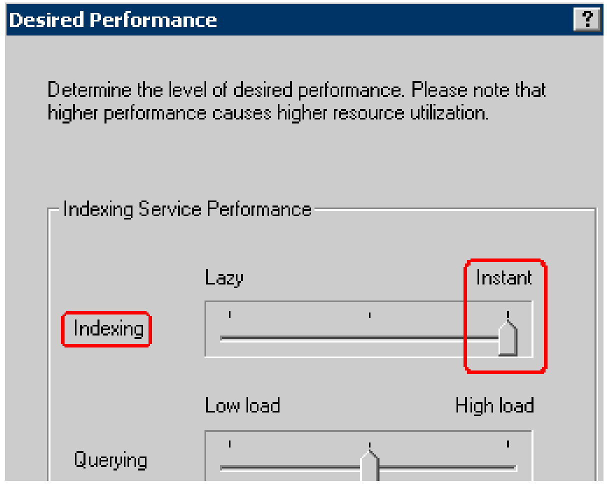
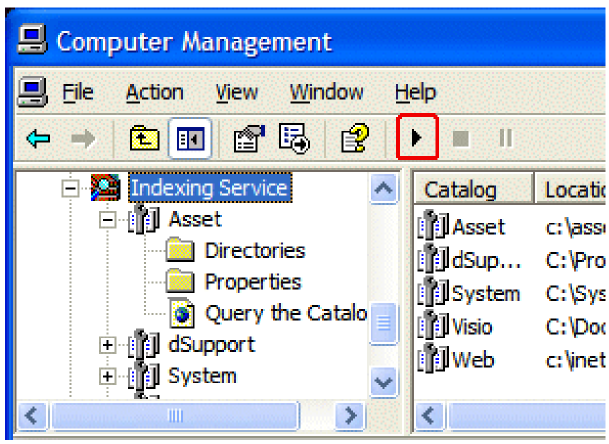
Note: By default, during installation, Ektron CMS400.NET uses `c:\(Domain Name, IP Address or Machine Name)\assetlibrary`.



Step	Screen
10. Click **OK**. Then, click the plus sign (**+**) next to **Asset** to view the Directories folder. In the Directories folder, the new directory is displayed.	
11. Right click **Assets**, then click **Properties**.	

Step	Screen
12. On the **Tracking** tab, uncheck all boxes and choose **None** for **WWW Server**.	
13. On the **Generation** tab, uncheck **Inherit above settings from Service**. Then click **OK**. The **Index files with unknown extensions** and **Generate abstracts** check boxes can be checked or empty. It is your choice.	

<table>
<tr><th>Step</th><th>Screen</th></tr>
<tr><td>14. Right click Indexing Service, then click All Tasks > Tune Performance.</td><td>
</td></tr>
<tr><td>15. Click the Customize radio button.</td><td>
</td></tr>
<tr><td>16. Click the Customize button.</td><td>
</td></tr>
</table>

Step	Screen
17. Change **Indexing** to **Instant**.	
18. Click **OK** and **OK** again to close both dialog boxes.	
19. Click the **Start** button to start the service again.	

Disabling the System Indexing Service

Symptom

The server running Ektron CMS400.NET is running slowly; much of its resources are being used even when the computer is idle.

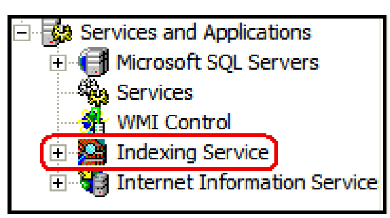
Cause

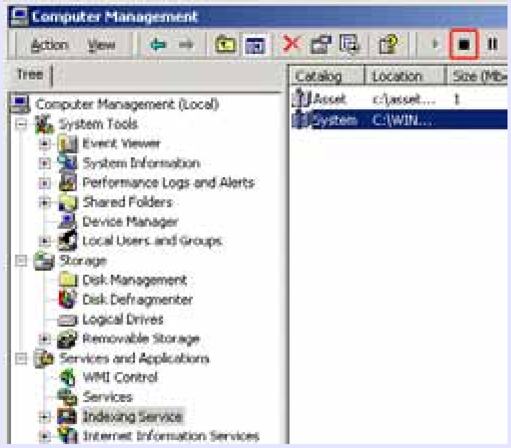
The Microsoft Windows Indexing service is turned on during installation. This service indexes every file on the server, and the resources required to carry out that task slow down other activities.

Note: Ektron recommends turning off *all* indexing services other than the DMS Asset indexing service.

Resolution

Follow these steps to disable the Windows indexing service. This change does not affect DMS's ability to find files because it uses a different indexing service.

Step	Screen
1. Click **Start > Control Panel > Administrative Tools > Computer Management**. The Computer Management screen appears.	
2. Click the plus sign (**+**) next to **Services and Applications**.	
3. Click **Indexing Service**.	

Step	Screen
4. Click the Stop button to stop the indexing service.	

Removing aspnet_isapi.dll from the List of Wildcard Application Maps

Symptom

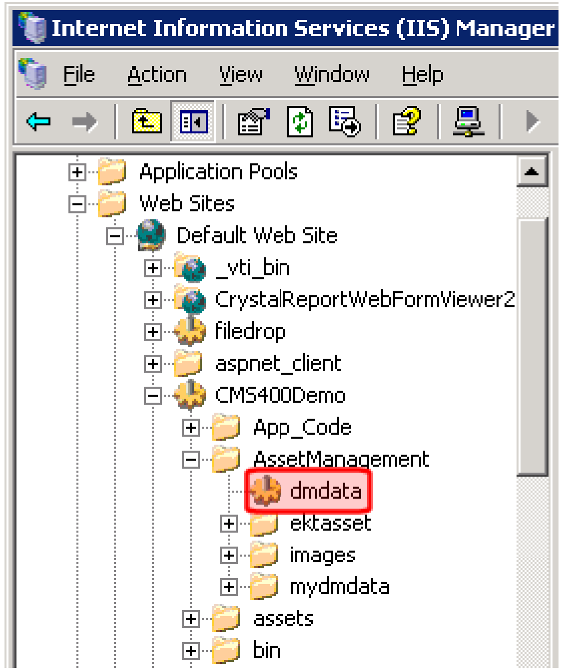
When you try to upload an asset, you get the error message "Failed to upload documents."

Cause

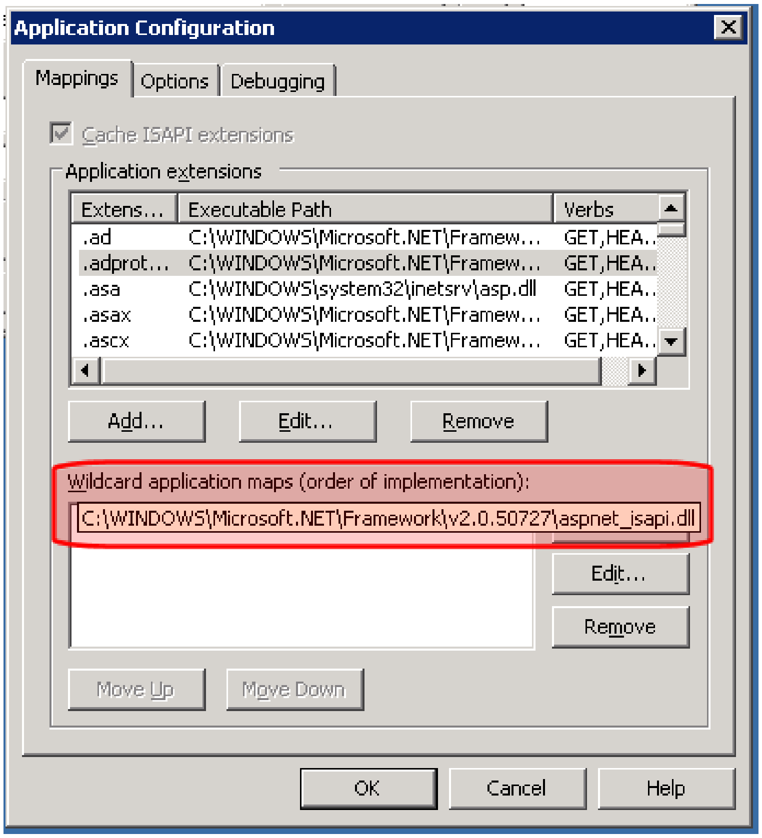
Remove the aspnet_isapi.dll from the list of Wildcard Application Maps.

Resolution

1. Open IIS.
2. Go to your Ektron CMS400.NET Web site.
3. Underneath the Web site, click **Asset Management** > **dmdata**.



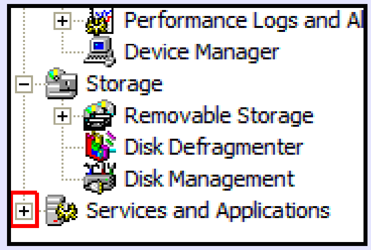
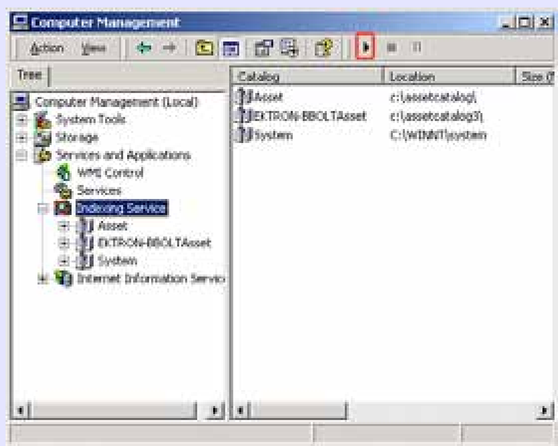
4. Right click **dmdata** and choose **Properties**.
5. Click the **Virtual Directory** tab.
6. Click the **Configuration** button.
7. Look in the **Wildcard Application Maps** area. If aspnet_isapi.dll appears, remove it.



8. Click **OK**.

Turning on the Asset Indexing Service

Step	Screen
1. Click **Start > Control Panel > Administrative Tools > Computer Management**. The Computer Management screen appears.	

Step	Screen
2. Click the plus sign (**+**) next to **Services and Applications**.	
3. Click **Indexing Service**.	
4. Click the Start button to start the indexing service.	

Using Microsoft Windows Server 2003 as a Client (Web Folders Setup)

Symptom

You receive the following error message:

- Windows Server 2003 no longer ships MSDAIPP.DLL, thus connecting to an FPSE server through Webfolders, is no longer possible.

Resolution

Per MS Licensing, you can obtain webfldrs.msi from any down-level OS, or any Office product that shipped before Windows2003 (not Office 2003) and install the WebFolders client. Doing so will keep you compliant with licensing.

Installing WebFolders from Office 2003 is only allowed if you have an Office 2003 license for each Windows2003 server you plan to install WebFolders on.

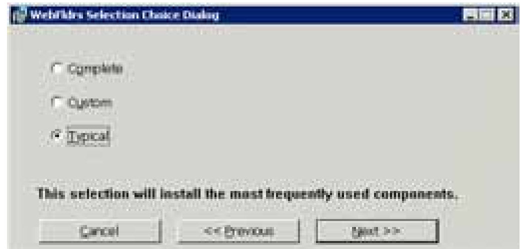
Web Folders Setup for Microsoft Windows Server 2003

Note: You only need to run the Web Folders Setup if there is a problem during the install. The Ektron CMS400.NET install performs the setup when needed.

The MSDAIPP.DLL is no longer shipped with Microsoft Windows Server 2003, making communication with Web folders impossible. To correct this, Ektron CMS400.NET setup runs the Web folder setup when it detects Microsoft Windows Server 2003.

The following steps explains installing Web Folders. You will need to obtain a copy of the webfldrs.msi file.

Step	Setup Screen
1. Double click the **webfldrs.msi** file.	
2. The Web Folders install screen appears. Click **Next** to continue.	
3. The Web Folders Identity dialog box appears. - Add your **Name**. - Add your **Organization**. - Click **Next**.	

<table>
<tr><th>Step</th><th>Setup Screen</th></tr>
<tr><td>4. The Web Folders Product ID dialog box appears.
This dialog box displays the your product ID number.
- Click Next.</td><td>
</td></tr>
<tr><td>5. The Web Folders Selection Choice dialog box appears.
- Complete - installs all components.
- Custom - you choose the components to install.
- Typical - installs the most frequently used components.
After making a selection, click Next.</td><td>
</td></tr>
<tr><td>6. The Verify Ready All dialog box appears. Click Install Now.</td><td>
</td></tr>
<tr><td>7. The Action dialog box appears. The Setup is installing Web folders.</td><td>
</td></tr>
<tr><td>8. The We Are Done dialog box appears. Click OK.</td><td></td></tr>
</table>

ERRMSG: AssetManagement error: Failed to save asset

Symptom

After recently moving the ASM database to a new SQL server that has never hosted an ASM database, the following error appears while adding a DMS asset.

AssetManagement error: Failed to save asset. Internal Message: RAISERROR could not locate entry for error 2000000002 in sysmessages. at Ektron.ASM.Documents.Asset.Create(enAssetStatus state) at Ektron.ASM.Documents.AbstractAssetManagement.Create(AssetMetaData assetMetaData, enAssetStatus state) at Ektron.ASM.PluginManager.PluginHandler.Create(AssetMetaData assetMetaData, enAssetStatus state) at AssetManagement.AssetManagementService.Create(AssetMetaData assetMetaData, enAssetStatus state) at Mojave.AssetManagementProxy.Create(AssetMetaData assetMetaData, enAssetStatus state) at Ektron.Cms.DataIO.EkContentRW.AddContentv2_0(Collection ContObj) at Ektron.Cms.EkException.ThrowException(Exception ex) at Ektron.Cms.DataIO.EkContentRW.AddContentv2_0(Collection ContObj) at Ektron.Cms.Content.EkContent.AddNewContentv2_0(Collection ContObj)

Cause

During the creation of the ASM database, a total of 7 messages are written to the sysmessages table in SQL Server's master database. Each installation of SQL Server has its own master database and, in a typical move from one location to another, changes to the master database are not brought over.

If the ASM database was moved, and these messages are not in the sysmessages table in the new location's master table, the above error appears instead of a standard error message.

Resolution

Run this set of SQL scripts against your database. They add appropriate messages to the sysmessages table in the master database.

```
/***********************************************************************************-
********/
sp_addmessage 2000000001, 10, N'Error in %s: Error %d inserting into %s. %s', US_
ENGLISH, FALSE, REPLACE
go
/***********************************************************************************-
********/
sp_addmessage 2000000002, 10, N'Error in %s: Insert into %s returned %d rows. %s', US_
ENGLISH, FALSE, REPLACE
go
/***********************************************************************************-
********/
sp_addmessage 2000000003, 10, N'Error in %s: Failed creating record because primary key
already exists. %s', US_ENGLISH, FALSE, REPLACE
go
/***********************************************************************************-
********/
sp_addmessage 2000000004, 10, N'Error in %s: Error %d updating into %s. %s', US_ENGLISH,
FALSE, REPLACE
go
/***********************************************************************************-
********/
sp_addmessage 2000000005, 10, N'Error in %s: Update into %s returned %d rows. %s', US_
ENGLISH, FALSE, REPLACE
go
/***********************************************************************************-
********/
```

```
sp_addmessage 2000000007, 10, N'Error in %s: Error %d deleting into %s. %s', US_ENGLISH,
FALSE, REPLACE
go
/*******************************************************************************************_
*********/
sp_addmessage 2000000008, 10, N'Error in %s: Delete into %s returned %d rows. %s', US_
ENGLISH, FALSE, REPLACE
```

go

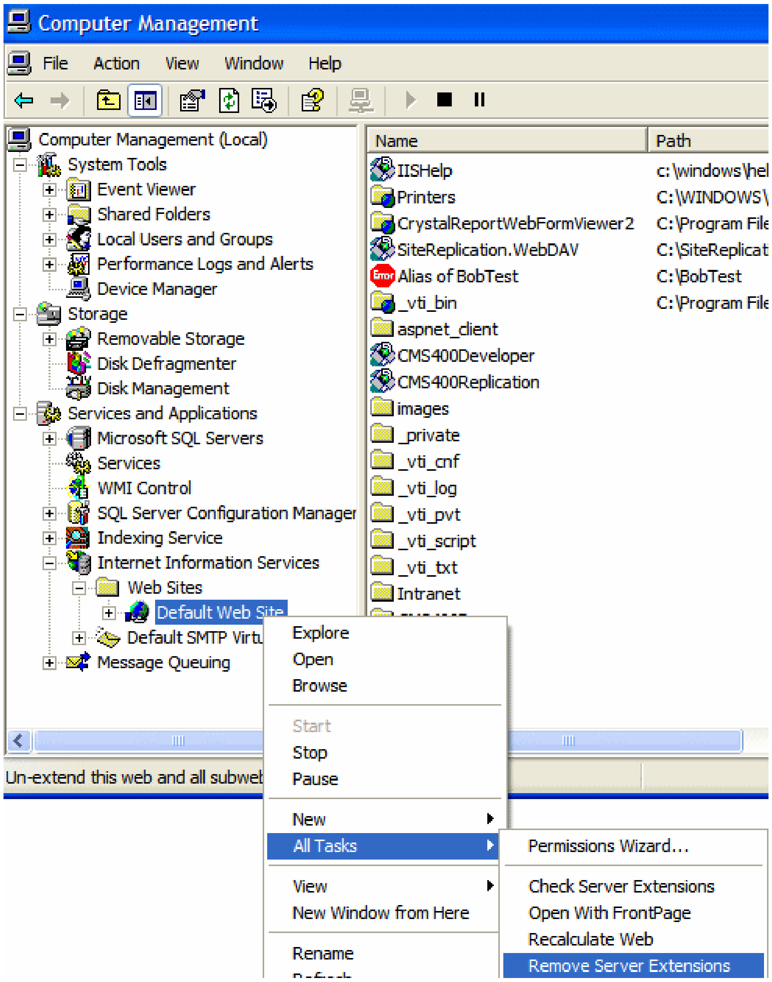
This snippet utilizes the sp_addmessage stored procedure from the master database, which adds the appropriate messages to the correct table.

Note: Although it is possible to recode these as an INSERT statement that can run directly against the sysmessages table, that procedure is not recommended.

Removing Front Page Server Extensions

Follow these steps to remove FrontPage Server Extensions from the Web root. When you do, the extensions are also removed from all folders below that.

1. Click the Windows **Start** button.
2. Click **Control Panel** > **Administrative Tools** > **Computer Management**.
3. Open **Services and Applications** > **Internet Information Services** > **Web Sites** > **Default Web Site**.



4. Right click the mouse and select **All Tasks > Remove Server Extensions**.

AssetControl Server Control

The AssetControl server control, when viewed on a Web form, displays a drag and drop icon that lets users upload new assets or update an existing one. When this icon is clicked, a drag and drop box appears. This box is similar to the upload box in the Workarea. See Also: "Adding Documents Using Drag and Drop" on page 7-419”

The difference between the Workarea and the server control is, in the Workarea users can only upload assets. With the AssetControl server control, users can upload a new asset or update an existing one by overwriting it. Even though the asset is overwritten, the previous version is still available through CMS400.NET’s history feature. See Also: "Viewing and Restoring Previous Content" on page 7-117

AssetControl Server Control Properties

The AssetControl server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

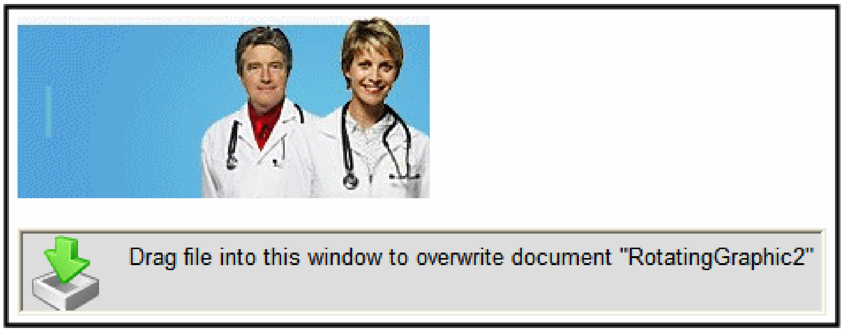
Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
DefaultAssetID	The ID of the asset you want to update. This property is used when the `UploadType` property is set to **Update**. See Also: "UploadType" on page 7-489 If you don't know the ID number of the asset, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DefaultFolderID	The ID of the folder where assets are added. This property is used when the `UploadType` property is set to **Add**. See Also: "UploadType" on page 7-489 If you don't know the ID number of the folder, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long

Property	Description	Data Type
DynamicParameter	Gets or sets the QueryString parameter to read a content ID or folder ID dynamically. The content ID is read when the `UploadType` property is set to Update. The folder ID is read when `UploadType` property is set to Add. To use the default content ID or default folder ID, leave blank. See Also: "UploadType" on page 7-489	String
Hide	Used to hide output of AssetControl in design time and run time. **True** = Hide AssetControl **False** = Display AssetControl	Boolean
IsImage	Setting this control to 1 (one) restricts the control so only images can be uploaded. **1** (one) - restrict the control to uploading images only. **0** (zero) - upload all types of assets.	Integer
Language	Set a language for viewing the collection. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
OverrideExtension	Allows you to restrict the type of asset that can be uploaded by its extension. For example, to restrict the control to uploading Word documents, enter **doc** in the property. **Warning!** When using this property, enter only the extension's letters not the wildcard (*) or the dot (.). You can add multiple extensions by creating a comma separated list of extensions. Ektron recommends limiting the list to five extensions.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TaxonomyID	The ID of the taxonomy with which to associate the asset.	Long

Property	Description	Data Type
UploadType	Select whether the control adds new assets or updates existing ones. ■ Select **Add** to add assets and use the `DefaultFolderID` property. See Also: "Default-FolderID" on page 7-487. If a file of the same name already exists in the folder, the new file is created using the naming convention `filename(2)`. ■ Select **Update** to update assets. In this case, you *must* identify an asset at the `DefaultAssetID` property. See Also: "DefaultAssetID" on page 7-487. The default is **Add**.	UploadTypeEnum
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

ImageControl Server Control

The ImageControl server control, when viewed on a Web form, displays an image stored within the CMS400.NET document management feature. When a user is logged in and has permission to edit the image, he can right click the image and select edit. This creates a drag and drop box that the user can use to update the file.



Warning! Images are stored as assets using the Document Management feature. This control does not use the CMS400.NET Library.

ImageControl Server Control Properties

The ImageControl server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
DefaultImageID	The image asset's content ID you want to display. If you don't know the ID number of the asset, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DynamicParameter	Gets or sets the QueryString parameter to read an image asset's ID dynamically. To have the default image ID used, leave blank.	String
FolderID	The ID of the folder where images are added. If you don't know the ID number of the folder, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
Hide	Used to hide output of AssetControl in design time and run time. **True** = Hide AssetControl **False** = Display AssetControl	Boolean
Language	Set a language for viewing the collection. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Description	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TaxonomyID	The ID of the taxonomy where assets are added.	Long
Title	Set the Image's alt/title text. By default the image file name is used.	String
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

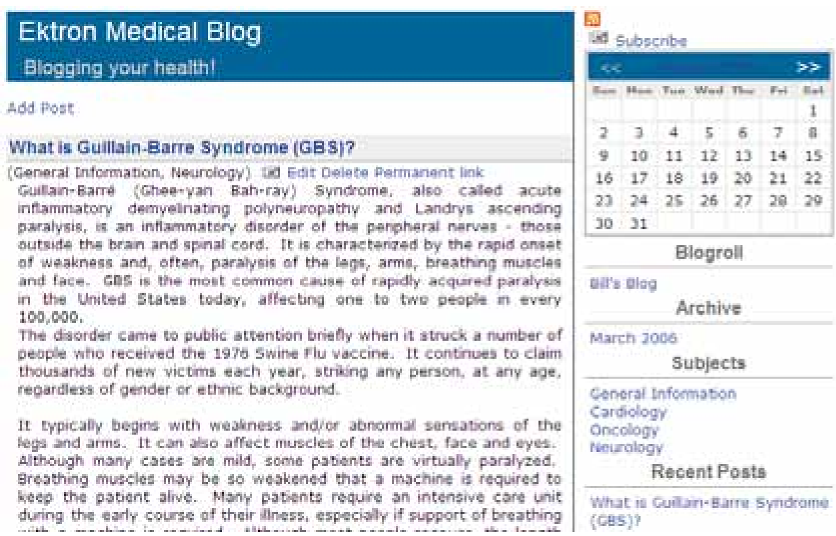
Blogs

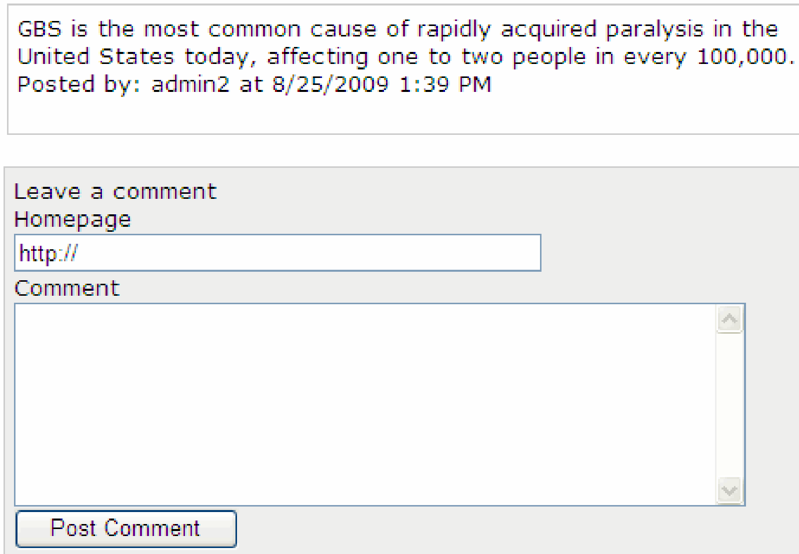
Blogs (short for Web Logs) are a form of online information sharing. A blog is often set up so a group of people can share their thoughts on a subject. One person creates the main post and other comment on post. In addition, blogs can be used to create an online diary of everyday life.

In the Ektron CMS400.NET Workarea, blogs and blog posts have a relationship similar to folders and content. The blog is the equivalent of a folder, and blog posts are the equivalent of content items. While blogs and blog posts have a few unique properties, they mostly work the same as folders and content.

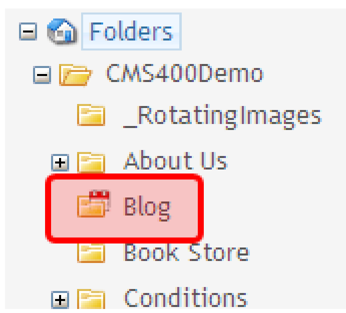
On your Web site, blogs are arranged so the latest post appears at the top. This differs from paper diaries, because you are reading the newest material first, instead of the oldest. Because blogs are laid out this way, site visitors can quickly find the most recent entries.

Blogs are made up of multiple elements. These elements allow site visitors to view or create a blog post, add comments, and see a roll call of associated blogs. In addition, if a blog calendar is present on the blog site, visitors can see which days have blog posts.





Blogs in the Workarea appear as a language bubble in the folder structure. This distinguishes a blog folder from a content folder.



The following table lists elements commonly found in a blog.

Element	Description
Blog Title	The name of your blog as you want it to appear on the site. For example, “My Life Story.”
Blog Post	The main entry for each topic. A blog post is made up of several sub elements: ■ Headline - the title of the post ■ Commentary - the details of the post ■ Comment Link - links to a comments page, where site visitors can view or add comments ■ TrackBack URL - a URL visitors can use to notify you when they are talking about the blog post on their site

Element	Description
	■ PingBack - Pings back any URLs in the blog post ■ Images - add images to a blog post. You add images to a blog post the same way you add them to content. See Also: "Adding a Library File to Content" on page 8-18
Blog Comments	A Comments link appears at the end of the blog post. The link includes a number in parentheses, for example (3). This number denotes how many comments have been made. Click this link to move to the comments page, where you can read comments on the post and possibly enter your own.
Blog Roll	Other blog sites that the blog's creator wants site visitors to view.
Blog Subjects	Subjects associated with the blog. If you click a subject, links to all posts associated with the subject appear.
Calendar	Indicates when blog posts were made. This lets site visitors navigate your blog by clicking a day that has blog posts.

Blog Workflow

The following table explains the workflow of a blog.

Workflow	Description	See Also
Phase 1	An administrator creates a blog in the Workarea. During this phase, he assigns blog subjects, creates a blog roll, and decides how comments are handled.	"Adding a Blog" on page 7-495
Phase 2	A developer adds the blog to a Web form using the blog server control. He then publishes the form.	"Introduction to Blog Server Controls" on page 7-532
Phase 3	Ektron CMS400.NET users can add blog posts, either from the Workarea or the Web site. Depending on the user's permissions, the post is either published immediately or submitted to the blog's approval chain.	"Blog Posts" on page 7-517
Phase 4	The blog post is published. Now, site visitors can view it and possibly add comments. Depending on the blog's comment settings, they either appear immediately or must be approved first.	"Blog Comments" on page 7-524

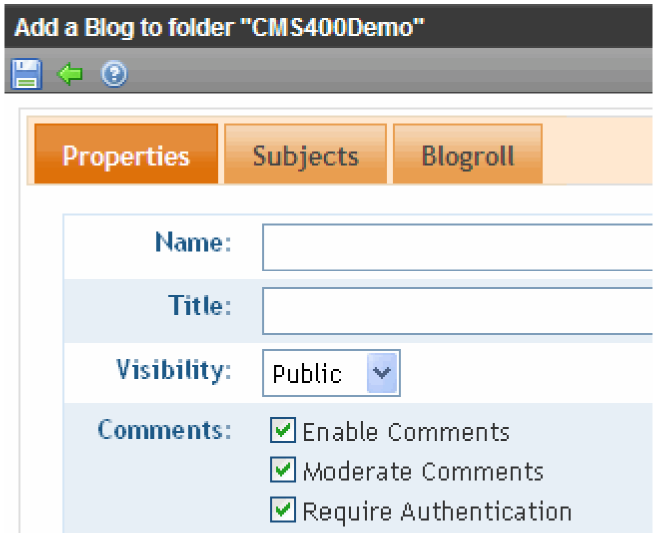
The following sections explain using the blog feature in the Workarea.

Adding a Blog

Note: To be able to create a blog, you must have permission to **Add Folders** on the blog's Advanced Permissions screen. See Also: "Permissions and Approvals" on page 7-511

To add a blog, follow these steps.

1. Go to the Workarea's Content folder.
2. Click the folder in which the blog will reside.
3. Click **New > Blog**.
4. The **Add a Blog** screen appears.



5. Fill out the **Properties** tab according to the table below.

Field	Description	
Blog Name	The name of your blog as it appears in the content folder tree.	
Blog Title	The title of your blog as it appears on the Web site.	
Visibility	Choose whether the site is private or public.	
	Public	Any site visitor can view the blog.
	Private	A site visitor must log in to view the blog. This includes membership and Ektron CMS400.NET users.
Comments	Choose how to handle comments by checking the appropriate boxes. For more information, see "Controlling Blog Comments" on page 7-524.	

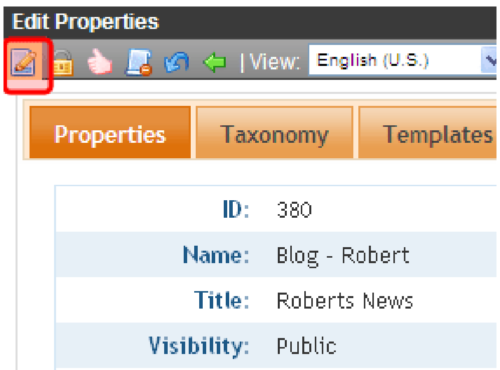
6. On the **Subjects** tab, add subjects to the blog. For more information on blog Subjects, see "Blog Subjects" on page 7-501.
7. On the **Blog Roll** tab, add blog sites that you want blog readers to visit. For more information on blog rolls, see .

Warning! See "Editing a Blog's Properties vs. Adding a Blog" on page 7-497 for additional properties that are only available when editing a blog's properties.

Blog Properties

Note: To be able to edit blog properties, you must have permission to **Edit Folders** on the blog's Advanced Permissions screen.

By clicking the blog edit properties button, you can change the following groups of information about a blog.



- "Editing a Blog's Properties vs. Adding a Blog" on page 7-497
- "Blog Folder Properties" on page 7-499
- "Metadata" on page 7-500
- "Blog Subjects" on page 7-501
- "Web Alerts" on page 7-504
- "The Blog Roll" on page 7-505
- "Permissions and Approvals" on page 7-511
- "Purge History" on page 7-513

Editing a Blog's Properties vs. Adding a Blog

When you edit a blog's properties and settings, more properties and settings are available than when you created it. This is done to save time when adding multiple blogs to a site.

The table below shows which properties or settings are available when adding and editing a blog.

Blog Properties and Settings Availability

Property or Setting	Available When Adding a Blog	Available When Editing a Blog
Visibility	✓	✓
Blog Name	✓	✓
Blog Title	✓	✓
Tagline		✓
# of Visible Posts		✓
Comment Control	✓	✓
Update Services		✓
Style sheet filename for this folder		✓
Template filename for this folder		✓
Smart Forms		✓
Metadata		✓
Subjects	✓	✓
Web Alerts		✓
Blog Roll	✓	✓
Permissions		✓
Approval Chain		✓

Blog Folder Properties

The following table shows the fields on the Blog's **Properties** tab. To edit these properties

- View > Properties from the Workarea, navigate to the blog folder, click **View > Properties**, then the Edit Properties button ().
- from the Web site, log in, navigate to the blog, open the menu for the blog and select **Properties**

When you are finished, click Save ().

To learn about the other tabs on the Properties screen, see

- "Metadata" on page 7-500
- "Blog Subjects" on page 7-501
- "Web Alerts" on page 7-504
- "Smart Forms" on page 7-505
- "The Blog Roll" on page 7-505
- "Creating SiteMap Breadcrumbs" on page 9-278

Field	Description	
Visibility	Choose whether the site is a private blog or public.	
	Public	Anyone who visits the site is able to view the blog.
	Private	A site visitor must log into the site to be able to view the blog. This could include membership users, CMS400 users or both.
Blog Name	The name of your blog as it appears in the content folder tree.	
Blog Title	The title of your blog as it appears on the Web site blog. It only appears if the	

Field	Description
	ShowHeader blog server control property is set to true.
ID	The ID number of the blog. This number is assigned by Ektron CMS400.NET and cannot be changed. Note: ID only appears when viewing the Properties screen. It does not appear while editing.
Tagline	A line of additional information that describes the blog. It appears below the title if the ShowHeader blog server control property is set to true. For example, the title of a blog is "John's Blog Page." The tag line could be "A place to learn about John's past, present, future, and his current state of mind!"
# Posts Visible	The number of posts visible on the blog page. If the number of posts exceeds this number, only this many of the most recent posts appear. For example, if this property is set to 10 and you add 11 posts, only the ten most recent posts appear. This number can be from 1 to 999. If you leave this field blank, all posts made during the current day are visible.
Comments	Choose how to handle comments by checking the appropriate boxes. For more information, see "Controlling Blog Comments" on page 7-524.
Update Service	Enter a service that notifies a blog search site when blog posts are added to your blog site. These blog search sites allow Web users to search content contained in blogs around the world. To use this feature, check the **Notify blog search engines of new posts** box and enter a path to a search site. An example path is: http://rpc.technorati.com/rpc/ping.
Style sheet filename for this folder.	If you want to provide a custom style sheet for the blog, enter the path to it relative to the site root. For example, WorkArea/csslib/my_custom_blogs.css. Leave this field blank to inherit the default style sheet, blogs.css, located in Workarea/csslib. You can customize the default style sheet but your modifications will get overwritten when you upgrade Ektron CMS400.NET.
Page Templates	Lets you specify one or more templates for content in this folder. For more information, see "Creating/Updating Templates" on page 7-184.

Metadata

There is no difference when working with Metadata for blogs or folders. For more information, see "Working with Metadata" on page 7-146.

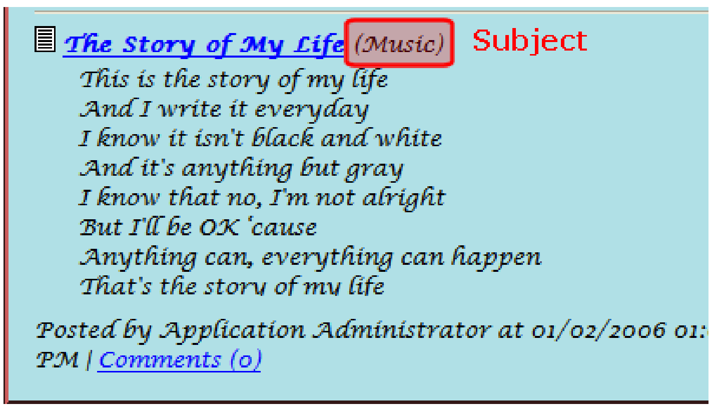
Blog Subjects

Subjects make it easier for site visitors scanning a blog page find posts that interest them. Here's how they work.

1. The creator of a blog post assigns one or more subjects to it.
2. When the post is published, a list of subjects assigned to all posts appears in the right column.
3. A site visitor clicks any subject and see all posts relating to it.

For example, a blog's subjects are General Information, Cancer, Neurology. A user creates a new blog post about his favorite band, Ektronica, and assigns the music subject to the post.

When a site visitor views the blog page, he looks under Subjects and clicks Music. A list of music-related posts appears, including the post about Ektronica.



A subject can only be assigned to the blog in which it is created -- it cannot be used with other blogs. With each new blog, you need to create new subjects. This gives you the flexibility to tailor unique subjects to each blog.

Adding Blog Subjects

To add a blog subject, follow these steps.

Note: To add a blog subject from the Web site, you must be logged in.

---

1. In the Workarea, navigate to the blog folder.

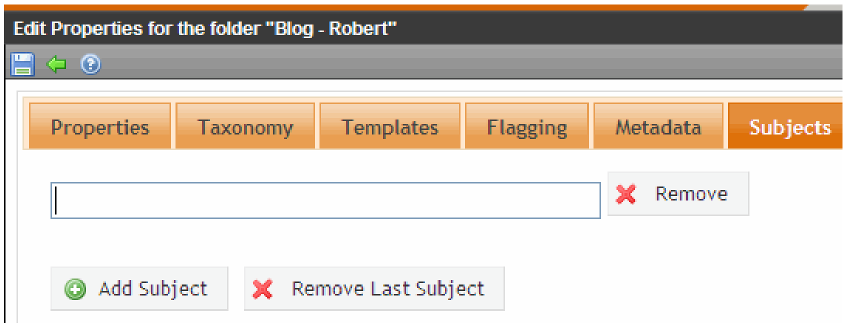
   or

   From the Web site

   – open the menu for the blog.

- click **Properties**.

2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Subjects** tab, then **Add Subject**.



5. A text box appears.
6. Enter the subject.

Note: Add as many subjects as you need by clicking **Add New Subjects**.

7. Click **Save** ( ).

Editing Blog Subjects

To edit a blog subject, follow these steps.

Note: To edit a blog subject from the Web site, you must be logged in.

1. In the Workarea, navigate to the blog folder.

   or

   From the Web site

   - open the menu for the blog.
   - click **Properties**.

2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Subjects** tab.
5. Change the information in the text box for the subject you want to edit.View > Properties
6. Click Save ( ).

Note: You can edit several subjects before clicking Save.

Removing Blog Subjects

There are two ways to remove blog subjects.

- Remove the last link that was added.
- Remove any link in the list.

Each task is explained below.

Removing the Last Blog Subject

Follow these steps to remove the last blog subject on the page.

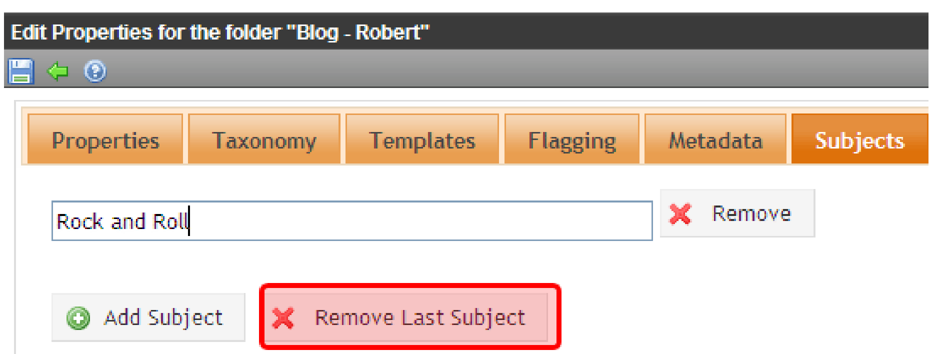
Note: To remove a blog subject from the Web site, you must be logged in.

1. In the Workarea, navigate to the blog folder.

   or

   From the Web site

   - open the menu for the blog.
   - click **Properties**.
2. Click **View** > **Properties**.
3. Click the **Edit Properties** button ( ).
4. Click the **Subjects** tab.
5. Click **Remove Last Subject**.



6. A dialog box appears.
7. Click **OK** to remove the last subject.

Note: You can continue to remove subjects at the end of the list by clicking the **Remove Last Subject** link.

8. Click Save ( ).

Removing a Blog Subject

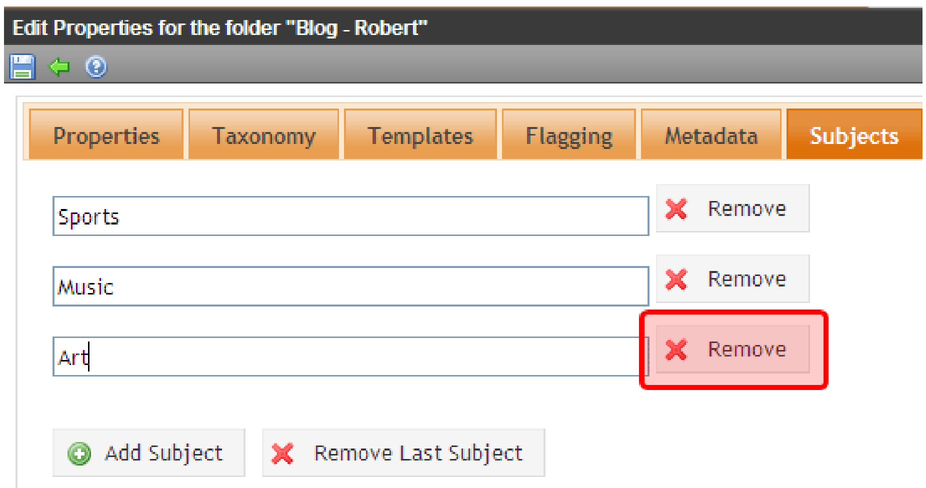
Note: To remove a blog subject from the Web site, you must be logged in.

1. In the Workarea, navigate to the blog folder.

   or

   From the Web site

   - open the menu for the blog.
   - click **Properties**.
2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Subjects** tab.
5. Click **Remove** next to the subject to be removed.



6. A confirmation box appears.
7. Click **OK** if you want to remove the subject.

Note: You can continue to remove subjects from the list by clicking the Remove link next to each subject.

8. Click **Save** ( ).

Web Alerts

Web Alerts notify users when a blog post is published. This feature is explained in "Assigning Web Alert Information to Content" on page 20-25.

Smart Forms

Use a Smart Form when you want to create structured blogging. Structured blogging provides a form for the blogger to fill out instead of free form writing. For example, you create a blog for book reviews. You want to make sure that, when someone submits a review, he provides the following information:

- Book title
- Author
- Date of review
- Review text

For information on working with Smart Forms, see "Working with Smart Forms" on page 7-288.

Note: Unlike the Smart Forms you can assign to regular folders, you cannot require the user to select a Smart Form when creating a new post. It is only an option.

The Blog Roll

The blog roll lets you add a list of Web site links to your blog page. Think of this as a roll call of blog pages, a list of blogs related to you or that you want visitors of your blog to also visit. Below is an example of a blog roll on a Web page.

Adding a Blog Roll Link

Follow these steps to add a blog roll link.

Note: To add a blog roll link from the Web site, you must be logged in.

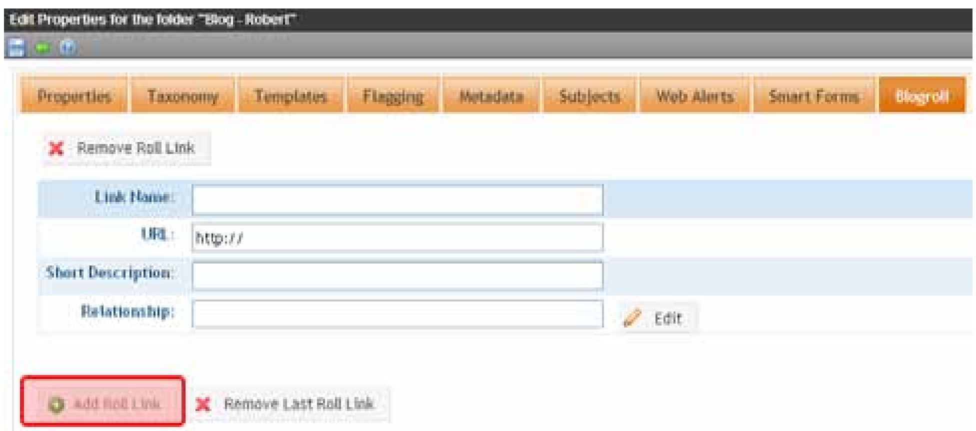
---

1. In the Workarea, navigate to the blog folder.

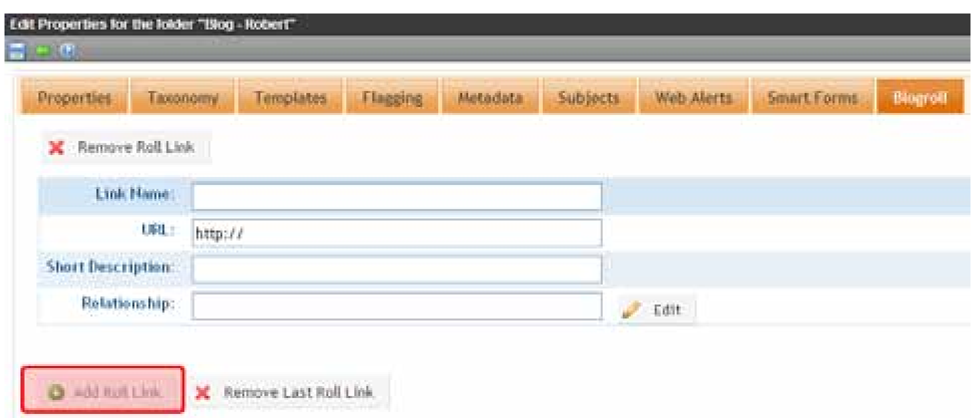
   or

   From the Web site

   - open the menu for the blog.
   - click **Properties**.
2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. On the **Blog Roll** tab, click **Add New Roll Link**.



5. The **Add Blog Roll Link** form appears.



6. Fill out the form according to the table below.

Field	Description
Link Name	Describes the link in the blog roll.
URL	The URL of the blog you are adding to the blog roll. It must begin with `http://`.
Short Description	Add a short description of the site.
Relationship	Enter the relationship of the blog roll link to you or to the site. For example, brother. Click **Edit** for a pop up screen that helps you choose the site's relationship.

The table below explains each relationship type.

Type of Relationship	Description
URL	Check this box if the address is owned by the same person or company.
Friendship	What level of friendship do you have with the person who owns the site? Choose one. ▪ Contact ▪ Acquaintance ▪ Friend ▪ None
Physical	Check this box if you have physically met the person who owns this blog.
Professional	Does the person who owns this site have a work level relationship with you.? Select all that apply. ▪ Co-worker ▪ Colleague
Geographical	Select one. ▪ co-resident ▪ neighbor ▪ none

Type of Relationship	Description
Family	If the site owner is family, what is the relationship? Select one. - Child - Parent - Sibling - Spouse - Kin - None
Romantic	What are your feelings toward the owner of the site? Check all that apply. - Muse - Crush - Date - Sweetheart

7. Click **Close**.

Note: Add as many links to the blog boll as you would like. Just click **Add a New Roll Link**. To remove a blog roll link, see "Removing a Blog Roll Link" on page 7-509.

8. Click **Save** ( ).

Editing a Blog Roll

To edit a blog roll link, follow these steps.

Note: To edit a blog roll link from the Web site, you must be logged in.

1. In the Workarea, navigate to the blog folder.

   or

   From the Web site

   - open the menu for the blog.
   - click **Properties**.
2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Blog Roll** tab.

5. Find the Blog Roll Link for which the information needs to be edited.
6. Edit the information.
7. Click **Save** ( ).

Note: As with adding a blog roll link, you can edit multiple blog roll links before clicking Save.

Removing a Blog Roll Link

There are two ways to remove blog roll links.

- Remove the last link that was added.
- Remove any link in the list individually.

The steps to perform each task are documented below.

Removing the Last Blog Roll Link

Using this method to remove the last blog link on the page.

1. In the Workarea,
   - navigate to the blog folder.

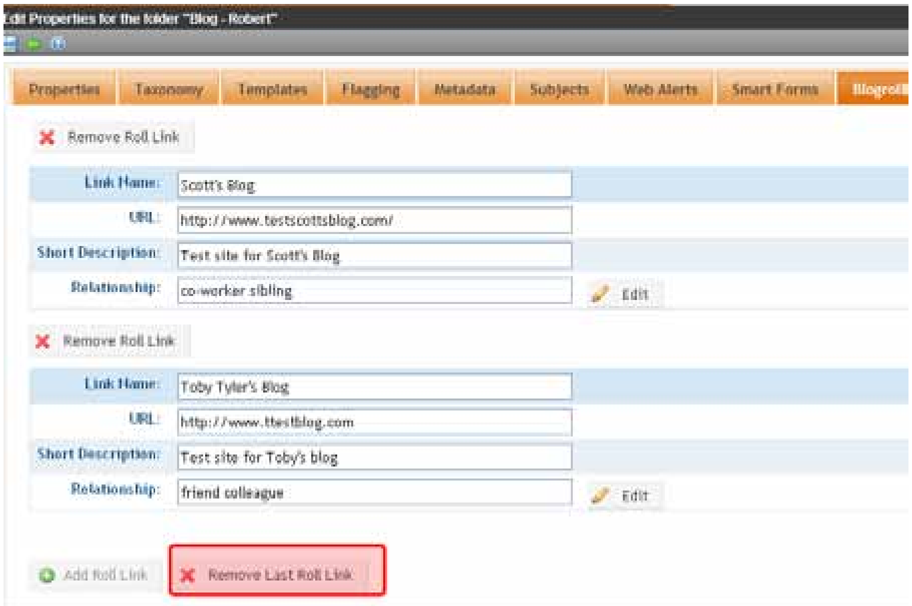
   or

   From the Web site

   - access the blog's menu from the site.
   - click **Properties**.

Note: To remove a blog roll link from the Web site, you must be logged in.

2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Blog Roll** tab.
5. Click **Remove Last Roll Link**.



6. A dialog box asks you to confirm.
7. Click **OK** to remove the last blog roll link.

Note: You can continue to remove subjects at the end of the list by clicking the **Remove Last Subject** link.

---

8. Click **Save** ( ).

Removing a Blog Roll Link

To remove any blog roll link on the list, follow these steps.

1. In the Workarea,
   - navigate to the blog folder.

   or

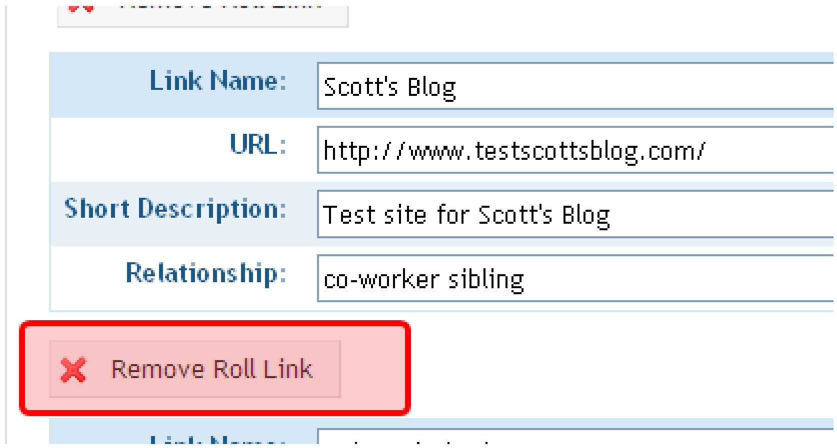
   From the Web site

   - access the blog's menu from the site.
   - click **Properties**.

Note: To remove a blog roll link from the Web site, you must be logged in.

---

2. Click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Blog Roll** tab.
5. Find the blog roll link to be removed.
6. Click **Remove Roll Link** above the Link Name to be removed.



7. A dialog box asks you to confirm.
8. Click **OK** to remove the blog roll link.

Note: Continue to remove subjects by clicking the **Remove** link.

9. Click **Save** ( ).

Permissions and Approvals

Permissions for blogs work like folder permissions. The same functionality and features are available. For more information, see "Approval Chains" on page 5-28 and "Folder Permissions" on page 5-43.

User Blog Permission/ Approval Table

Function	Permissions that affect this function when performed from Web Site	Permissions that affect this function when performed from Workarea
Blog		
View	Published blogs are viewable by any site visitor	Blog properties standard permission **View-Only**
Add	Not available	Blog properties advanced permission **Add Folders**
Edit	Not available	Blog properties advanced permission **Edit Folders**

Function	Permissions that affect this function when performed from Web Site	Permissions that affect this function when performed from Workarea
Delete	Not available	Blog properties advanced permission **Delete Folders**
Post		
View	Published posts are viewable by any site visitor	Blog properties standard permission **View-Only**
Add	Not available	Blog properties standard permission **Add**
Edit	Not available	Blog properties standard permission **Edit**
Delete	Not available	Blog properties standard permission **Delete**
Approve	Not available	User must be member of blog's approval chain
Comment		
Add	Three blog folder properties control how comments can be submitted from Web site. See "Controlling Blog Comments" on page 7-524.	Blog properties standard permission **Add**
Edit	Not available	Blog properties standard permission **Read Only**
Delete	Not available	Blog properties standard permission **Read Only**
Approve	Not available	Blog properties standard permission **Edit**

Membership User Blog Permission Table

Membership users can be given permission to edit and add blog posts in the blog. Depending on the level of permissions, they can perform any of these functions:

Permission	Lets membership user
Read Only	Read blog posts. This box must be checked before you can add Edit and Add permissions.
Edit	Edit blog posts.
Add	Add blog posts.
Library Read Only	Add items to the library.
Add Images	Upload images to the corresponding library folder.
Add Files	Upload files to the corresponding library folder.

Purge History

Purge History works the same way for blogs as it does for the rest of the Ektron CMS400.NET. See Also: "Purge History" on page 5-21

Language Support

Language Support for blogs and blog posts work the same way as it does for folders and content. See Multi-Language Support.

Deleting a Blog

Note: To delete a blog, you must have permission to **Delete Folders** on the blog's Advanced Permissions screen.

Deleting a blog removes the blog and all posts, comments, and quicklinks for the blog.

Warning! After a blog is deleted, you cannot retrieve its posts, comments, or quicklinks.

The following steps explain how to delete a blog.

1. In the **Workarea**, navigate to the blog folder.

   Or

   From the Web site, Open the menu for the blog and click **Properties**.

Note: To delete a blog from the Web site, you must be logged in.

2. Click the **Delete** > **This Blog**.
3. A dialog box asks you to confirm.
4. Click **OK** to delete the blog.

Searching Blogs

Searching blogs works the same as searching HTML content. See the following topics for an explanation of using the Search feature.

- "Web Site Search" on page 9-5
- "Searching the Library" on page 8-8

Subscribing/Unsubscribing to a Blog

Logged in Site users and Membership users can subscribe to a blog or a blog post.

By subscribing to a blog, users receive notification when posts are added to the blog. By subscribing to a blog post, users are notified when comments are added to the post. When you do not want to receive notices, you can unsubscribe.

The section contains the following topics:

- "Subscribe to a Blog" on page 7-514
- "Unsubscribe to a Blog" on page 7-515
- "Subscribe to a Blog Post" on page 7-516
- "Unsubscribe to a Blog Post" on page 7-516

Subscribe to a Blog

To subscribe to a blog, follow these steps.

1. Navigate to the blog on the site.
2. Click the Subscribe icon ( ) for the blog.

3. The Subscribe/Unsubscribe screen appears.

4. Select the Notification Type.
5. Click **Add Subscription**.

A message states that you are now subscribed to the blog. You are forwarded to the blog page.

Unsubscribe to a Blog

To unsubscribe to a blog, follow these steps.

1. Navigate to the blog on the site.
2. Click the Subscribe icon ( ) for the blog.

3. The Subscribe/Unsubscribe screen appears.
4. Select a **Notification Type**.
5. Check the **Unsubscribe** check box.

6. Click **Update Subscription**.

A message states that you are now unsubscribed to the blog.

Subscribe to a Blog Post

To subscribe to a blog post, follow these steps.

1. Navigate to the blog post on the site.
2. Click the Subscribe icon ( ) for the blog post.
3. The Subscribe/Unsubscribe screen appears.

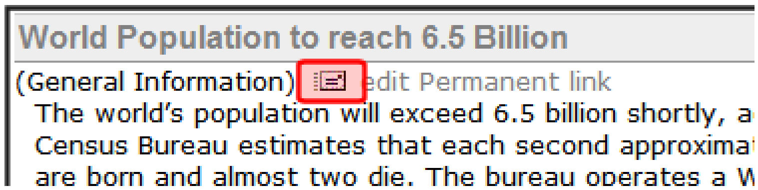
4. Select the Notification Type.
5. Click **Add Subscription**.

A message states that you are now subscribed to the blog post. You are forwarded to the blog post's page.

Unsubscribe to a Blog Post

To unsubscribe to a blog, follow these steps.

1. Navigate to the blog post on the site.
2. Click the Subscribe icon ( ) for the blog.



3. The Subscribe/Unsubscribe screen appears.

4. Select the Notification Type.
5. Check the **Unsubscribe** check box.
6. Click **Update Subscription**.
7. A message states that you are unsubscribed to the blog post.

Blog Posts

For a definition of blog posts, see "Permissions and Approvals" on page 7-511.

From your Web site, only published blog posts are visible. But, from the Workarea, you can see all blog posts, regardless of status. Using the Workarea, you can also create, edit, delete, and archive blog posts the same way you work with content.

This section contains the following subtopics.

- "Adding a Blog Post" on page 7-521
- "Editing a Blog Post" on page 7-522
- "Deleting a Blog Post" on page 7-523

Blog Posts on the Site

You can view published blog posts on the Web site. The following is an example of one.

A blog post has a Title, Content, Comments Link, Post Time, Date, and Editor Information. Below is a breakdown of a blog post on a site.

Item	Description
Title	The headline of the post. Usually what a site visitor scans through to find a post to read.
Permanent Link	If you click this link, a new screen appears. The new screen indicates the *permanent link* to this blog post. As long as the blog post is active within Ektron CMS400.NET, you can access it via the URL in the browser's address bar. Most blog pages show only recent posts. After a post is moved off the blog's front page, it is still accessible via this link.
Content	The body of the post.
Comments Information	The comments link shows the number in parentheses of comments for a post . When this link is clicked, a new page of comments for the post appears. Also on the page is a form to add comments about the post. The comments only appear if a site visitor has logged in or authentication is not required for blog comments.
Editor Information	The person who created or last edited the blog post.
Post Time and Date	The date and time a blog post was created or last edited.

Blog Posts in the Workarea

Viewing a blog post in the Workarea is similar to viewing content in the Workarea. Navigate to the folder that contains the blog. Next, in the View Posts in Blog screen, click the title of the blog post. Below is an example of a viewing a blog post in the Workarea.

The View Posts in Blog screen shows the following information about each blog post.

See Also: "Blog Posts" on page 7-517; "Permissions and Approvals" on page 7-511

Item	Description
Title	The headline of the post. Usually what a site visitor scans through to find a post to read.
Comments Information	The comments link shows the number in parentheses of comments for a post . When this link is clicked, the View Comments for Post screen appears. If a red flag ( ) appears next to the comments icon, they are awaiting approval.
Editor Information	The person who created or last edited the blog post.

Item	Description
Post Time and Date	The date and time the blog post was created or last edited.
Status	The status of the blog post. For example, if the blog post is checked in, the status is **I**. See Also: "Content Statuses" on page 7-133

From this screen, you can perform all functions with a blog post that you can with content. You can give it a summary, add metadata, associate a task, assign Web Alerts, etc. You must have Edit permission for the blog to perform these functions.

Warning! You can also add a history comment to the blog post by clicking the Comment tab. This is not the same as adding a comment to a blog post on a site. When you add a history comment, it has the same properties as a comment associated with content.

Adding a Blog Post

Note: To be able to add a blog post, you must have **Add** permission on the blog's Standard Permissions screen.

Follow these steps to add a blog post.

1. In the Workarea, navigate to the blog folder. Click **New** > **HTML Post**.

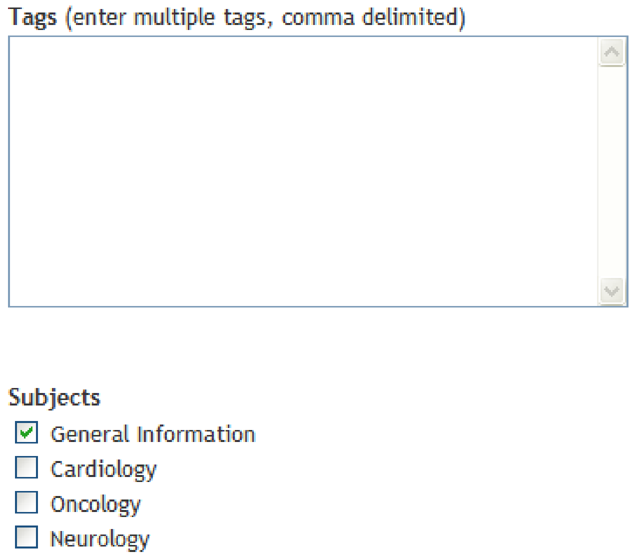
   Or

   From the Web site, open the menu for the blog then choose **New Post**.

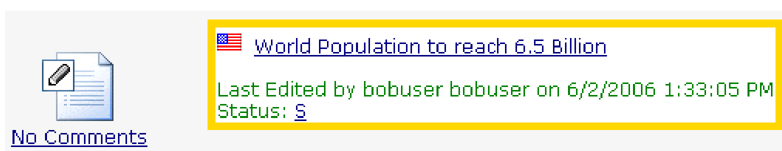
Note: To add a blog post from the Web site, you must be logged in.

2. When the Add Content screen appears, use the editor to create the blog post. You create a blog post the same way you create content. See Also: "Adding HTML Content" on page 7-15.

Warning! If you are using subjects or tags, they can be assigned to a blog post by clicking the Summary tab and choosing a subject. For more information on subjects, see "Blog Subjects" on page 7-501. For more information on Tags, see "Tags on the Summary Page" on page 7-522.



3. If the user creating the post is a member of the blog's approval chain, it is published immediately. If not, it is surrounded by a yellow border, and a member of the approval chain must approve it before it can appear on the Web site. (For more information on working with permissions and approvals, see "Approval Chains" on page 5-28.)



4. Once the post is published, it appears within the blog on the Web site.

Tags on the Summary Page

You can add tags to a blog post to further define information about the post for blog search engines. For example, you create a blog post about your favorite band, Ektronica, and enter the following tags: Music, Guitars, Rock & Roll.

When a person visits a blog search site and searches for Rock & Roll music, your blog post appears. Some blog search sites have a page specifically for searching blog tags.

Editing a Blog Post

Note: To be able to edit a blog post, you must have **Edit** permission on the blog's Standard Permissions screen.

Follow these steps to edit a blog post.

Warning! If another editor changes a blog post, the posting information reflects the new editor, the date, and the time the information was changed. This is important to remember if you want the original person who posted the blog to get credit for the post.

1. In the Workarea, navigate to the blog folder.

   Or

   From the Web site, open menu for the blog then choose **Properties**. Next, choose the post.

Note: To add a blog post from the Web site, you must be logged in.

2. Click the blog post title you want to edit.
3. Click the Edit button ( ).
4. Change the blog post.
5. When the blog is published, the changes appear in the blog post on the Web site.

See Also: "Blog Posts" on page 7-517

Approving a Blog Post

If someone who is not a member of the blog's approval chain creates or edits a blog post, its status is set to Submitted. It will only appear on the Web site after a member of the chain approves it. While its status is Submitted, it has yellow border on the View Posts in blog screen.

To approve a blog post, see "Approve/Decline One Content Item" on page 5-35.

Deleting a Blog Post

Note: To be able to delete a blog post, you must have **Delete** permission on the blog's Standard Permissions screen.

The following steps explain how to delete a blog post.

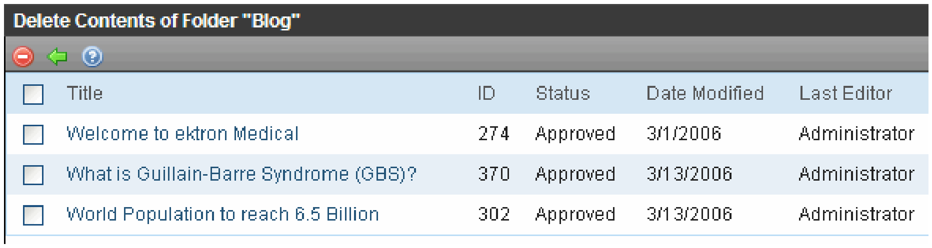
1. In the Workarea, navigate to the blog folder.

   Or

   From the Web site, open the menu for the blog then choose **Properties**. Next, choose the post.

Note: To delete a blog post from the Web site, you must be logged in.

2. From the menu, click the **Delete** > **Posts**.
3. The **Delete Contents** screen appears.



4. Click the check box next to each post you want to delete. To select all posts, click the check box next to **Title**.
5. Click the Delete Contents button ( ).
6. A dialog box asks you to confirm.
7. Click **OK** to delete the selected posts.

Blog Comments

Warning! Do not confuse blog comments with history comments. You can add a history comment to the blog post by clicking the Comment tab. This is not the same as adding a comment to a blog post on a site. When you add a history comment, it has the same properties as a comment associated with content.

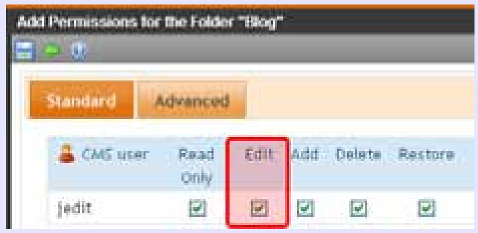
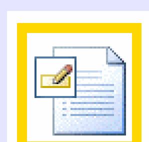
Blog comments allow site visitors to interact with a blog by adding their thoughts about a blog post. The blog administrator controls commenting by deciding who can add comments and if they require approval for publication.

See Also:

- "Controlling Blog Comments" on page 7-524
- "Comments on the Site" on page 7-526
- "Comments in the Workarea" on page 7-527

Controlling Blog Comments

Ektron CMS400.NET provides three properties for controlling comments. Use the Blog Properties screen to set them. See Also: . The following table describes these properties.

Field	Description
Enable Comments	Allows user in Workarea and site visitor to add blog comments. Also displays comments on site and in Workarea. Note: A member of the Administrators group can always add comments, regardless of how this checkbox is set.
Moderate Comments	Determines if comments must be approved before they appear on site. If this field is checked, only users with permission to edit the post can approve comments (see illustration of this permission below).  If users without this permission add comments, they only appear on the Web site after being approved by someone with permission to edit the post. If someone has edit post permission and authenticates before submitting a comment, it is approved automatically. **Appearance of Unapproved Comments** On the Workarea's View Posts in Blog screen, an unapproved comment is indicated by a red flag .  On the View Comments for Post screen, an unapproved comment is indicated by a yellow border. 
Require Authentication	Determines if a user must be authenticated (that is, logged in as a CMS400 user or membership user) to add comments via the Web site.

Comments by default are fully controlled. This means they are enabled, must be approved, and a site visitor must be authenticated to create them.

If comments are enabled but not moderated, any site visitor can add a comment. If you don't want censorship, this is the way to go.

Warning! While you can delete a comment at any time, if comments are not moderated, they appear on your site as soon as a site visitor submits them.

However, to make sure comments on your site meet certain criteria, moderate them.

The following topics are explained in this section.

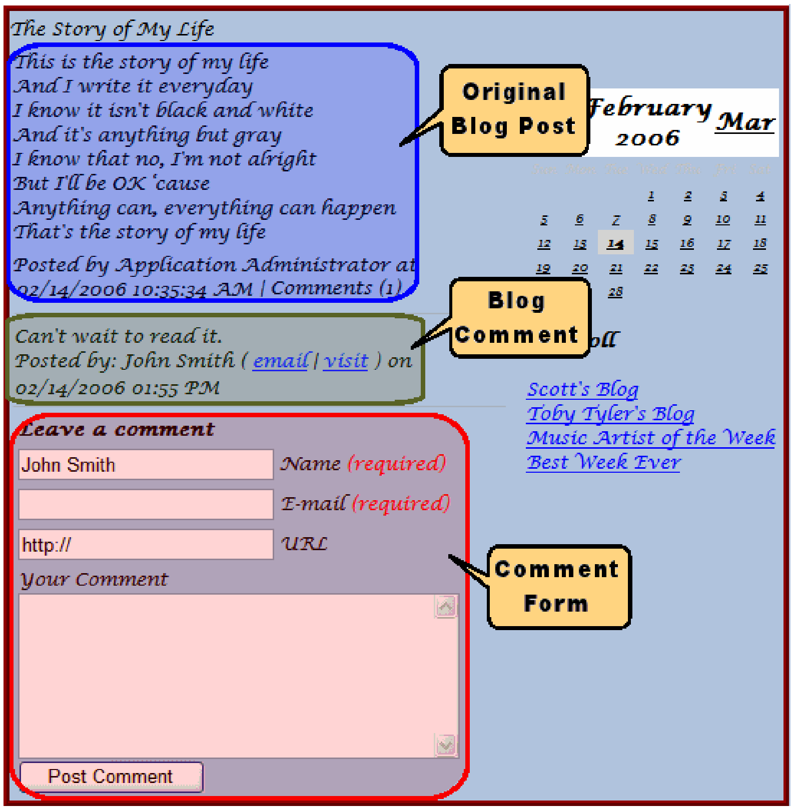
- "Comments on the Site" on page 7-526
- "Comments in the Workarea" on page 7-527

Comments on the Site

On the site, comments for a blog post appear when one of the following blog post items is clicked:

- the Comments link
- the Title of the blog post

The comment page contains the original post, any comments that have been added, and a form to post new comments. Depending on how the page is designed, the calendar and blog roll can also appear.



The Comment Form

Note: See "Controlling Blog Comments" on page 7-524 to learn about how an administrator determines if and by whom comments can be submitted.

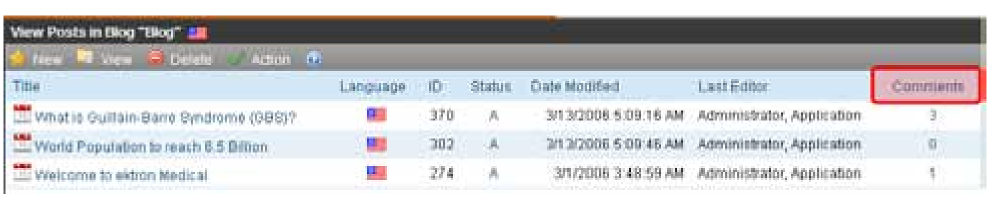
Site visitors, regular users, and Membership users can add comments by filling out the form on the comments page. The form has five fields.

Field	Description
Name	The person submitting the comment. This information is required. **Note**: This text box appears only when a site visitor, who is not a regular user or membership user, is adding a comment. If a regular user or membership user adds a comment, their name and email address is taken from their user profile.
Email	The email address of the person submitting the comment. This information is required. **Note**: This text box appears only when a site visitor, who is not a regular user or membership user, is adding a comment. If a regular user or membership user adds a comment, their name and email address is taken from their user profile.
Homepage	A URL for the person's web site.
Comment Section	A text area to insert comments about the post.
Post Comment button	Post a comment by clicking this button. Depending on the comment's settings, it either posts immediately or is submitted for approval. See Also: "Controlling Blog Comments" on page 7-524

Comments in the Workarea

In the Workarea, you can add, view, approve, edit, and delete comments for a blog post. See Also: "Blog Comments" on page 7-524

The comment link (illustrated below) indicates the number of comments. To work with comments, navigate to the blog folder and click the comment link next to a blog post.



This leads you to View Comments screen. Here, you can view approve, edit, delete, and add new comments.

Note: To learn about recognizing unapproved comments and approving them, see "Controlling Blog Comments" on page 7-524.

See Also:

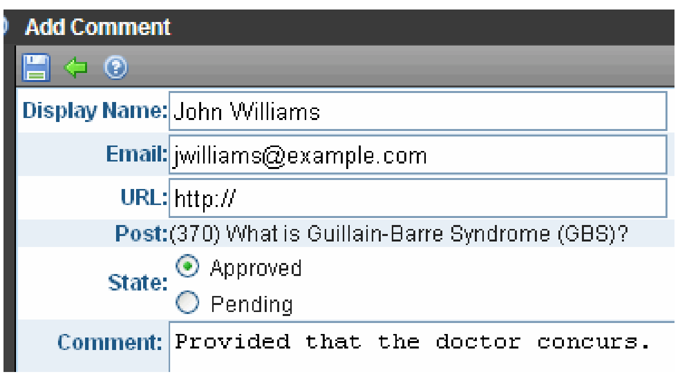
- "Adding a Comment" on page 7-528
- "Editing a Comment" on page 7-529
- "Deleting a Comment" on page 7-529
- "Approving a Comment" on page 7-529

Adding a Comment

Note: To be able to add a comment, you must have **Add** permission on the blog's Standard Permissions screen.

To add a blog post comment from the Workarea, follow these steps.

1. From the **Content** area, navigate to the blog.
2. Click the Comments icon to the left of the post that you want to comment on.
3. Click **New** > **Comment**.
4. The Add Comment screen appears.



For a description of the fields on this screen, see "The Comment Form" on page 7-527.

Note that Add Comment screen provides an additional field, **State**. This field lets the submitting user set the comment's state to approved or pending. Approved comments appear on the site immediately. Pending comments must be approved before they appear.

To learn about the approval process for pending comments, see "Moderate Comments" on page 7-525. See Also: "Blog Comments" on page 7-524; "Permissions and Approvals" on page 7-511

Editing a Comment

1. From the **Content** area, navigate to the blog.
2. Click the Comments icon to the left of the post whose comment you want to edit.
3. Locate the comment you want to edit.
4. Click **edit**.
5. The Edit Comment screen appears.

For a description of the fields on this screen, see "The Comment Form" on page 7-527.

Note that Edit Comment screen provides an additional field, **State**. This field lets the submitting user set the comment's state to approved or pending. Approved comments appear on the site immediately. Pending comments must be approved before they appear.

To learn about the approval process for pending comments, see "Moderate Comments" on page 7-525.

See Also: "Blog Comments" on page 7-524; "Permissions and Approvals" on page 7-511

Deleting a Comment

Once a comment is deleted, you cannot retrieve it.

1. From the **Content** area, navigate to the blog.
2. Click the Comments icon to the left of the post whose comment you want to delete.
3. Click **delete**.
4. A dialog box asks you to confirm.
5. Click **OK** to delete the comment.

Approving a Comment

Comments can require approval if

- they are submitted from the Web site and **Moderate Comments** is checked in the blog's folder properties
- a user submits the comment from the Workarea set its state to Pending

Only users with permission to edit content (posts) within the blog folder can approve comments. To learn about the approval process for pending comments, see "Moderate Comments" on page 7-525.

To approve a comment, follow these steps.

1. From the **Content** area, navigate to the blog.

2. Click the Comments icon to the left of the post whose comment you want to approve. (Unapproved comments are indicated by a red flag ( ).
3. Click **approve**.
4. The comment’s status changes to approved.

See Also: "Blog Comments" on page 7-524;

Adding or Editing Blog posts with Windows Live Writer

Ektron CMS400.NET authors and membership users can use Windows Live™ Writer to add and edit blog posts to your site. If users have the proper permissions, they upload images and attach files from their system. See Also: "Permissions and Approvals" on page 7-511.

For additional Windows Live Writer help from Microsoft, click here.

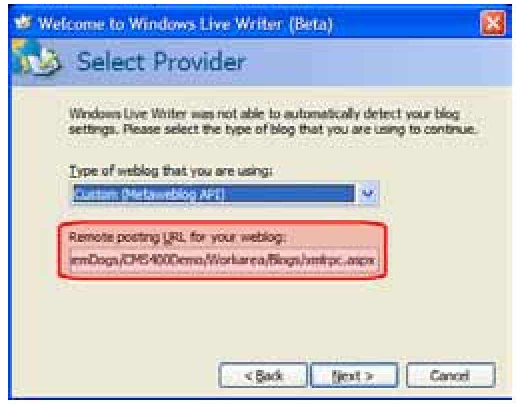
Follow these steps to set up Windows Live Writer to work with your Ektron CMS400.NET Blog. If you have previously set up Windows Live Writer, click **Weblog** > **Edit Weblog Settings**. Then, skip to step four.

<table>
<tr><th>Step</th><th>Windows Live Writer Setup Screen</th></tr>
<tr><td>1. Download and Start Windows Live Writer.

When the Welcome window appears, click the Next button. Do not create a Windows Live Spaces account.</td><td>
</td></tr>
<tr><td>2. In the Choose Blog Type window, select the Another weblog service radio button.

Click Next.</td><td>
</td></tr>
</table>

Step	Windows Live Writer Setup Screen
3. In the Weblog Homepage and Login window, enter the following information: - **Weblog Homepage URL** - this is the page that contains the blog. For example, `http://<your site>/CMS400Min/blogs.aspx.` - **Username** - your username to log on to the Ektron CMS400.NET site. - **Password** - your password to log on to the Ektron CMS400.NET site. - **Edit Proxy Settings...** - edit the proxy settings as needed. Click **Next**.	
4. In the Select Provider widow, choose **Custom (Metaweblog API)** from the **Type of weblog that you are using** dropdown box.	

Step	Windows Live Writer Setup Screen
5. In the **Remote posting URL for your weblog** textbox, add a link to the xmlrpc.aspx file for the site. The default location for the file in the demo site is `http://<your site>/CMS400Min/Workarea/Blogs/xmlrpc.aspx`. Click **Next**.	
6. When the Weblog Configuration Complete window appears, Add a blog name in the **Weblog Name** field. Click **Finish**.	

Introduction to Blog Server Controls

Note: In addition to reading this section on the Blog server controls, you should also read "Blogs" on page 7-492.

Ektron provides nine server controls that relate to displaying a Blog on a Web site. One of these, the Blog server control, allows you to display all of the pieces that typically make up a blog site on a Web form. These items are blog entries, blog posts, blog categories, a blog's recent posts, a blog's RSS feed, an archive, a blog calendar and a blog roll.

The other seven Blog server controls allow you to display each of these items individually. The eight individual Blog server controls offer additional ways to customize the page layout and appearance of the items.

The nine Blog server controls provided by Ektron are

- "Blog Server Control" on page 7-533

Using the Blog Server Control vs. Using the Individual Blog Server Controls

When you use the Blog server control to display a blog, you only have to deal with one server control and its settings. This makes adding a blog to your site quick and easy.

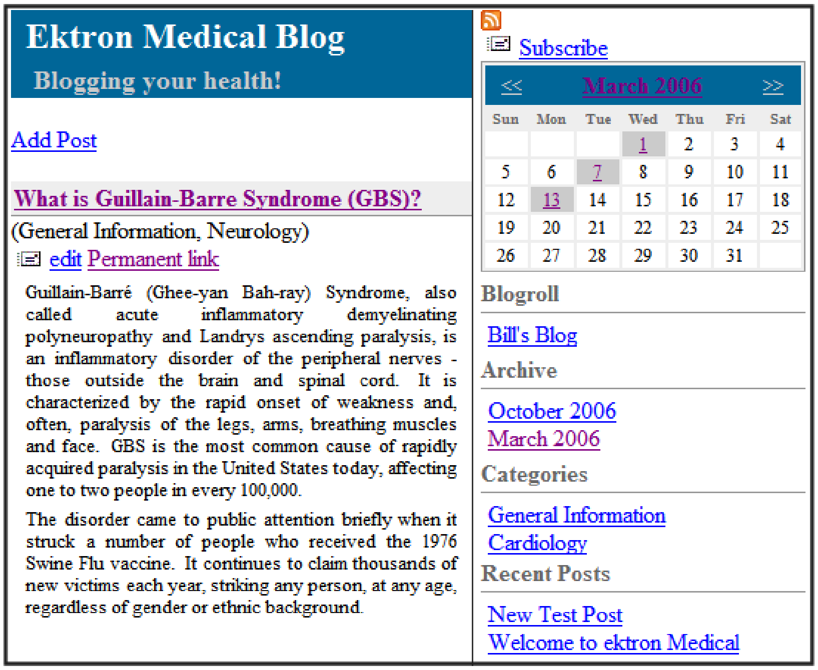
Using the Individual Blog server controls to display a Blog, allows you the flexibility to display the parts of a Blog you want to display. For example, you might to display the Blog entries and a Blog roll, but not display a Blog calendar. In addition, using the individual Blog server controls allows you to further define the display details of each control.

Blog Server Control

The Blog server control allows you to quickly add a blog to a Web form. It has all of the items commonly found on a blog page in one server control. These items include blog posts, a comments link, a blog roll, blog categories, recent blog posts, the RSS feed for a blog, an archive and a blog calendar. If you want to learn more about each item, see "Blogs" on page 7-492.

The Blog server control allows you to easily maintain the overall look of the blog. When you change display properties, such as the background color or font, they change for the whole blog, not just a piece of it.

While you can change display properties, you cannot change the location of each item in the server control. The title always appears on the top, with the tagline below it. The blog posts always appear to the left and the calendar, blog roll, blog categories, recent blog posts, RSS feed, archive and blog roll to the right.



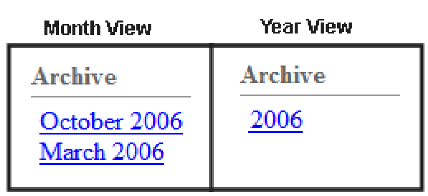
The Blog server control is easy to use. Simply add it a Web form and set the `BlogPath` property to the folder location in the CMS400.NET. Next, choose whether to enable RSS and whether to show the header and tagline.

If you want to further customize the look of the blog, you can edit the `Blog.css` file located in *webroot**siteroot*\Workarea\csslib.

Blog Server Control Properties

The following table explains the properties of the Blog control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
ArchiveMode	Select whether the archive appears in *month* format or *year* format. The default is **month**. 	String

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DateToStart	The date of the last blog entries you want to appear. For example, if you want to display blog entries for January 1, 2007 and before, you enter 1/1/2007. Clicking the dropdown box provides you with a calendar.	DateTime
DefaultUserID	The ID of the user who owns the blog to be displayed. This property is used when the server control displays a user's blog. To display a blog not associated with a user, leave this property set to 0 (zero) and enter the blog's ID in the `BlogID` property.	Long
DynamicParameter	Gets or sets the QueryString parameter to read a Blog ID dynamically. Set to "None - Use Default" if you want to always display the default blog. **None - Use Default** - use the default Blog ID list. **ID** - reads a Blog's ID dynamically **ekfrm** - reads a form block's ID dynamically	String
DynamicUserParameter	Gets or sets the QueryString parameter to read a user ID dynamically. Set to "Use Default" if you wish to always display the default user's blog (static.)	String
EditorHeight	Sets the height of the blog editor in pixels.	Integer
EditorWidth	Sets the width of the blog editor in pixels.	Integer
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean

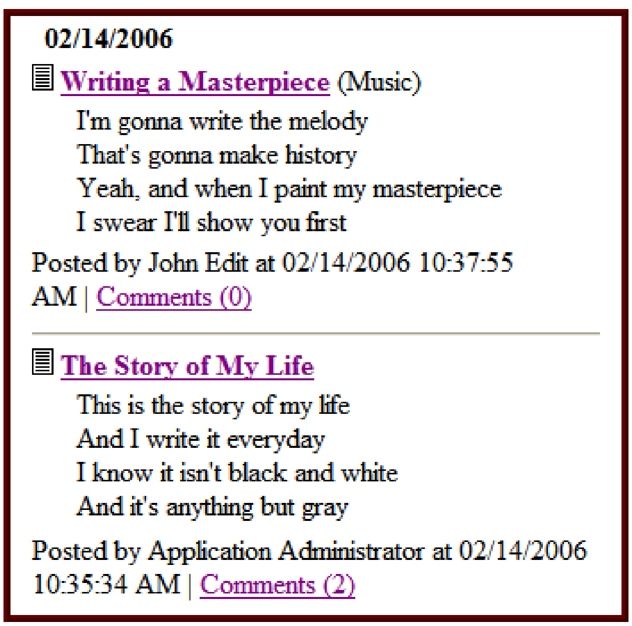
Property	Value	Data Type
JavascriptEditorHTMLMode	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Set to **True** to allow users to edit their posts and replies in HTML. The default is **False**.	String
Language	Set a language for viewing blog posts. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxResults	Set the maximum number of posts to display. If set to 0 (zero), there is no limit. If set to -1, all posts for the day are shown. If set to -2, all posts for the month are shown, If set to -3, the control uses the **# of Post Visible** setting in the Workarea. The default is **-3**. See Also: "# of Visible Posts" on page 7-498	Integer
PostParameter	Works like the `DynamicParameter` for content blocks. When `id` is selected, this server control passes the blog post ID as a URL parameter. The default setting is **id**. **Blank** - the list of blog posts is static. The links in the blog posts are inactive. **id** - the id of the blog post is passed to the URL as a parameter. **None use default** - the list of blog posts is static. The links in the blog posts are inactive.	String
RecentPosts	The number of post links contained in the Recent Posts list. The default is 5 (five).	Integer
ShowHeader	Shows the title and tagline when set to True. The default is **True**. **True** - show title and tagline. **False** - do not show header and tagline.	Boolean
ShowRSS	Displays the icon for the RSS feed ( ) when set to True. The default is **True**. **True** - show RSS feed icon. **False** - do not show RSS feed icon.	Boolean
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Value	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

BlogEntries Server Control

The BlogEntries server control allows you to display a list of multiple blog posts on from a blog on a Web form. It also allows you to display a user's Journal (personal blog). By using this server control, you can display blog posts or journal entries to a Web form without having to work with the other items normally contained in a blog.

Using this server control in combination with the other individual blog server controls, allows you the flexibility to change the appearance of this control without changing other blog controls. In addition, you can layout the controls any way you like, unlike the Blog server control. Below is an example of a BlogEntries server control.



To use this server control to dynamically display a blog's entries, set the following properties:

- DynamicParameter - set this property to the parameter name used to pass a blog ID to the QueryString. The default is **blogid**.
- BlogPostParameter - set this property to the parameter name used to pass a blog post's ID to the QueryString. The default is **id**.

To use this server control to dynamically display a user's Journal, set the following properties:

- DynamicUserParameter - Set this property to the parameter name used to pass a user's ID to the QueryString.
- BlogPostParameter - set this property to the parameter name used to pass a blog post's ID to the QueryString. The default is **id**.

BlogEntries Server Control Properties

The following table explains the properties of the BlogEntries control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET from which blog entries are displayed; for example, 41. This is the default ID that is used when a blog ID is not passed dynamically to the QueryString. To pass a blog ID dynamically, set the DynamicParameter property. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
BlogPostParameter	Set this property to the parameter name used to pass a blog post's ID to the QueryString. The default is **id**. When a parameter is defined, this server control passes the blog post's ID as a URL parameter. If you do not set this parameter to **id**, you will not be forwarded to the blog post's page when you click on any links in the post. The default setting is **id**. **Blank** - the list of blog posts is static. The links in the blog posts are inactive.	String

Property	Value	Data Type
	id - the ID of the blog post is passed to the URL as a parameter. **None use default** - the list of blog posts is static. The links in the blog posts are inactive.	
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DateToStart	The date of the last blog entries you want to appear. For example, if you want to display blog entries for January 1, 2006 and before, you enter 1/1/2006. Clicking the dropdown box provides you with a calendar.	DateTime
DefaultUserID	The ID of the user who owns a Journal from which to display journal entries. To display journal entries not associated with a user, leave this property set to 0 (zero) and enter the blog's ID in the `BlogID` property. **Warning!** If you define a DefaultUserID, it overrides the BlogID property.	Long
DisplayXslt	Specify an external XSLT file. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in the Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicParameter	Gets or sets the QueryString parameter to read a Blog ID dynamically. Set to "None - Use Default" if you want to always display the default blog. The default is **blogid**. **Note:** If an ID for this property is passed on the QueryString and a an ID for the DynamicUserParameter property is passed the control displays blog entries for a user.	String

Property	Value	Data Type
DynamicUserParameter	Gets or sets the QueryString parameter to read a User ID dynamically. Set to "Use Default" if you wish to always display the default user's blog (static.) **Note:** If an ID for this property is passed on the QueryString and a an ID for the DynamicUserParameter property is passed the control displays blog entries for a user.	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the blog entries. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxResults	Set the maximum number of posts to display. If set to 0 (zero), there is no limit. If set to -1, all posts for the day are shown. If set to -2, the all post for the month are shown, If set to -3, the control uses the **# of Post Visible** setting in the Workarea. The default is **-3**. See Also: "# of Visible Posts" on page 7-498	Integer
ShowHeader	Shows the title and tagline when set to True. The default is **True**. **True** - show title and tagline. **False** - do not show header and tagline.	Boolean
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

BlogPost Server Control

The BlogPost server control allows you to display an individual blog post on a page.

There are two ways this server control displays a blog post. First, if a user is logged in as a CMS400.NET user or a Membership user, the control displays the blog post, comments and comments form on the Web page. The second way is if a user is not logged in, the control displays only the blog post.

Note: The **Enable Comments** property in the Workarea must be enabled for comments and the comments form to appear.

BlogPost Server Control Properties

The following table explains the properties of the BlogPost control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DefaultContentID	The ID of a default blog post that appears where you inserted this server control if no other content block is identified, or is not available. If you don't know the ID number of the blog post, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DisplayXslt	Specify an external XSLT file. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in the Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicParameter	To make this blog post dynamic, select **id**. When you do, this server control uses the blog post passed as a URL parameter.	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the blog posts. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
ShowType	Shows a blog post's content and its comments or just the blog post's comments. The default is **Content**.	String

Property	Value	Data Type
	Content - Show a blog post's content and its comments. **Description** - Show a blog post's comments only.	
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

BlogCalendar Server Control

The BlogCalendar server control allows a user to display a calendar on a Web page and associate it with a blog. When a blog calendar is associated with a blog, the days that have blog posts are highlighted on the calendar.

You can use a BlogCalendar server control with a BlogEntries server control. This gives site visitors a way to view blog posts for a given day.

BlogCalendar Server Control Properties

The following table explains the properties of the BlogCalendar control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to	String

Property	Value	Data Type
	Browse Your Ektron CMS400.NET Site" on page 21-9	
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the calendar. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

BlogRoll Server Control

The BlogRoll server control displays the blog roll for a blog on a Web form. A blog roll is a list of links to other blogs. Blog rolls are created in the Workarea for each blog. This control reads that list and displays a clickable list of links. For more information on the blog roll, see"The Blog Roll" on page 7-505.

Typically this control is displayed along side other individual Blog server controls. Using the individual server controls, such as the BlogRoll server control, allows you more flexibility for layout and appearance than using the Blog server control.

Note: Clicking a blog roll link opens the destination page in a new window.

BlogRoll Server Control Properties

The following table explains the properties of the BlogRoll control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the Blog roll. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

BlogCategories Server Control

The BlogCategories server control displays a blog's categories on a Web form. Blog categories are created in the Workarea for each blog. This control reads that list and displays a clickable list of links. When a link is clicked it displays all the posts associated with the category.

Typically this control is displayed along side other individual Blog server controls. Using the individual server controls, such as the BlogCategories server control, allows you more flexibility for layout and appearance than using the Blog server control.

BlogCategories Server Control Properties

The following table explains the properties of the BlogCategories control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean

Property	Value	Data Type
Language	Set a language for viewing the Blog categories. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

BlogRecentPosts Server Control

The BlogRecentPosts server control displays a list of recent blog posts links on a Web form. when a link is clicked it takes you to the blog post. You can control how many recent post links are displayed by setting the `NumberofPosts` property.

Typically this control is displayed along side other individual Blog server controls. Using the individual server controls, such as the BlogREcentPosts server control, allows you more flexibility for layout and appearance than using the Blog server control.

BlogRecentPosts Server Control Properties

The following table explains the properties of the BlogRecentPosts control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long

Property	Value	Data Type
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the blog's Recent Posts list. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
NumberofPosts	Sets the number of post links to display. The default is 5 (five).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

BlogRSS Server Control

The BlogRSS server control displays the icon () for the blog's RSS feed on the Web form. When the icon is clicked, the RSS feed for the blog appears.

Typically this control is displayed along side other individual Blog server controls. Using the individual server controls, such as the BlogRSS server control, allows you more flexibility for layout and appearance than using the Blog server control.

BlogRSS Server Control Properties

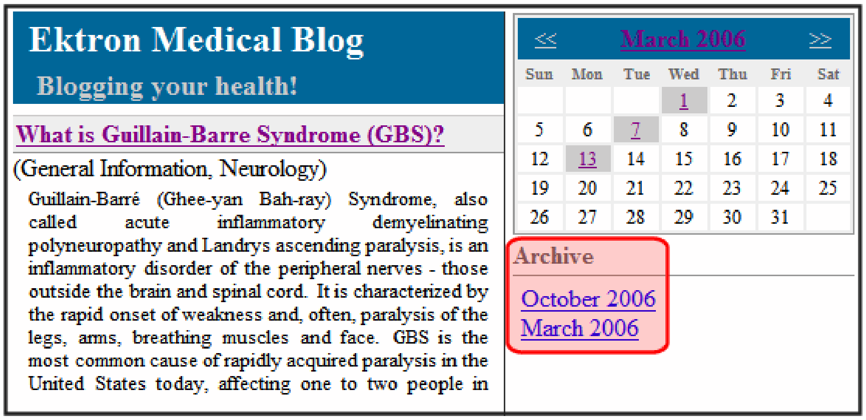
The following table explains the properties of the BlogRSS control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the RSS feed. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

BlogArchive Server Control

The BlogArchive server control displays a list of past months or years that have posts. This server control can be used with the BlogEntries server control and the calendar control to allow site users to scan for older Blog posts.

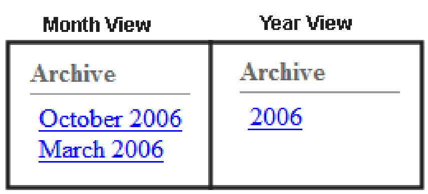


By clicking a month in the archive, the calendar changes and the entries appear for that month.

BlogArchive Server Control Properties

The following table explains the properties of the BlogArchive control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
ArchiveMode	Select whether the archive appears in *month* format or *year* format. The default is **month**. 	String
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
BlogID	The ID of the blog in CMS400.NET. For example: 41. If you don't know the ID of the blog, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long

Property	Value	Data Type
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
DynamicParameter	Sets the QueryString parameter to read a Blog ID dynamically. Leave blank to always display the default blog.	String
Language	Set a language for viewing the Blog's archive. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Web Calendars

Web Calendars in Ektron CMS400.NET perform the same function as a paper calendar - they keep visitors informed about upcoming events. They can be displayed to all visitors to your Web site, and any authorized user can add events to a calendar.

Typical calendar events could include

- company meeting
- reserving a conference room for an interview
- company holidays
- community group events
- personal events
- training dates

Web Calendars allow you to create many calendars for your Web site. Users may add events that are posted for visitors to see.

Create a Web Calendar in Ektron CMS400.NET using three basic steps.

1. Create the Calendar within Ektron CMS400.NET. See Also: "Adding a System Calendar Folder " on page 7-553

2. Place either the WebCalendar Server control or the WebCalendar Widget on a template. See Also: "Using the WebCalendar Server Control" on page 7-584 or "Web Calendar Widgets" on page 7-569
3. Add appointments. See Also: "Adding Web Calendar Events" on page 7-562

Calendar Types

There are three basic calendar types in Ektron CMS400.NET system - the System, User, and Group Calendar types. The calendar type determines where events are stored in the database and what permissions are needed to edit them.

	System Calendar	User Calendar	Group Calendar
Where events are stored	Workarea Content Calendar Folder	Community User Calendar	Community Group Calendar
Where events are added or edited	The Web page or Workarea folder	The community user's profile Web page	The community group's Web page
Where permissions are set	Folder Permissions	Community Users and Colleagues	Community Group Membership
How it appears on a Web page	Web page with Server Control or Widgets		
For more information see	"Adding a System Calendar Folder " on page 7-553	"Creating a Calendar in My Profile" on page 7-577	"Creating a Calendar in My Group" on page 7-580

Displaying Calendars

There are two ways to display Web Calendars on a Web page.

- Web Calendar Server Control (see "Web Calendar Server Control" on page 7-584)
- Web Calendar Widget ("Web Calendar Widgets" on page 7-569).

The following sections explain using the Web Calendar feature.

Adding a System Calendar Folder

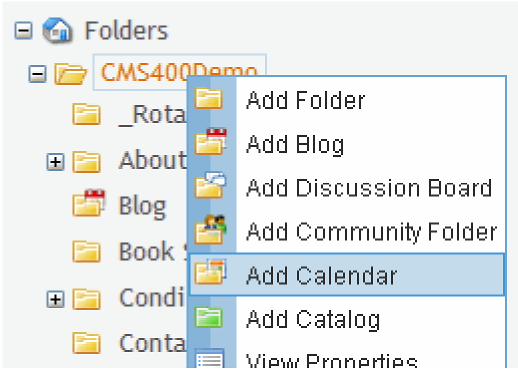
A system calendar folder contains events shown in various places within a Web site.

To add a System Calendar into an Ektron CMS400.NET Web site, follow these steps.

Note: You must have permission to **Edit Folders** on the Advanced Permissions screen.

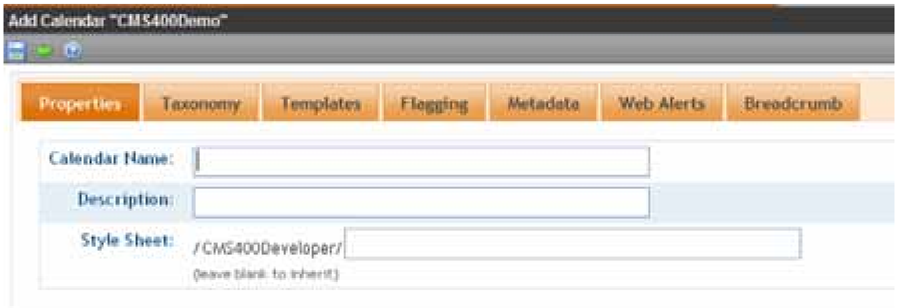
1. In the Workarea, click the Content Tab.
2. Right click the folder into which you will add a Calendar.

   In the example below, we add a new calendar into the CMS400Demo folder.



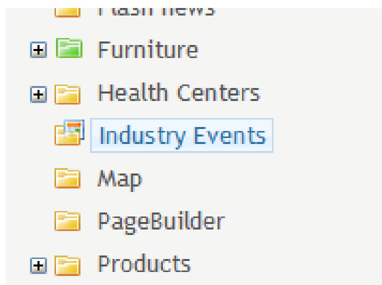
3. Click **Add Calendar**.

   You see this Add Calendar window.



4. Enter the Calendar Name.
5. Enter the Description.
6. If needed, enter the path and name of the Style Sheet. See Also: "Style Sheet filename for this folder: (leave blank to inherit)" on page 7-556.
7. Click the Add Calendar button ( ) to save your changes and create the new calendar folder.

   Notice that the System Calendar folder is different from the other Folder icons, as shown below.



After you create a System Calendar folder, you can add events. See Also: "Adding Web Calendar Events" on page 7-562.

Viewing System Calendar Folder Properties

The Calendar folder properties screen lets you set permissions as well as modify the folder's metadata, taxonomy, templates, flagging, Web Alerts and Breadcrumbs.

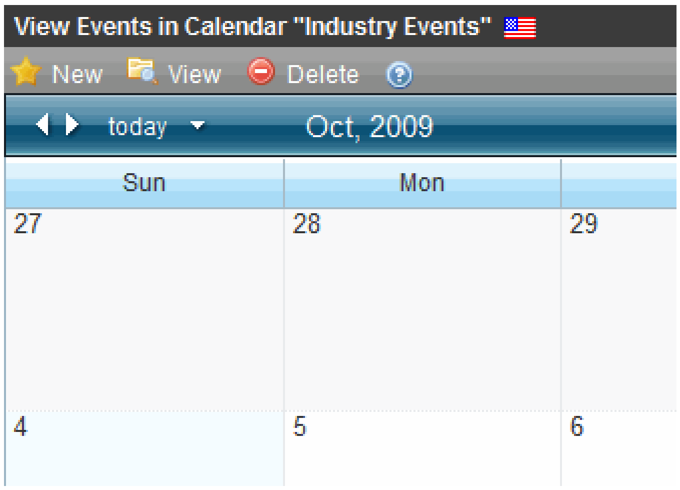
This section covers the following topics.

- "Fields on the Calendar Folder Properties Tab" on page 7-555
- "Calendar Properties Template Tab" on page 7-556
- "Other Calendar Properties Tabs" on page 7-557

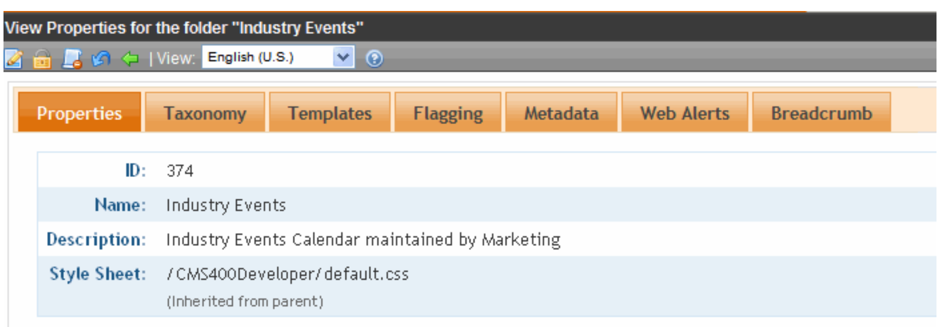
- "Editing Calendar Folder Properties" on page 7-558

To view the System Calendar properties, follow these steps.

1. Open the Workarea.
2. Click the **Content Tab.**
3. Click the calendar folder you wish to view.
4. The View Events screen appears.

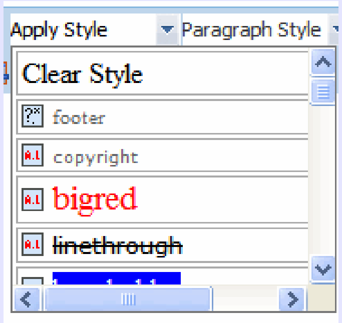


5. Click **View** > **Properties**.
6. The View Properties screen appears.



Fields on the Calendar Folder Properties Tab

Field	Description
ID	The Calendar Id is automatically assigned by the system.

Field	Description
Name	The name of the Web Calendar folder.
Description	The description of the Web Calendar folder.
Style Sheet filename for this folder: (leave blank to inherit)	Specify a style sheet that defines styles that may be applied to event content in this folder. The style sheet that you identify must reside in the site root folder. Or, leave this field blank to inherit the parent folder's style sheet. The style sheet populates the style dropdown list (see below) within the editor.  Note: This style sheet affects event content being edited. It does not necessarily affect the content's appearance on your Web site. To set or edit the style sheet that determines your Web pages' appearance, open the page's Web form and place a `<link rel="stylesheet"...` tag within its `<HEAD>` tags. If desired, you can identify the same style sheet in both locations. To include user-selectable styles, they must be generic classes.

Calendar Properties Template Tab

Field	Description
Inherit Parent Template Configuration	Check this box to inherit the template from the parent content folder. Or, do not check this box and specify one or more templates below. See Also: "Inheritance of Folder Templates" on page 7-187.
Page Templates	Specify one or more templates for Calendar events in this folder. This folder's content uses the specified template when appearing on your Web site. See Also: "Inheritance of Folder Templates" on page 7-187.

Other Calendar Properties Tabs

Tab	Description
Taxonomy Tab	■ If you want this folder to inherit taxonomy configurations from the parent folder, check **Inherit Parent Taxonomy Configuration**. If you uncheck **Inherit Parent Taxonomy Configuration**, you can then select taxonomies that can be applied to content in this folder. ■ If you want all content in this folder to be assigned at least one taxonomy category, check **Required at least one category selection**. See Also: "Inheriting Taxonomies from a Parent Folder" on page 9-215; "Taxonomy" on page 9-200
Flagging Tab	Check this box if content in this folder inherits a flagging definition from its parent folder. If you do not check the box, use the dropdown list to apply a flagging definition to content in this folder. See Also: "Flagging" on page 16-236, "Assigning a Flagging Definition to a Folder" on page 16-239
Metadata Tab	"Assigning Metadata to a Folder" on page 7-165
Web Alerts Tab	"Assigning Web Alert Information to Folders and Content" on page 20-21
Breadcrumb Tab	"Creating SiteMap Breadcrumbs" on page 9-278

Folder Properties Toolbar

The Folder Properties screen contains these toolbar buttons.

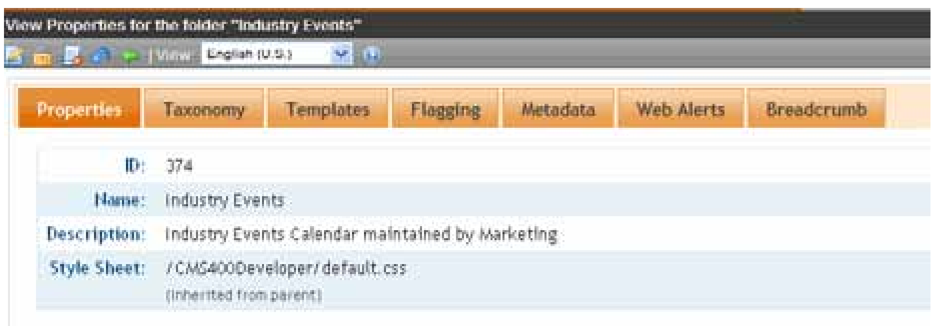
Button	Name	Description	More Information
	Edit Properties	Access the Edit Folder Properties screen	"Editing Calendar Folder Properties" on page 7-558
	Permissions	Access the folder's Permissions Table	"Folder Permissions" on page 5-43
	Purge History	Access the folder's purge history table	"Purge History" on page 5-21
	Restore Web Alert	Assigns the folder's Web Alert properties to all content in folder	"Inheriting Content-Level Web Alert Information from Its Folder" on page 20-

Button	Name	Description	More Information
	Inheritance		28
	Back	Go to previous screen	

Editing Calendar Folder Properties

To edit any properties for a calendar folder, follow these steps.

1. Access the View Properties screen for the folder you want to edit, as described in "Viewing System Calendar Folder Properties" on page 7-554.
2. Click the Edit button ( ).
3. The folder's Edit Properties screen appears.



4. Make the necessary changes to the content folder's properties. See "Fields on the Calendar Folder Properties Tab" on page 7-555.
5. Click the Update button ( ).

Changing System Calendar Permissions

You control System Calendar permissions in the same way you set permissions for other content folders.

For further information about setting permissions see "Folder Permissions" on page 5-43.

Using the Web Calendar page

A Web Calendar shows the current day, month, or week when you first view it in either a Web site page or in the Workarea.

When logged in, you can add or edit events to the calendar. See "Adding Web Calendar Events" on page 7-562 .

You must have permission to add or edit events. See "Changing System Calendar Permissions" on page 7-558 for more information.

Topics covered in this section.

- "Selecting the Day, Week or Month View" on page 7-561
- "Selecting the Previous or Next Period" on page 7-561
- "Choosing a Date " on page 7-562
- "Adding Web Calendar Events" on page 7-562

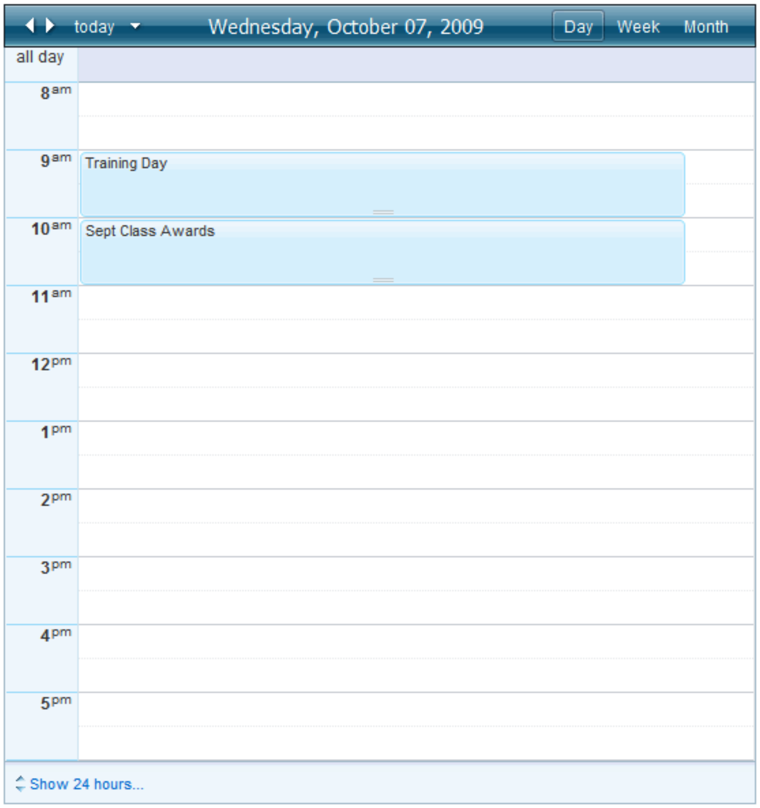
Month, Week, Day Views

The calendar displays a Month, Week or Day view. To change the view, use the settings in the upper right corner of the calendar. See Also: "Selecting the Day, Week or Month View" on page 7-561

Month View

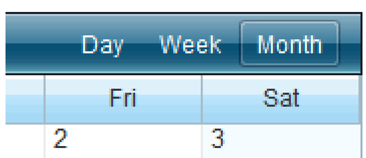
Week View

Day View



Selecting the Day, Week or Month View

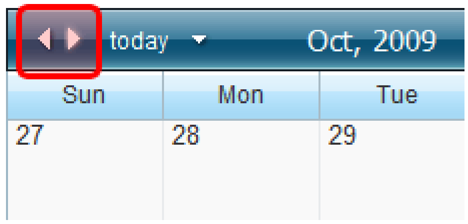
Click one of the buttons on the top right corner of the calendar to choose the view



The appearance of these buttons is controlled by the WebCalendar server control property DisplayType=”All”. See Also: "WebCalendar Server Control Properties" on page 7-584

Selecting the Previous or Next Period

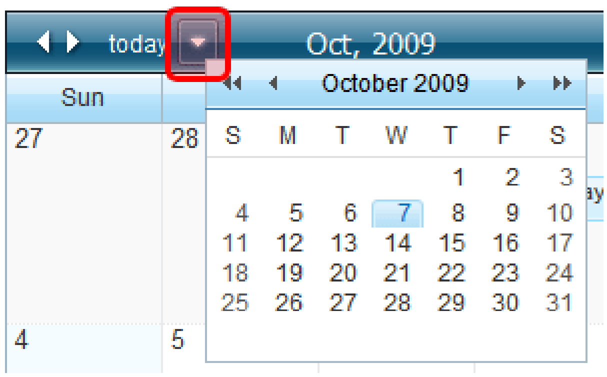
Click the left or right arrow (circled below) to move the calendar forward or backward by one period of time.



In the example above, if you click the right arrow, you see Nov, 2009. If you click the left arrow, you see Sept, 2009.

Choosing a Date

Click the arrow shown circled below to open the Date popup.



Find and click the date you wish to show on your calendar.

Adding Web Calendar Events

Note: You must log in to Ektron CMS400.NET and have permission to edit events in the calendar folder. See Also: "Setting Permissions through the Permissions Table" on page 5-43

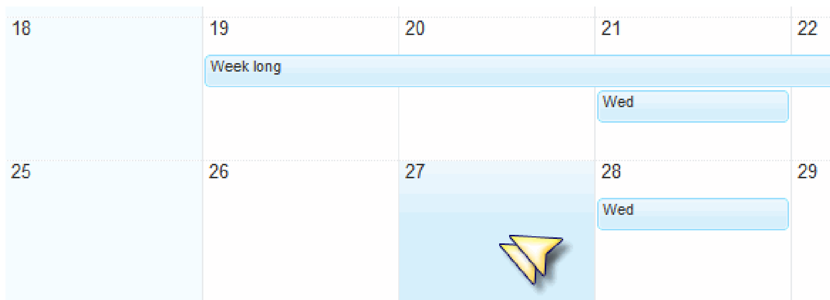
To add an event to a calendar, follow these steps.

- "Step 1 - Use the Edit Appointment page" on page 7-563
- "Step 2 - Edit the Event Title, Location and Description" on page 7-563
- "Step 3 - Change the Start Time and the All Day Option" on page 7-564
- "Step 4 - Set Recurrences " on page 7-565
- "Step 5 - Select a Taxonomy Category" on page 7-567
- "Step 6 - Set Metadata for the Event" on page 7-567

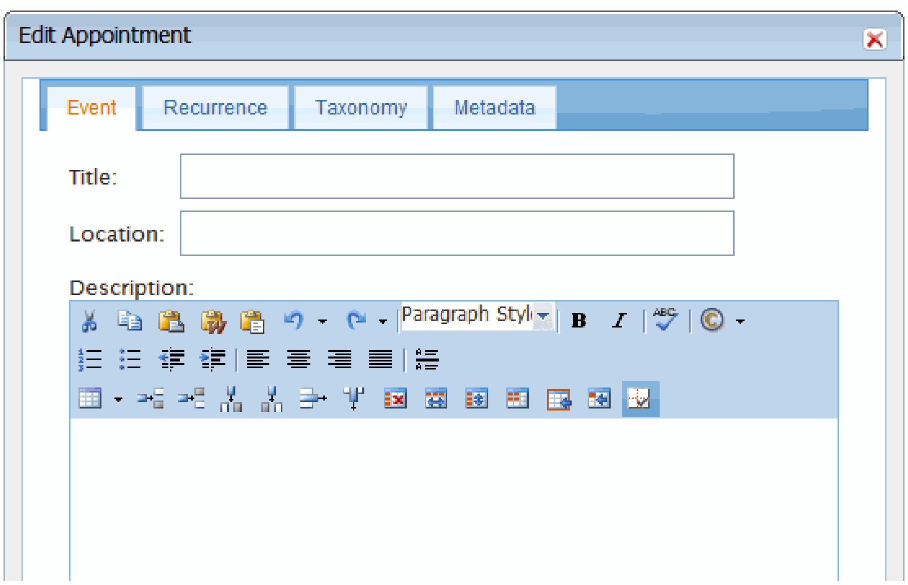
Step 1 - Use the Edit Appointment page

To add or edit an event on the calendar, follow these steps

1. Navigate to your calendar from either the Web page containing the calendar or from the **Workarea -> Content Tab** and select the appropriate calendar folder.
2. Double click any day to add a new event for it. The example below adds an event to the 27th of the month.



3. The Edit Appointment screen appears.



Step 2 - Edit the Event Title, Location and Description

1. Enter the title of the event into the **Title** text box. “Training Day” for example.This title shows on the calendar and in the pop-up.
2. Enter the location. This appears in the pop-up.
3. Enter the Description. This appears in the pop-up.

Mouse-over the event to see these fields as shown below.

This pop-up can be customized. See "Customizing the Web Calendar Tooltip" on page 7-587 for more information.

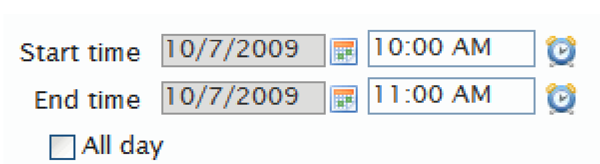
Step 3 - Change the Start Time and the All Day Option

At the bottom of the Edit Appointment page, notice that the selected date appears as the **Start Time**, and **All Day** is checked as the time.

All day events appear differently in the calendar than those with fixed starting and ending times. For example, in a weekly view, all day events appear at the top and others appear in their proper time slot as show below.

To change the start and end date/time, follow these steps.

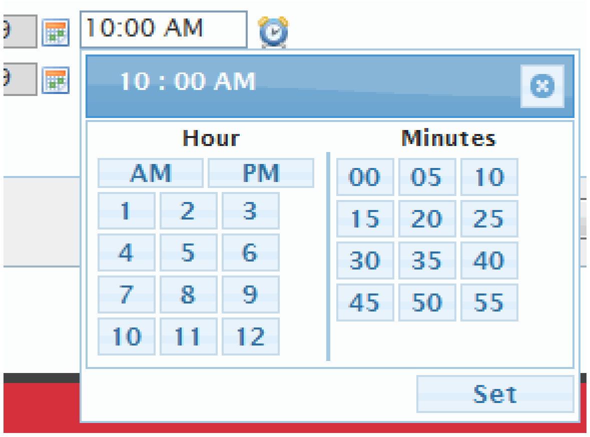
1. Uncheck the All Day option to add the time of day.



2. For start date, click the calendar button ( ) and set the start date.

3. For start time, enter the time text or click the clock button ( ).

4. If you use the clock button, choose the values and click the **Set** button when finished.



5. To set the end date and time, repeat steps 2-4.

Time Zones for Events

Event times are stored in the Ektron CMS400.NET database as UTC (also known as Greenwich Mean Time - GMT). For members or visitors that login, events show in the member's time zone. For visitors that are not logged in, the events show in the Web server's time zone.

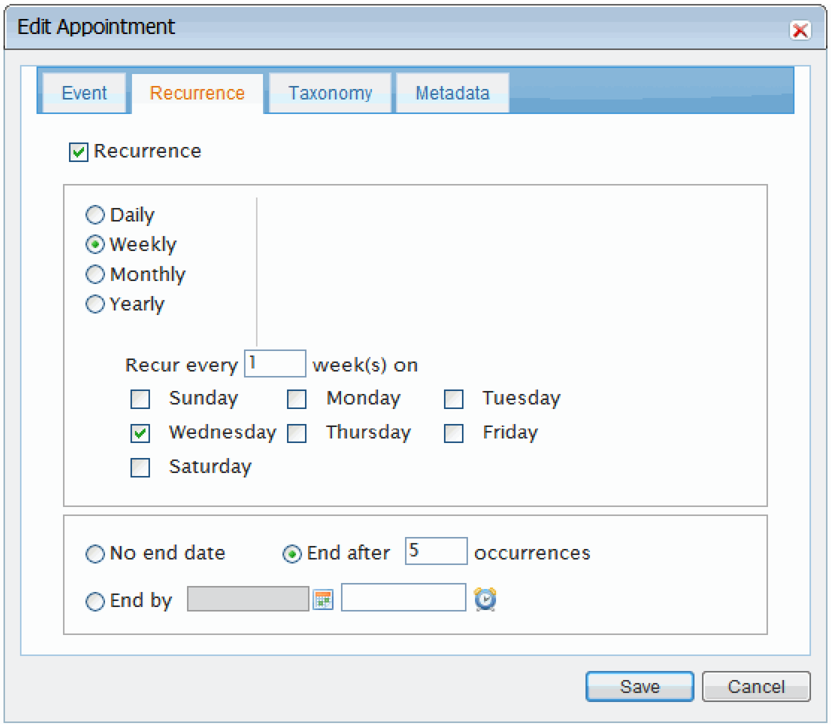
For information about setting the User time zone, see "Time Zone Field" on page 15-23.

Step 4 - Set Recurrences

Appointments can be set to recur Daily, Weekly, Monthly, or Yearly. They can be spaced at various intervals and have a finite duration or recur indefinitely.

Follow these steps to set a recurrence for a Weekly event that occurs on each Wednesday for the next 5 weeks.

1. Click the **Recurrence** tab on the Edit Appointment window.
2. Check the **Recurrence** checkbox, as shown below.



3. Click the **Weekly** option.
4. Enter 1 to set the recurrence to occur every week.
5. Click the **Wednesday** checkbox.
6. Enter **5** to end after this many occurrences.
7. Save your changes.

Editing a Recurring Appointment

When you edit a recurring event, you see the following prompt.

Edit only this occurrence to change just one event. Edit the series to change all events.

Step 5 - Select a Taxonomy Category

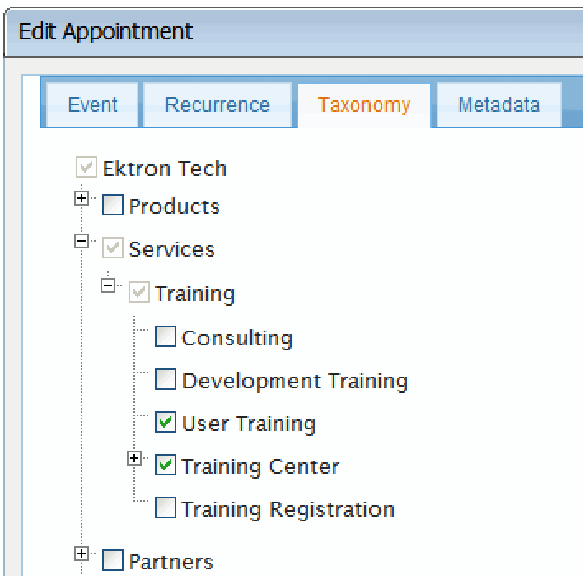
A typical calendar taxonomy helps screen events a Web site visitor might wish to see. For example, a College Sports Web site might show all sports, but the visitor may only want to view Football games.

To show only those events related a specific category on your calendar page, use a Taxonomy. See Also: "Taxonomy" on page 9-200.

Follow these steps to set taxonomy categories for your event.

1. Click the **Taxonomy** tab on the Edit Appointment window.
2. Check the appropriate categories.

   In the example below, we selected the User Training and Training Center categories.



See Also: "Using a Taxonomy Filter for Calendar Events" on page 7-594

Step 6 - Set Metadata for the Event

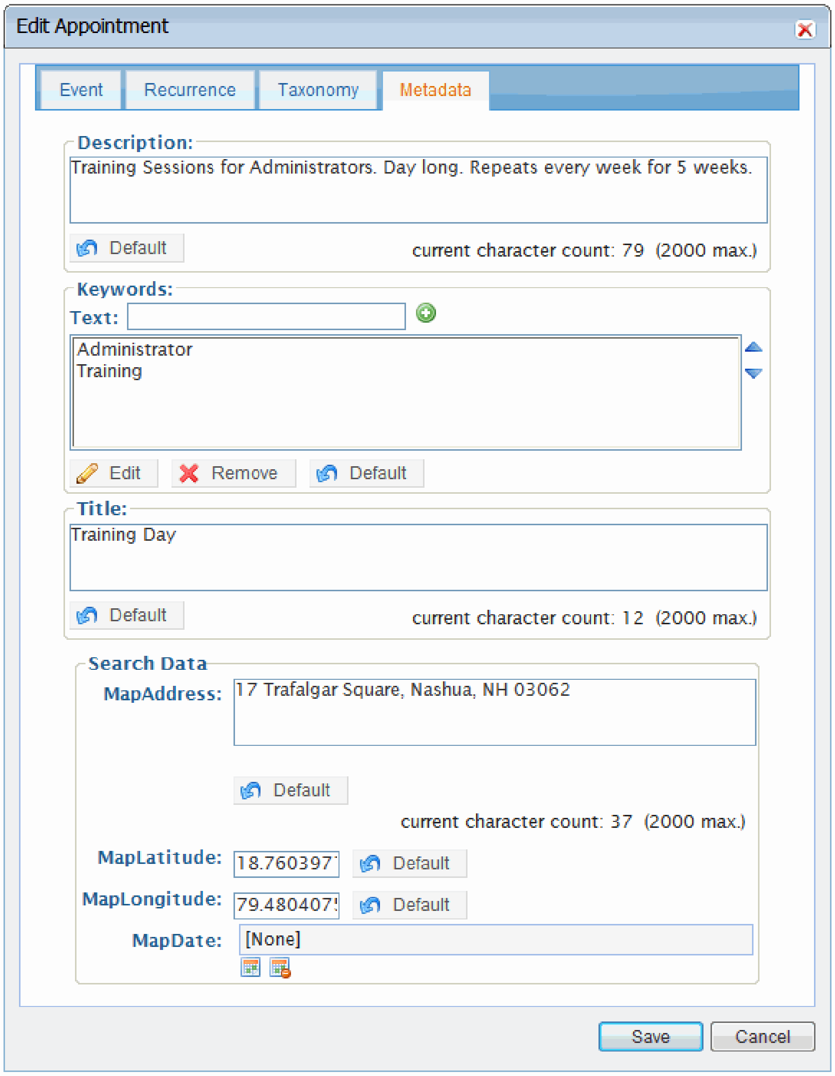
Each event can have Metadata associated to it. To learn more about metadata, see "Working with Metadata" on page 7-146.

In the example below, a map address is associated to an event so that the event's location can show on a map. See Also: "Map Server Control" on page 9-247

To set the metadata, follow these steps.

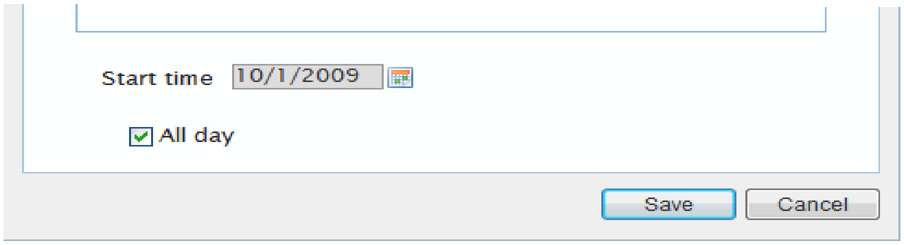
1. Click the **Metadata** tab on the Edit Appointment window.
2. Fill in the Metadata values in the fields provided.

An example of metadata fields for an event is shown below.



Save Your Appointment

At any time, click the Save button to display it on the Calendar.

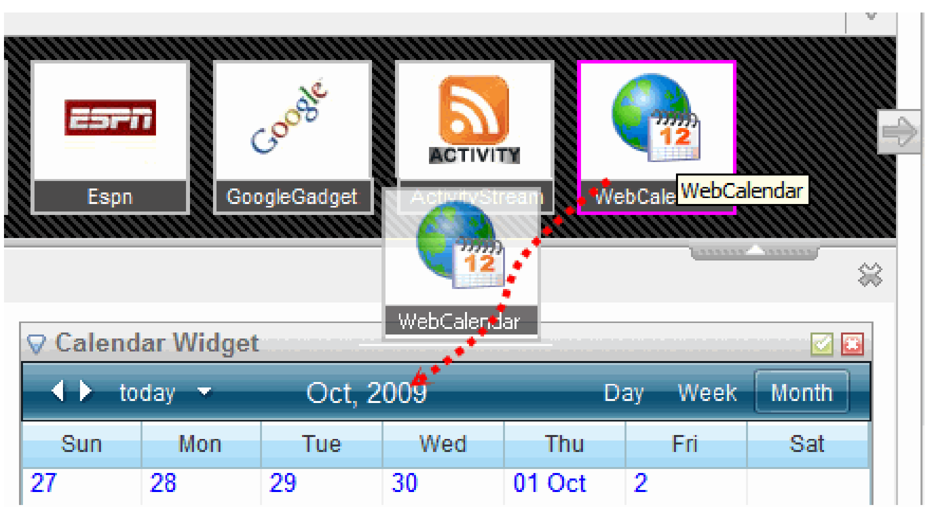


When you finish, the calendar looks like this.

Web Calendar Widgets

You place Web Calendars on a Web page by using either a WebCalendar server control or a Web Calendar Widget in a PageBuilder page.

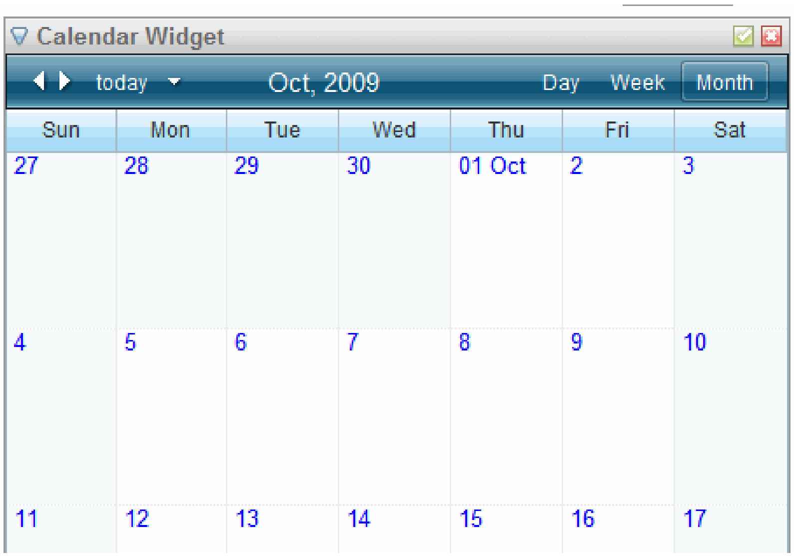
The Web Calendar widget provides an easy way to add calendars to a Web page. It is one of the standard widgets provided in Ektron CMS400.NET. See Also: "Standard Widgets" on page 21-404.



You can drag-and-drop the web calendar widget into these page types.

- PageBuilder (See Also: "Building PageBuilder Pages" on page 6-1)
- Smart Desktop (See Also: "Personalizing the Smart Desktop" on page 4-4)

The web calendar widget looks like this when you are logged in.



For more information about using the Web Calendar interface, see "Using the Web Calendar page" on page 7-559.

The following topics show how to configure the Web Calendar widget.

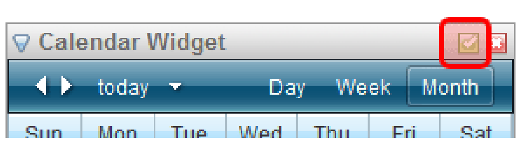
- "Adding a System Calendar to a Widget" on page 7-570
- "Adding User Calendars to a Widget" on page 7-571
- "Adding a Group Calendar to a Widget" on page 7-574

Adding a System Calendar to a Widget

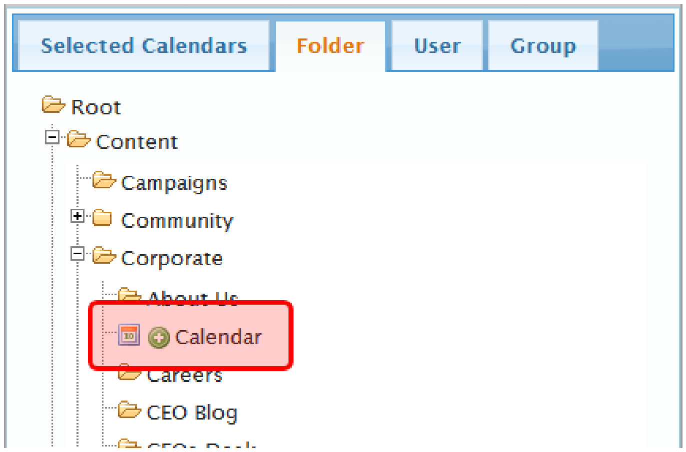
A system calendar is managed as a Calendar folder within the Workarea content. For more information, see "Adding a System Calendar Folder " on page 7-553.

To add System Calendars to this widget, follow these steps.

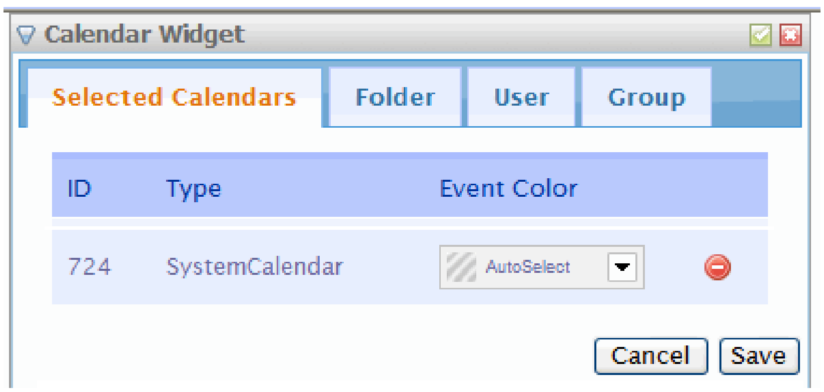
1. Click the edit icon (circled below) in the upper right corner of the Web Calendar widget.



2. Click the **Folder** tab.
3. Locate the Calendar Folder to add.



4. Click the Add button ( ).
5. The System Calendar (724) is added to the **Selected Calendars** list. .

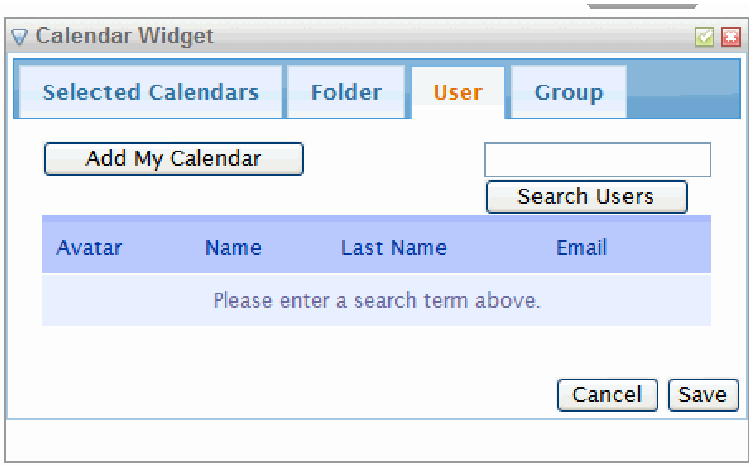


Adding User Calendars to a Widget

To show one or more user calendars on a Web Calendar widget, follow the steps below.

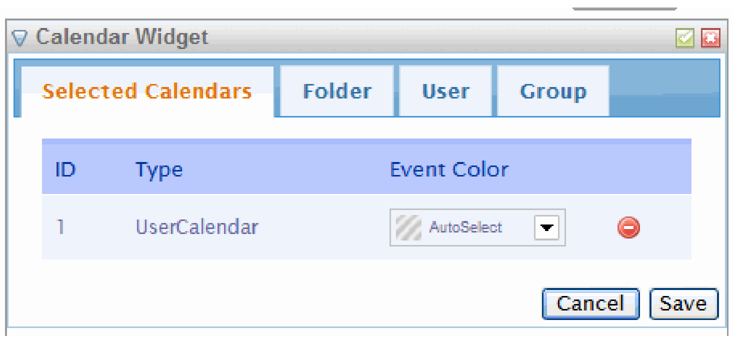
1. Click the edit icon (circled below) in the upper right corner of the Web Calendar widget.

2. Click the **User** tab.



3. Click **Add My Calendar** to add your own calendar.

   Your calendar is added to the Calendar Widget.



Searching Users to Add to Your Personal Calendar Widget

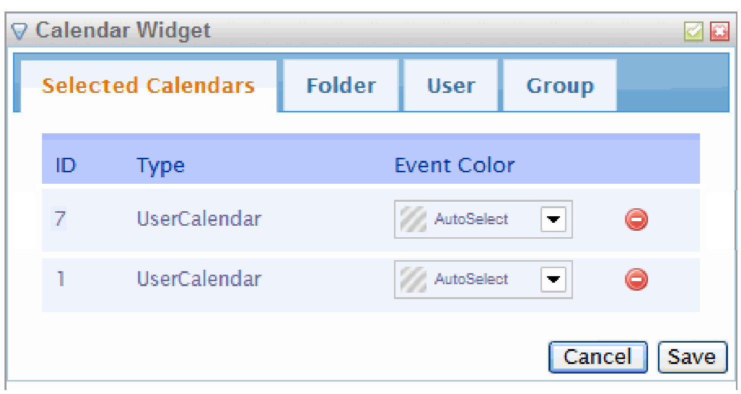
In addition to your own calendar, you may wish to add colleagues calendars to yours. This way you can quickly compare their important dates, vacations, meetings with your own.

To add additional users to your calendar, continue with these steps.

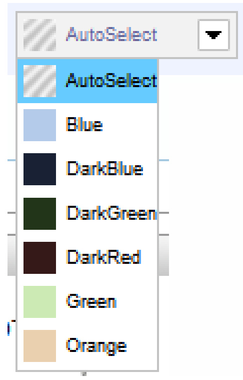
1. Click the **User** Tab.
2. In the Search box, enter a name, such as John.
3. Click the **Search Users** button.

   The example below shows all the users named John.

4. Click the **Add Calendar** button ( ) next to any user.
   Now it appears on the **Selected Calendars** tab as shown below. You will see both calendars together on your Web page.



5. Click the Event Color dropdown to choose the background color used for the event on the calendar. AutoSelect will use the next available color in the list.

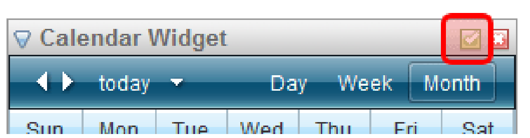


6. To remove any calendar, click the **Remove** button ( ).
7. Click the **Save** button.

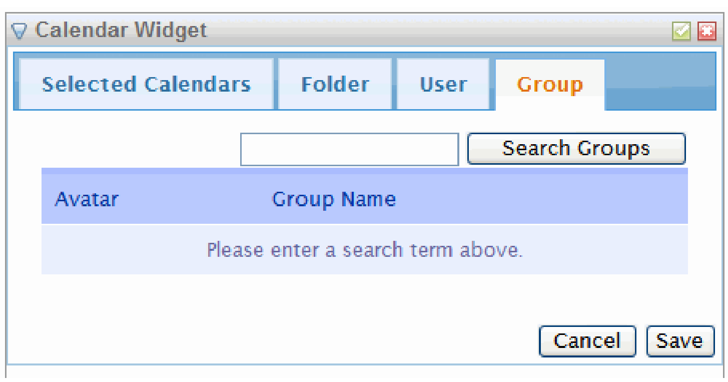
Adding a Group Calendar to a Widget

To show one or more Group calendars on a Web Calendar widget, follow the steps below.

1. Click the widget edit icon (circled below) in the upper right corner of the web calendar widget.

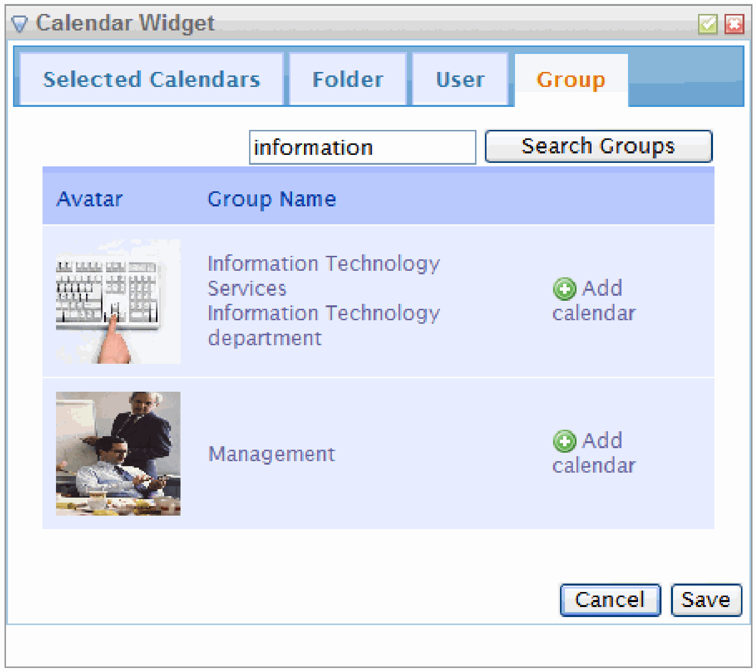


2. Click the **Group** tab.

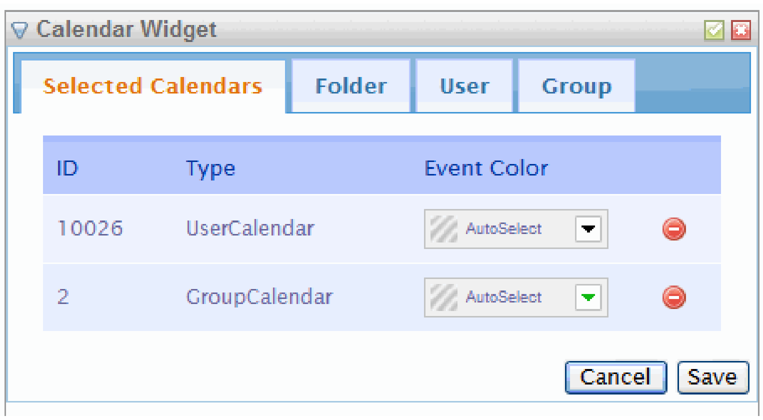


3. Search for other group calendars by entering their group name and click the **Search Groups** button.

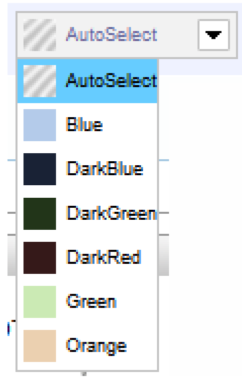
   The example below shows a search for groups that contain “information” in their title.



4. Click the **Add Calendar** button ( ) next to a calendar you wish to add.
   The group calendar you selected appears on the **Selected Calendars** tab as shown below.



5. Click the Event Color dropdown to choose the background color used for the event on the calendar. AutoSelect will use the next available color in the list.

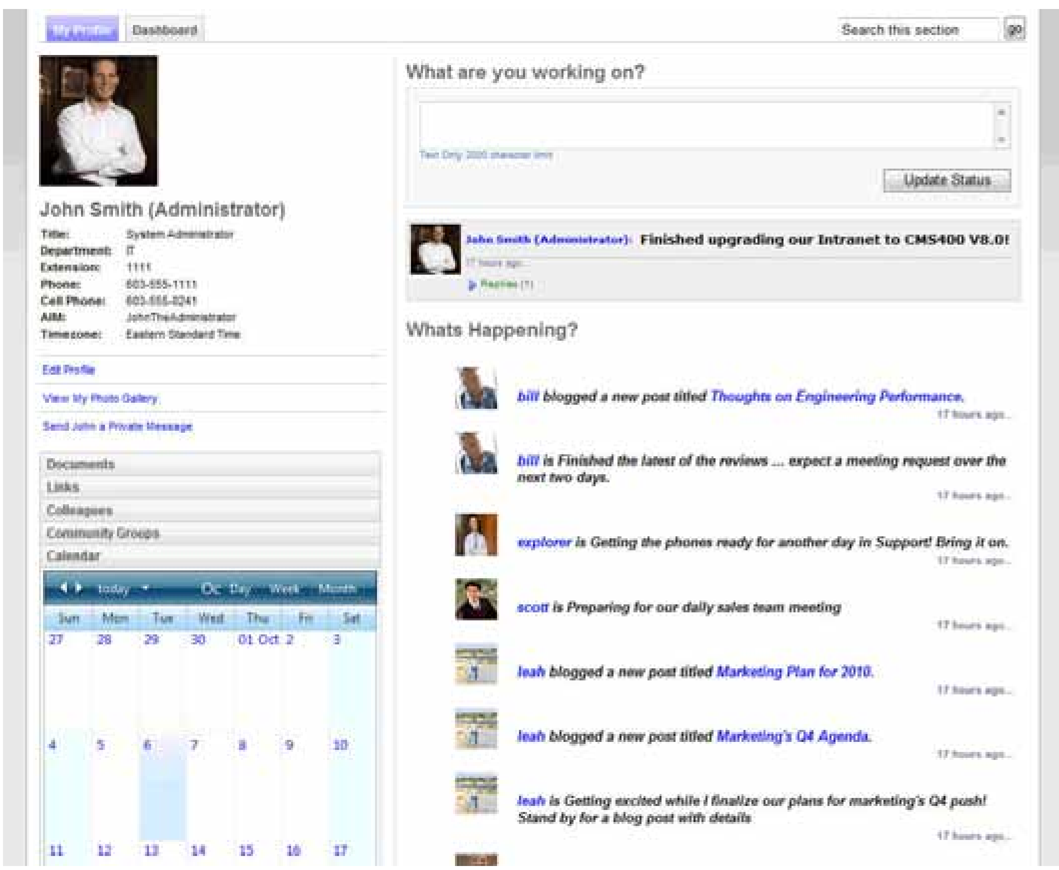


6. To remove any calendar, click the **Remove** button ( ).
7. Click the **Save** button.

Using Community Web Calendars

Both Community Groups and Community User profile pages can show a Web Calendar.

In the following example, the profile page contains a personal calendar



The calendar displayed on a personal community page obeys the same community rules as other features in the community. You can restrict the visibility of your events to only colleagues or make them public.

Creating a Calendar in My Profile

A web calendar can be used inside of individual community profiles to track personal appointments.

The following section describes how to use the WebCalendar server control on a user profile template.

Note: An alternate way to use a personal calendar is to use a Web Calendar Widget on the user dashboard. See "Web Calendar Widgets" on page 7-569 for more information.

Adding a WebCalendar ServerControl to a User Profile

The example below shows code to place a Web Calendar server control on a User Profile template.

```
<CMS:WebCalendar ID="WebCalendar1" runat="server" >
<DataSource>
<CMS:CalendarDataSource sourceType="UserCalendar" dynamicParameter="id” />
</DataSource>
</CMS:WebCalendar>
```

The following properties must be set for CalendarDataSource.

Property	Set to this value
sourceType	UserCalendar
dynamicParameter	id

Creating the User Calendar in the Database

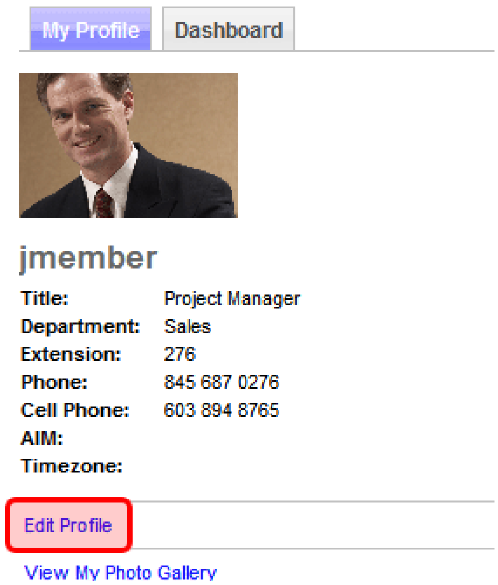
To use a personal calendar, you must add your personal Calendar into the database. Each user needs to do this one time when they decide to have a calendar for their own profile.

Add a User Calendar into the database by following these steps.

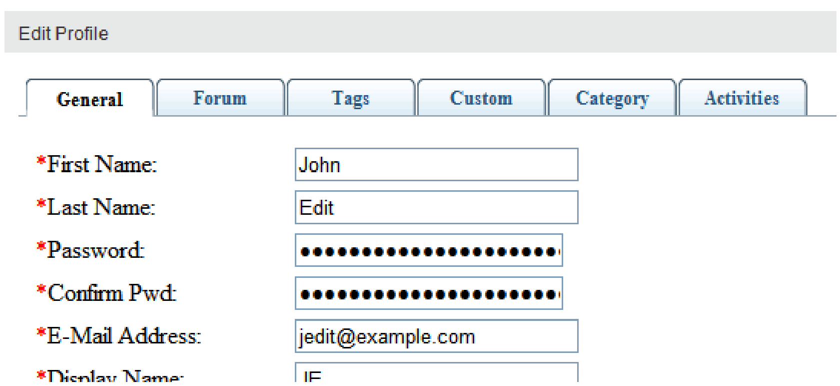
1. Login to your Website.
2. Navigate to your personal web page.

3. Click the **Edit Profile** link.

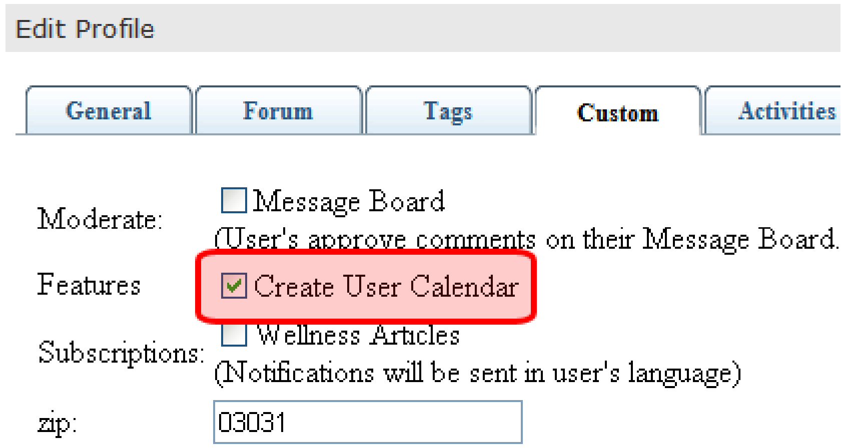
   In this example, the Edit Profile link (circled below) is located on a personal profile page of the eIntranet Starter Site.



4. The Edit Profile window appears.



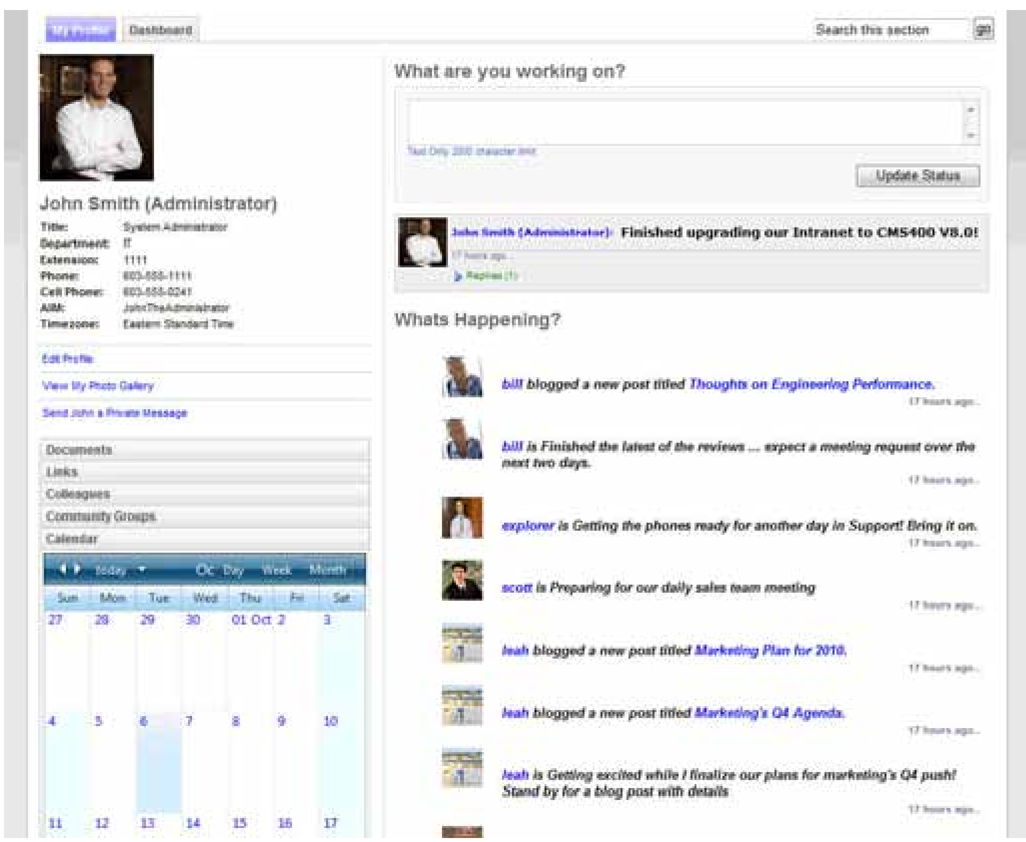
5. Click the **Custom** tab.
6. Check the **Create User Calendar** box (circled below) to create a User Calendar in the database.



Warning! After you save this profile, you cannot later uncheck this option.

7. Click the **Save** button.

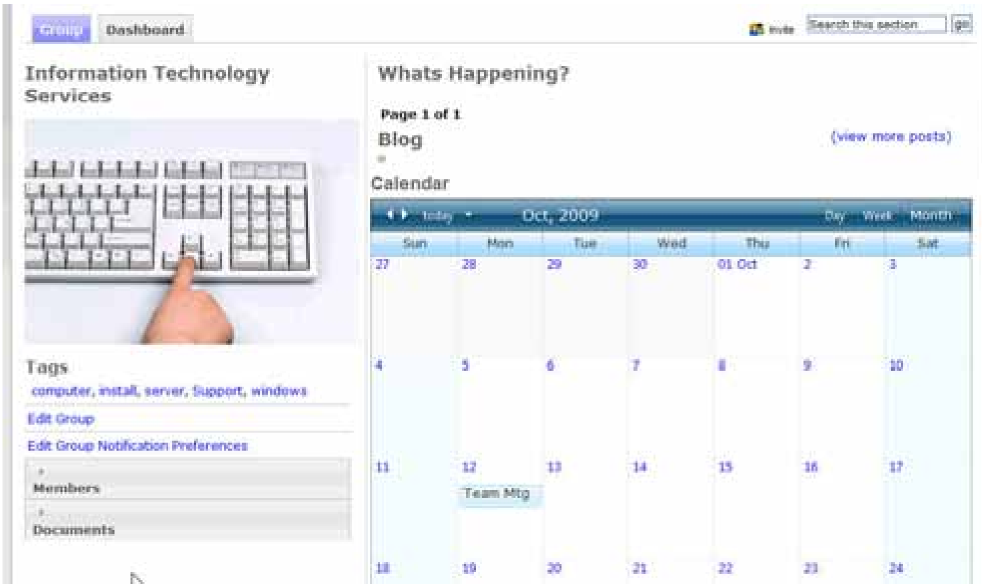
Now, your calendar exists in the database and can appear on your profile page. To add events, see "Adding Web Calendar Events" on page 7-562.



Creating a Calendar in My Group

In any Ektron CMS400.NET Community Group, you can add a Web Calendar.

The following is an example of a calendar on a community group page



This calendar could show many types of events important to a group such as:

- Group meetings
- Team schedules
- Project Milestones

The calendar displayed on a community group page obeys the same community rules as other features in the community. You can restrict the visibility of your group events to only group members or you can make the calendar public.

The following section describes how to use the WebCalendar server control to do this.

Note: An alternate way to use group calendars is using the WebCalendar Widget on a group dashboard. See "Web Calendar Widgets" on page 7-569 for more information.

Adding a WebCalendar ServerControl to a Group Profile

The example below shows code to place a Web Calendar server control on a Group Profile template.

```
<CMS:WebCalendar ID="WebCalendar1" runat="server" >
<DataSource>
<CMS:CalendarDataSource sourceType="GroupCalendar" dynamicParameter="id" />
</DataSource>
</CMS:WebCalendar>
```

The following properties must be set for CalendarDataSource.

Property	Set to this value
sourceType	GroupCalendar
dynamicParameter	id

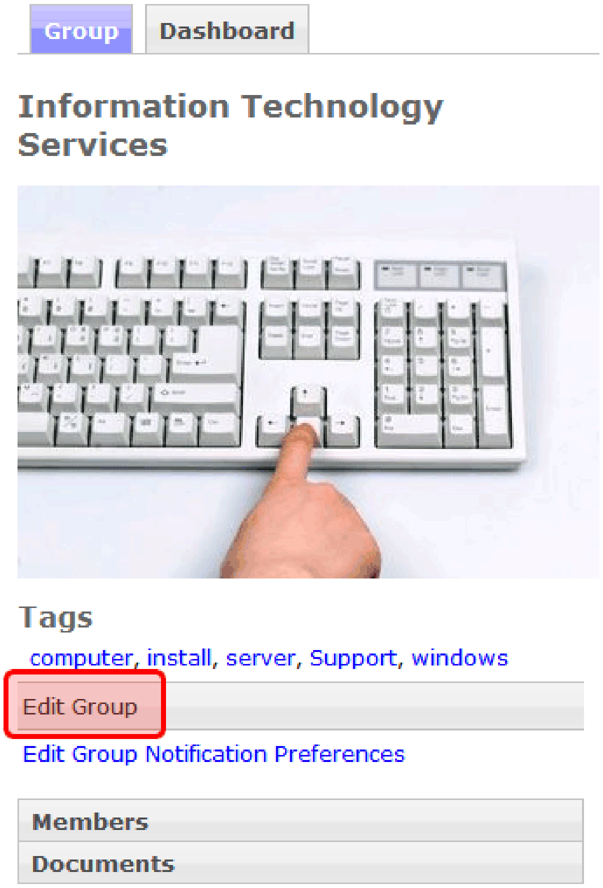
Creating the Group Calendar in the Database

To use a group calendar, you must add the group calendar into the database. Each group needs to do this one time when they decide to have a calendar for their group.

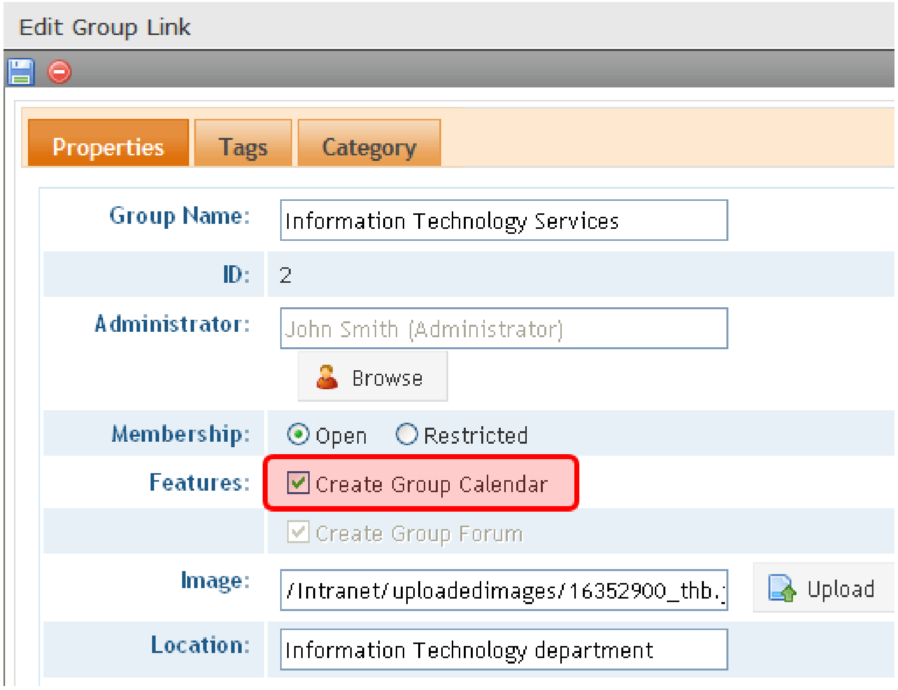
Add a group calendar database by following these steps.

1. Login to your Website.
2. Navigate to your group web page.
3. Click the **Edit Group** link.

   In this example, the **Edit Group** link (circled below) is located on this group profile page of the eIntranet Starter Site.



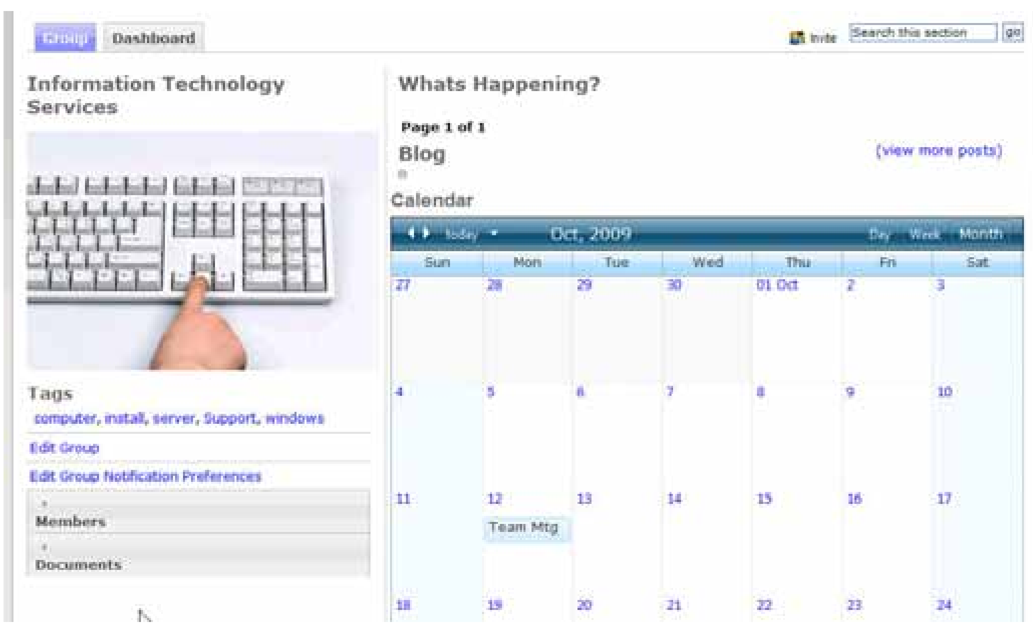
4. The Edit Group Link window appears
5. Check the **Create Group Calendar** checkbox (circled below) to create a group calendar in the database.



Warning! After you save this profile, you cannot later uncheck this option.

6. Click the **Save** button.

Now, a group calendar exists in the database and can appear on the group page. To add events, see "Adding Web Calendar Events" on page 7-562.



Web Calendar Server Control

The Web Calendar server control displays any calendars managed by Ektron CMS400.NET.

The Web Calendar Server Control is explained in the following topics:

- "Using the WebCalendar Server Control" on page 7-584
- "WebCalendar Server Control Properties" on page 7-584
- "CalendarDataSource Properties" on page 7-586
- "See the following for additional information about the using the CalendarDataSource properties." on page 7-587

Using the WebCalendar Server Control

The Web Calendar server control code looks like this.

```
<cms:WebCalendar ID="webcalendar" runat="server" DynamicParameter="calendar_id"
DisplayType="Day">
<DataSource>
<cms:CalendarDataSource defaultId="724" sourceType="SystemCalendar" />
</DataSource>
</cms:WebCalendar>
```

The two parts of the WebCalendar Server Control are:

- cms:WebCalendar Server Control. See Also: "WebCalendar Server Control Properties" on page 7-584
- cms:CalendarDataSource, located inside the WebCalendar tags. See Also: "CalendarDataSource Properties" on page 7-586

WebCalendar Server Control Properties

The WebCalendar server control properties are described in this table.

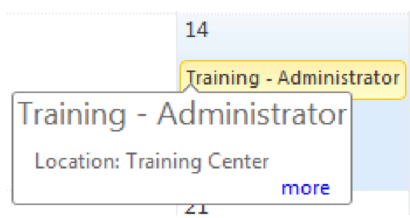
Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
AllowEventEditing	Determines whether Events can be added and edited on the calendar. Default is “True”. See Also: "Changing System Calendar Permissions" on page 7-558	Boolean
DefaultDisplayType	Specify the Calendar view type. The default is **Month** which means that the Month view of the calendar will show on the Web page. The site visitor can change the view. See Also: "Selecting the Day, Week or Month View" on page 7-561.	String
DisplayTemplatePath	Specify the path to the code that controls how events are displayed. Default is blank. See Also: "Customizing the Web Calendar Tooltip" on page 7-587	String
DisplayType	Determines what time period choices will be presented on the calendar. See Also: "Selecting the Day, Week or Month View" on page 7-561 Choices are **All**, **Day**, **Month**, **Week**. Default is “All”	String
DynamicParameter	To make this calendar dynamic, select **calendar_id**. When you do, this server control uses the calendar passed as a URL parameter. To exclude this function, choose “None- Use Default”. Only Calendars with sourcetype=”SystemCalendar” may be used in the querystring for this value. For example, where DyanamicParameter=”calendar_id”, the URL may read http://mysite.com/calendar.aspx?calendar_id=”55”. In this case, calendar 55 must be of the SystemCalendar type.	String
Hide	Used to hide the output of a calendar in design time and run time. **True** = Hide calendar **False** = Display calendar (Default setting)	Boolean
Language	Set a language for viewing a calendar. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Value	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

CalendarDataSource Properties

The table below shows properties set inside the CalendarDataSource tag.

Property	Value	Data Type
backColor	The background color of the event shown on the calendar. This example shows backColor="yellow".  If you set this value to "AutoSelect", the next available color in the list is chosen automatically. This is the list of color choices. AutoSelect Blue DarkBlue DarkGreen DarkRed Green LightBlue Orange Pink Red Violet Yellow	String

Property	Value	Data Type
defaultId	The Id of the SystemCalendar, GroupCalendar or UserCalendar to display on the Web page.	String
queryParam	The parameter that may be in the query string to mash-up additional calendars. This can be any Calendar SourceType. For example, if the value is set to **uid,** then the querystring can be: .../calendar.aspx?calendar_id="55"&**uid**="440"	String
sourceType	Choices are **SystemCalendar, GroupCalendar, UserCalendar**.	String

See the following for additional information about the using the CalendarDataSource properties.

- "Web Calendar Mashups" on page 7-590
- "Using Taxonomy with Web Calendars" on page 7-594

Customizing the Web Calendar

The Web Calendar can be customized in many ways. Two methods are shown as follows:

- "Customizing the Web Calendar Tooltip" on page 7-587
- "Changing Web Calendar Style Sheets" on page 7-589

Customizing the Web Calendar Tooltip

When you hover over a Calendar event, a tooltip automatically shows its details.

You can change how this tooltip looks and behaves. Do this by modifying the telerik:RadToolTip properties.

Changing the Event Tooltip Control

You can apply many changes to a tooltip, but for a simple explanation, we will choose just two. In this example, we make the tooltip appear without delay and have fade-in animation. The example below uses the EktronTech starter site.

Before starting, be sure to add an event to your calendar so that you see the default behavior. See Also: "Adding Web Calendar Events" on page 7-562.

Then follow these steps.

1. Open the EktronTech Website file folder in your editor.
2. Make a copy of the Display.ascx and Display.ascx.cs files from this folder `<siteroot>\workarea\WebCalendar\DefaultTemplate`
3. Paste them into a new folder in the Web site such as `<siteroot>\CustomUserControls`.

Warning! Ektron recommends that you make a copy of these files and move them to a folder that is not inside the \Workarea folder. Upgrades overwrite files in the \workarea folder.

4. Edit the new ascx file you just created.
5. Change these properties on the Telerik:RadToolTip server control.

Property	Value	Default Value
ShowDelay	0	400
Animation	Fade	None

6. Save your changes.
7. Edit your template.
8. Change the following properties on the WebCalendar server control to set the location of this revised display.ascx file.

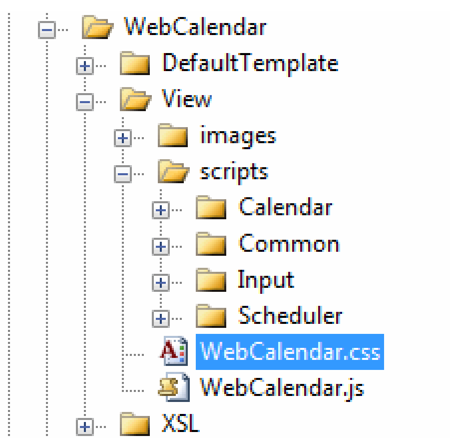
Property	Value (example)
`DisplayTemplatePath`	`/CustomUserControls/display.ascx`

See Also: "Using the WebCalendar Server Control" on page 7-584

9. Save your changes.
10. Refresh the browser page containing the calendar.
11. Mouse-over the event on the calendar to see the new behavior.

Changing Web Calendar Style Sheets

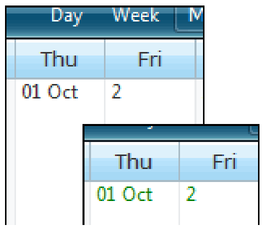
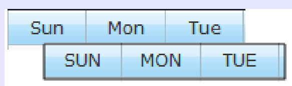
The Web Calendar style sheet is WebCalendar.css. It is located in the folder <siteroot>\workarea\WebCalendar\View.



By modifying the various `.RadScheduler` classes, you can change style for your web calendar. Below are some sample changes you can make.

Example	CSS Style Change

Color	`.RadScheduler .rsDateHeader {`
	`font-size: 12px;`
	`padding: 1px 4px 3px;`
	`text-decoration: none;`
	`color: green`
	`}`

<table>
<tr><th>Example</th><th>CSS Style Change</th></tr>
<tr><td>
</td><td></td></tr>
<tr><td>Uppercase

</td><td>

```
.RadScheduler .rsSpacerCell, .RadScheduler
.rsVerticalHeaderTable th, .RadScheduler
.rsHorizontalHeaderTable th {
   border-style: solid;
   text-transform: uppercase
}
```

</td></tr>
</table>

Web Calendar Mashups

A Calendar Mashup shows events from different calendars combined into one calendar view. As an example, you could combine upcoming company meetings from one calendar with a special seminar series from another calendar.

There are several ways to combine the events on a calendar. Three methods are shown below.

- "Combining Calendars Using the Dynamic Method" on page 7-590
- "Combining Calendars Using the Static Method" on page 7-592
- "Combining a Static Mashup and Dynamic Parameter" on page 7-592

Combining Calendars Using the Dynamic Method

The dynamic method uses URL query string parameters to specify which calendars to see. This allows you to maintain one calendar template that can be used by many calendars on your Web site.

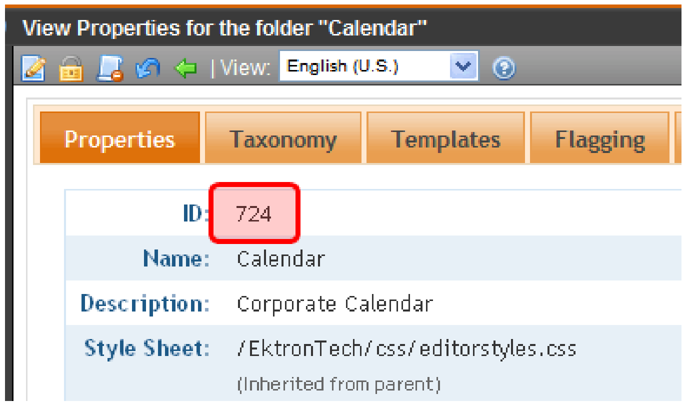
Using the EktronTech starter site, the exercise below combines calendars using a URL query parameter **cal2**.

```
http://<servername>/ektrontech/calendar.aspx?cal2=376
```

Follow these steps to combine two calendars.

1. Log in to the site.

2. Create two calendar folders in the workarea. See Also: "Adding a System Calendar Folder " on page 7-553.
3. Determine the ID number (circled below) for each calendar by examining the Calendar Folder Properties.



See Also: "Viewing System Calendar Folder Properties" on page 7-554. In our example, we use Calendar folder Ids 375 and 376

4. Edit the calendar.aspx template that contains the web calendar. In this example, the template is located on the web server in this folder: d:\inetpub\wwwroot\EktronTech.
5. Add two CalendarDataSource tags - one for a static calendar the other for a dynamic calendar.
6. In the first (static) CalendarDataSource properties, add defaultId = “375”.
7. In the second (dynamic) CalendarDataSource properties, add queryParam = “cal2”.
8. In both CalendarDataSource tags, be sure to set the sourceType = “SystemCalendar” property.

The finished code looks like this.

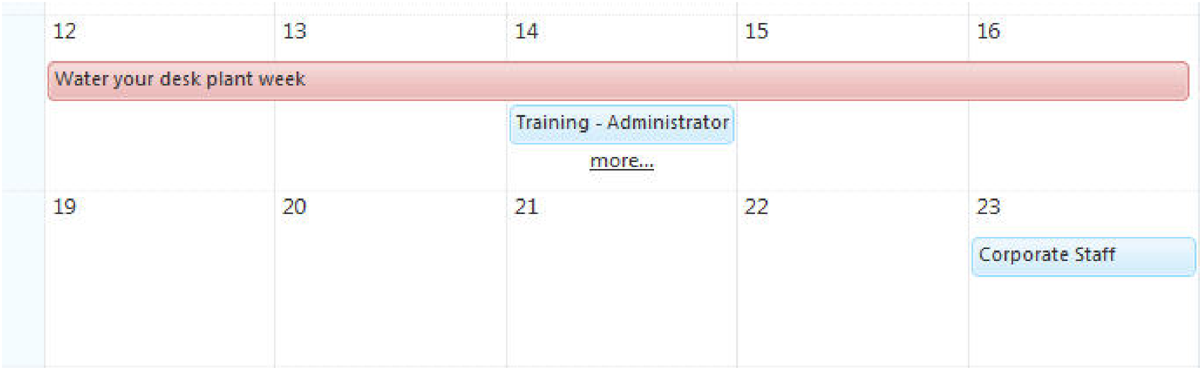
```
<cms:WebCalendar ID="webcalendar" runat="server" DynamicParameter="calendar_id"
DisplayType="All" SuppressWrapperTags="True">
<DataSource>
<cms:CalendarDataSource defaultId="375" sourceType="SystemCalendar"/>
<cms:CalendarDataSource queryParam="cal2" sourceType="SystemCalendar"/>
</DataSource>
</cms:WebCalendar>
```

The code above has a CalendarDataSource `defaultId` for calendar 375. By adding the second CalenderDataSource line with a queryParam, we can display any calendar by referring to it in the query string.

9. Save the calendar.aspx page.
10. Enter the following URL to see the calendar:

```
http://<servername>/ektrontech/calendar.aspx?cal2=376
```

You see the combined calendar events. When there are too many events to show on a specific date, you will see a link that says “more...”. Click this link to see all of the events.



Combining Calendars Using the Static Method

The static method of combining calendars hard codes the calendar id numbers instead of using a query string parameter. This creates a calendar whose events source does not change dynamically.

For example, follow these steps.

1. Log in to the EktronTech starter site.
2. Create two calendar folders in the workarea. See Also: "Adding a System Calendar Folder " on page 7-553
3. Determine the ID number for each calendar by examining the Calendar Folder Properties. See Also: "Viewing System Calendar Folder Properties" on page 7-554
4. Edit the calendar.aspx template.

   In the CalendarDataSource properties, add the defaultId values for each calendar as shown in the code below.

```
<cms:WebCalendar ID="webcalendar" runat="server" DynamicParameter="calendar_id"
DisplayType="All" SuppressWrapperTags="True">
<DataSource>
<cms:CalendarDataSource defaultId="375" sourceType="SystemCalendar"/>
<cms:CalendarDataSource defaultId="376" sourceType="SystemCalendar"/>
```

</DataSource>

In this example, all events for calendars 375 and 376 are combined on the calendar.aspx page.

Combining a Static Mashup and Dynamic Parameter

The following example show how to display a specific calendar according to a dynamic parameter in the query string. If the query string parameter is not used, the calendar shows a mashup of three calendars.

The following example assumes you created three calendars with events with ids 374, 375, and 376.

This is the code for the events.aspx template.

```
<cms:WebCalendar ID="webcalendar1" runat="server">
 <DataSource>
 <cms:CalendarDataSource sourceType="SystemCalendar" >
 </cms:CalendarDataSource>
 </DataSource>

</cms:WebCalendar>
```

This is the code behind for events.aspx.vb, which listens for a query parameter. If none is found, display a static calendar mashup.

```
'This code is located in the Page_Load event
Protected Sub Page_Load(ByVal sender As Object, ByVal e As
System.EventArgs) Handles Me.Load
'Create a CalendarDataSource instance and set the sourceType and queryParam
Dim cds As New Ektron.Cms.Controls.CalendarDataSource()
cds.queryParam = "calid"
cds.sourceType = Ektron.Cms.Controls.SourceType.SystemCalendar
'Add the DataSource object
webcalendar1.DataSource.Add(cds)
'If the queryString is used, show that calendar,
otherwise show the following mashup
If (Request.QueryString("calid") = String.Empty) Then
'Create three CalendarDataSource instances and add the sourceType and defaultId for
each.
 cds = New Ektron.Cms.Controls.CalendarDataSource()
 cds.sourceType = Ektron.Cms.Controls.SourceType.SystemCalendar
 cds.defaultId = 374
 webcalendar1.DataSource.Add(cds)
 cds = New Ektron.Cms.Controls.CalendarDataSource()
 cds.sourceType = Ektron.Cms.Controls.SourceType.SystemCalendar
 cds.defaultId = 375
 webcalendar1.DataSource.Add(cds)
 cds = New Ektron.Cms.Controls.CalendarDataSource()
 cds.sourceType = Ektron.Cms.Controls.SourceType.SystemCalendar
 cds.defaultId = 376
 webcalendar1.DataSource.Add(cds)
End If
'Fill and return
webcalendar1.Fill()

End Sub
```

To see a single calendar such as 376, use this URL:

```
http://<server>/cms400developer/events.aspx?calid=376
```

To see all calendars together, do not use the query string parameter, as shown below.

```
http://<server>/cms400developer/events.aspx
```

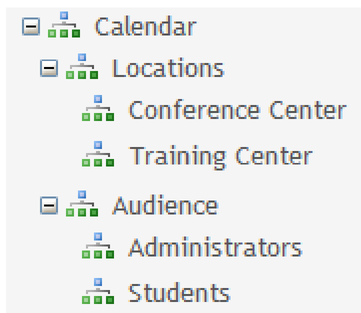
Using Taxonomy with Web Calendars

You can use taxonomy categories to filter events on a calendar. The categories for a calendar could include the meeting rooms, the audience, or whether the event should show on a special public calendar.

To see more information about Taxonomy, see "Introduction to Creating a Taxonomy" on page 9-201.

An Example of a Calendar Taxonomy

The following example shows how to organize events based on locations and audience.



Once a Taxonomy is created, these categories can be assigned to events. See Also: "Step 5 - Select a Taxonomy Category" on page 7-567

Using a Taxonomy Filter for Calendar Events

Use a CategoryID value in the CalendarDataSource to filter events according to taxonomy categories.

In the example below, the calendar shows events for the Training Center (category 123) or Administrators (category 124).

```
<cms:WebCalendar ID="webcalendar" runat="server">
 <DataSource>
<cms:CalendarDataSource defaultId="726" sourceType="SystemCalendar">
<CMS:CategoryID categoryId="123" />
<CMS:CategoryID categoryId="124" />
</cms:CalendarDataSource>
</DataSource>
</cms:WebCalendar>
```

By using an id of a higher category in the taxonomy tree, you can show all events under it.

For example, this taxonomy has two higher level branches with id 100 and 200.

If you set the category id to 100, you see any events associated with categories 100, 111 or 112.

Using Previous Calendar Versions

To enable Version 7.6.5 Calendar functionality, make the following change to the `siteroot\web.config` file.

```
<add key="ek_enableClassicCalendar" value="True"/>
```

Both versions of the Calendar may exist on a Web Site.

For more information about using Calendar Version 7.6 and earlier, refer to Calendars in the Version 7.6 Ektron Administrator Manual.

Discussion Boards

The Discussion Board feature provides an opportunity for topic discussions on your Web site. A site or membership user with Add Topic permission creates a topic and posts a starter question. Site visitors can then reply.

An example of a Discussion Board is below. As you can see, the first screen has general topics, the second screen's topics are more specific, and a third screen displays posts to the forum.

As an administrator, you can determine the following Discussion Board features.

- The subjects being discussed
- A starter post, which initiates a discussion
- If users must sign in before posting to the forum
- If a post appears as soon as someone submits it, or must be approved first
  - If a post requires approval, you can edit or delete it before it appears

Whether or not posts must be approved, anyone with permission to the board can perform the following tasks on a post from the Workarea

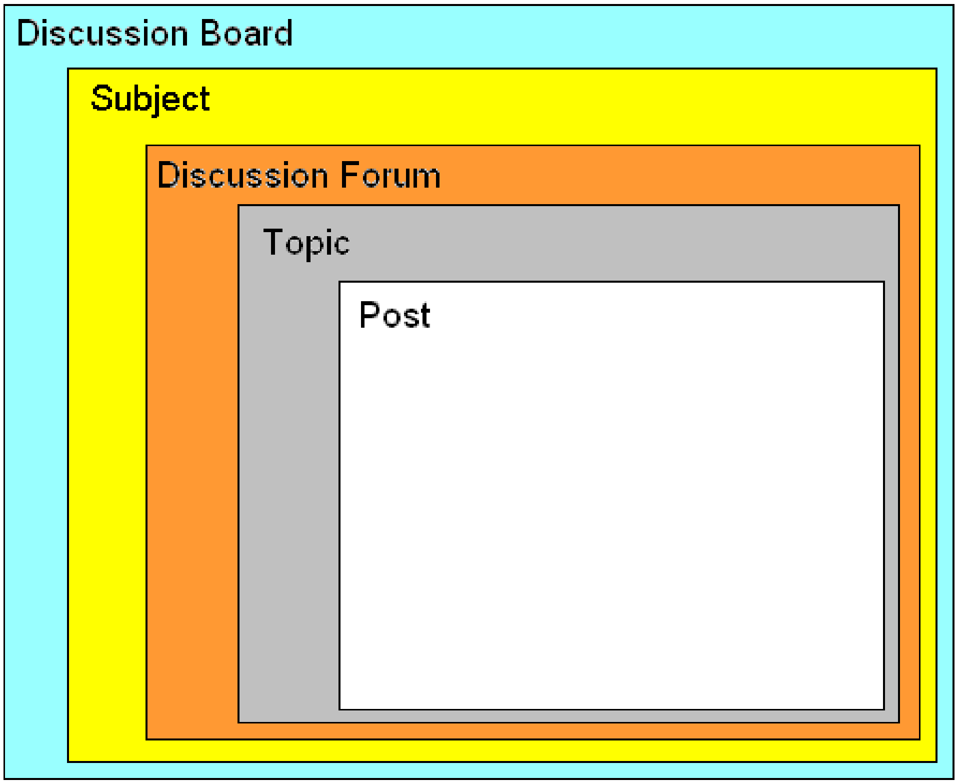
- edit
- delete
- reply

This section explains Discussion Boards through the following topics.

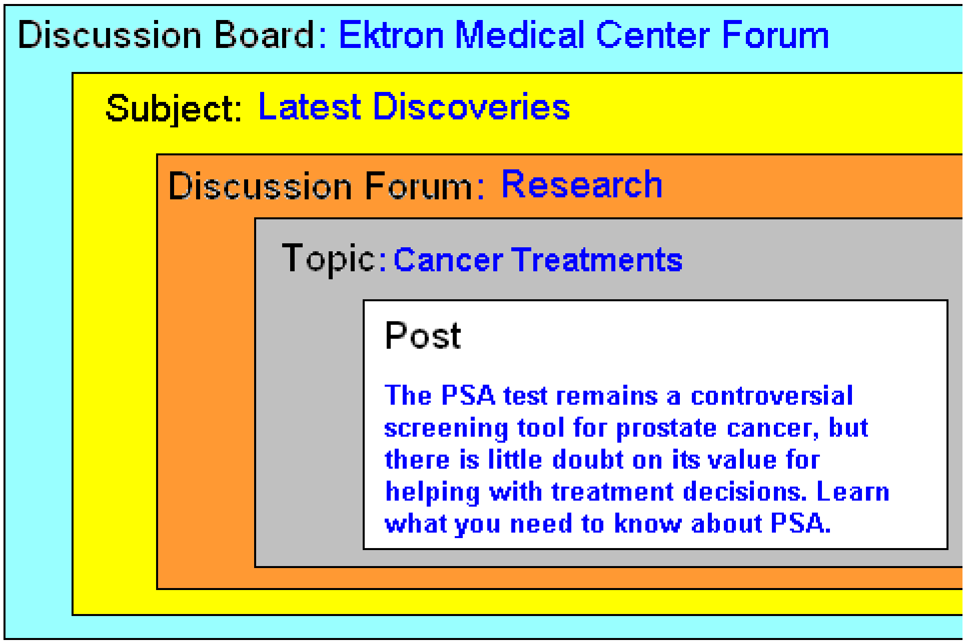
- "Hierarchy of Discussion Board Elements" on page 7-597

Hierarchy of Discussion Board Elements

A Discussion Board consists of a five-level hierarchy, illustrated below. Before creating a Discussion Board, it is important to understand the elements of the hierarchy.

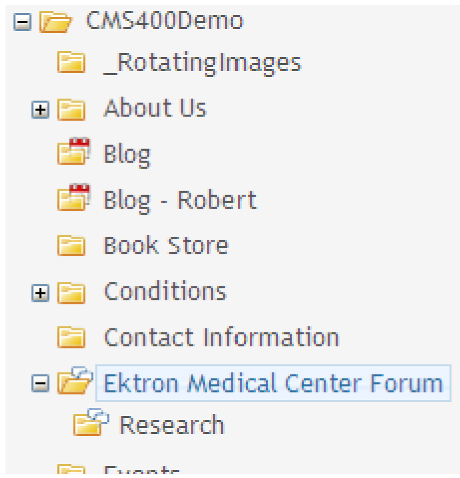


Ektron CMS400.NET supports an unlimited number of Discussion Boards. Each board must follow the hierarchy. Below is the hierarchy with sample data, to explain how each element is used.



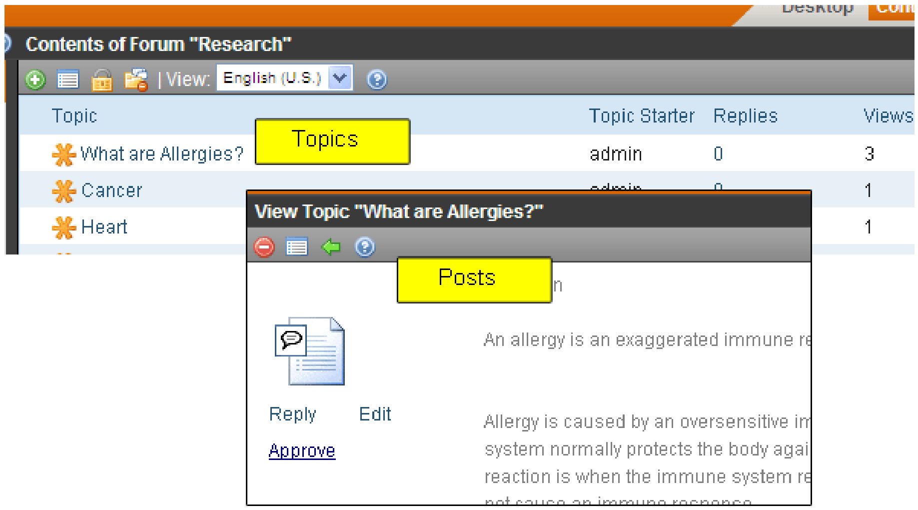
Within the Workarea, Discussion Boards appear as top-level folders in the folder structure.

Forums appears under them. Both folders us this icon () to distinguish them from content and blog folders.



If you click a Discussion Board, you see its Subjects and Forums on the right side of the Workarea, as shown below.

If you click a Discussion Forum, you see its topics. If you click a topic, you see its posts, as shown below.



Implementing Discussion Boards

To implement a Discussion Board into your Web site, place a Forum server control on a Web page. Then, select a Discussion Board.

All Subjects and Forums within that board appear on the Web page. You cannot selectively suppress Subjects or Forums. Keep this in mind when determining the contents of a Discussion Board.

Working with Discussion Boards and Subjects

This section contains the following topics.

- "Creating a Discussion Board" on page 7-601
- "Viewing a Discussion Board" on page 7-605
- "Editing a Discussion Board" on page 7-606
- "Deleting a Discussion Board" on page 7-606
- "Changing Page Size for Discussion Boards" on page 7-606
- "Editing Subject Name and Sort Order" on page 7-607
- "Creating a New Subject" on page 7-607

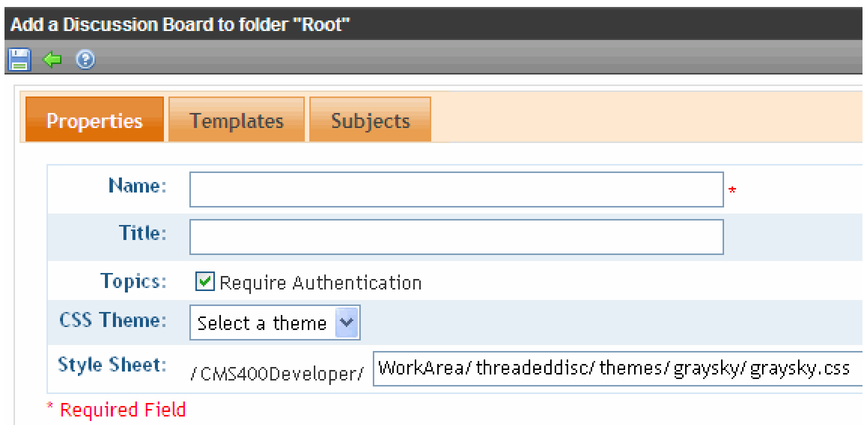
- "Terms & Conditions" on page 7-608

See Also: "Implementing Discussion Boards" on page 7-600

Creating a Discussion Board

To create a Discussion Board, follow these steps.

1. From the Workarea's **Content** tab, navigate to the folder in which you want to place the Discussion Board.
2. Click **New** > **Discussion Board**.
3. The **Add a Discussion Board to folder** screen appears.



Complete the screen using the following table.

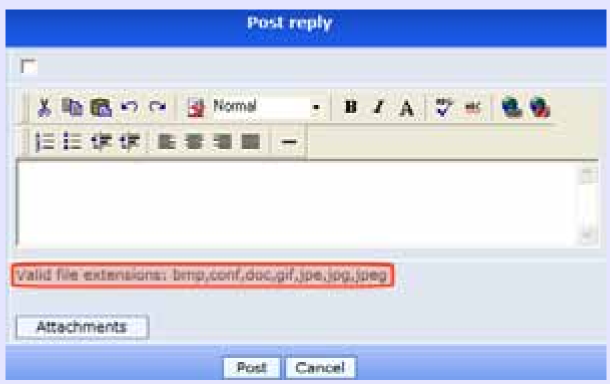
Note: Some items in this table only appear when editing an existing Discussion Board's properties.

Discussion Board Properties

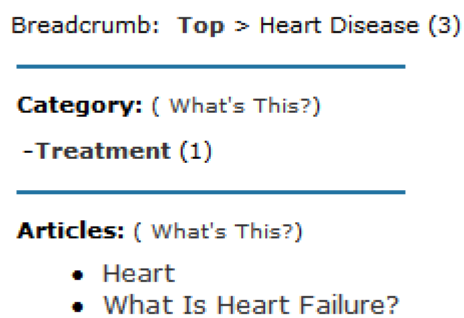
Field	Description	When Available
Name	Enter the name of the Discussion Board. This text describes the board within the Workarea and on your Web site.	Enter or edit
Title	Enter the title of the board.	Enter or edit

Field	Description	When Available

Accepted HTML	A comma-delimited list of HTML tags allowed in the editor. When left blank, all tags are available.
	The default list is:
	`br,hr,b,i,u,a,div,ol,ul,li,blockquote,img,span,`
	`p,em,strong,font,pre,h1,h2,h3,h4,h5,h6,address,embed`
	Site visitors posting to the forum can apply these HTML tags to content when their Forum editor is **eWebEdit400**, as set in the user profile.
	Note: You must add the **embed** tag if you want users to be able to insert WMV files into their posts. See Also: "Adding Video to a Post" on page 7-652
		Enter or edit

Accepted Extensions	A comma delimited list of file extensions that can be uploaded. You can enter the extension with or without the period (.). Use a comma to separate each extension. The default list is: `bmp,conf,doc,gif,jpe,jpeg,jpeg,png` The list appears at the bottom of the editor screen to notify the person entering a post which file types he can attach. 	Edit only
Max File Size	The maximum size of a file, in bytes, that a user can upload. The default is 200000 bytes (.19 megabytes).	Edit only
Topics: Require Authentication	**Effect of this Field on the Web Site** Check this box if a site visitor must sign in before he can post to the Discussion Board. If the user cannot access a login screen, he cannot post. If this box is unchecked, site visitors can post without signing in. **Effect of this Field within the Workarea** If this field is checked, only users with Add Topic or Edit Topic permissions for the Discussion Board can create or reply to posts. See Also: "Assigning Permissions to a Discussion Board" on page 7-636	Enter or edit

Field	Description	When Available
Lock	Check this box if you want to prevent all posting to this Discussion Board. You can do this temporarily or permanently. If a Board is locked, only Administrator user group members can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea. You can alternatively lock any Forum underneath this Board via the Forum properties screen.	Edit only
CSS Theme	Choose a style sheet to determine the appearance of the Discussion Board on your Web site. Select any theme available in the CSS Theme dropdown. The default is `site root/Workarea/threadeddisc/themes/standard.css`. Alternatively, enter a path below the site root folder to your custom CSS file in the path box. **Note**: If you edit a CSS file, Ektron recommends saving it under a new name. This prevents your changes from being overwritten during an upgrade. For additional information on creating custom themes, see "Using a Custom Theme" on page 7-674.	Enter or edit
Page Template	Lets you specify a template for the Forum. If you do not specify a template, the search results do not link properly to the Forum. See Also: To preview what the Forum looks like within the selected template, click the preview icon to the right ( ).	Enter or edit
Taxonomy: Required category selection	If you want all topics in this Discussion Board to be assigned a taxonomy category, check **Required category selection**. If you do, a signed-in user is prompted to select a taxonomy category when creating a topic. This checkbox has no effect when creating new topics within the Ektron CMS400.NET Workarea. See Also: "Taxonomy" on page 9-200	Edit only

Field	Description	When Available
Taxonomy: *All taxonomies appear*	Select a taxonomy whose categories will be assigned to Forum topics. The Taxonomies are created in the Taxonomy Tab. The Discussion Board's taxonomy display represents another way to organize the Forum's posts. See Also: "Taxonomy" on page 9-200 **Effect of Assigning Taxonomy Categories to a Topic** When a Discussion Board server control is placed on a Web page, its display includes a small taxonomy icon (circled below).  When a site visitor clicks this icon, he sees all taxonomy categories. When he selects a category, he sees its subcategories followed by all Forum posts assigned to that category. Below is an example of how a Discussion Board's posts might be organized by taxonomy category.  See Also: "Using the Taxonomy Search" on page 9-235	

Field	Description	When Available
Subjects Tab	Enter as many Subjects as you wish. Each Subject contains one or more Discussion Forums. You *must* create at least one Subject for each Discussion Board. To learn how Subjects fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 7-597. Note: You can also add a Subject by selecting a Discussion Board then selecting **New > Subjects**. **Subject Sort Order** Subjects are the highest level of the hierarchy that appears on your Web site. In the sample Forum below, **Latest Discoveries** and **Patient Care** are Subjects.  Subjects appear in alphabetical order unless you use the **Sort Order** field. The **Sort Order** field accepts a number and uses it to arrange the Subjects of a Discussion Board on the Web site. The lowest numbers appear near the top of the page. To access the **Sort Order** field, follow these steps. 1. Save the Discussion Board. 2. Click the Discussion Board in the Workarea. 3. Click **View > Properties**. 4. Click the **Subjects** tab. 5. Modify the number in the **Sort Order** field as needed.	Enter or edit
Terms & Conditions Tab	Add the Terms & Conditions for using the Discussion Board. By entering text in this text box and saving, you activate the Terms and Conditions feature. See Also: "Terms & Conditions" on page 7-608	Edit only

Viewing a Discussion Board

To view a Discussion Board, select it from the Folders display. When viewing the Board, you see all of its Forums. You can click any Forum to see details about it.

See Also: "Implementing Discussion Boards" on page 7-600;

Editing a Discussion Board

When editing a Discussion Board, you can change information entered when it was created plus additional fields only available when editing. See the **When Available** column of the "Discussion Board Properties" on page 7-601.

To edit a Discussion Board, follow these steps.

1. Click the Workarea's **Content** tab.
2. Form the folder structure in the left frame, click the Discussion Board.
3. Click **View** > **Properties**.
4. Click the Edit button ( ).
5. Update the screen as needed. Fields are described in "Discussion Board Properties" on page 7-601.
6. Click Save ( ).

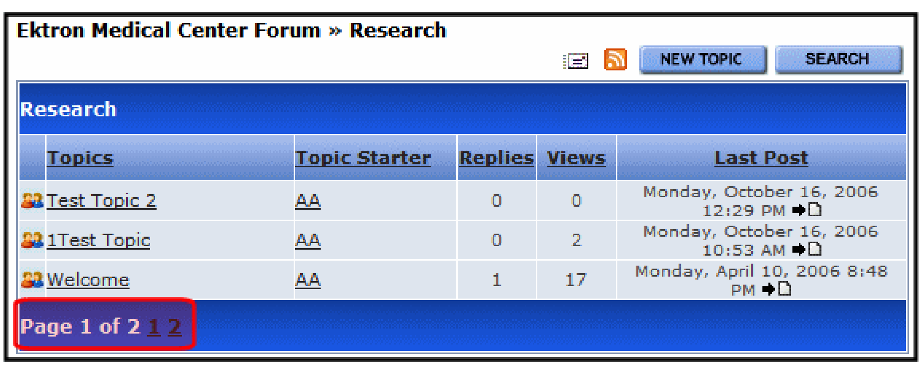
Deleting a Discussion Board

You can delete any Discussion Board. When you do, its Subjects, Forums, and posts are also deleted. Once deleted, they cannot be retrieved.

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board.
3. Click **Delete** > **This folder**.
4. A message appears asking you to confirm.
5. Press **OK** If you are sure.

Changing Page Size for Discussion Boards

You can change the number of Topics or Posts shown on a page by changing the `ek_PageSize` value in the Web.config file.

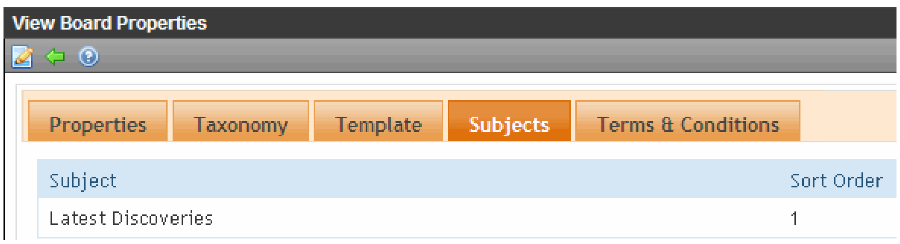


See Also: See "ek_PageSize" on page 1-77

Editing Subject Name and Sort Order

You can change any Subject's name or sort order. To do so, follow these steps.

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board that contains the Subjects.
3. Click **View** > **Properties**.
4. Click the **Subjects** tab.



5. Click the Subject that you want to edit.
6. The current Subject name and sort order appear on a new screen. Edit as needed. See Also: "Subject Sort Order" on page 7-605.
7. Click Save ( ).

Creating a New Subject

Use this procedure when you want to add a new Subject to a Discussion Board.

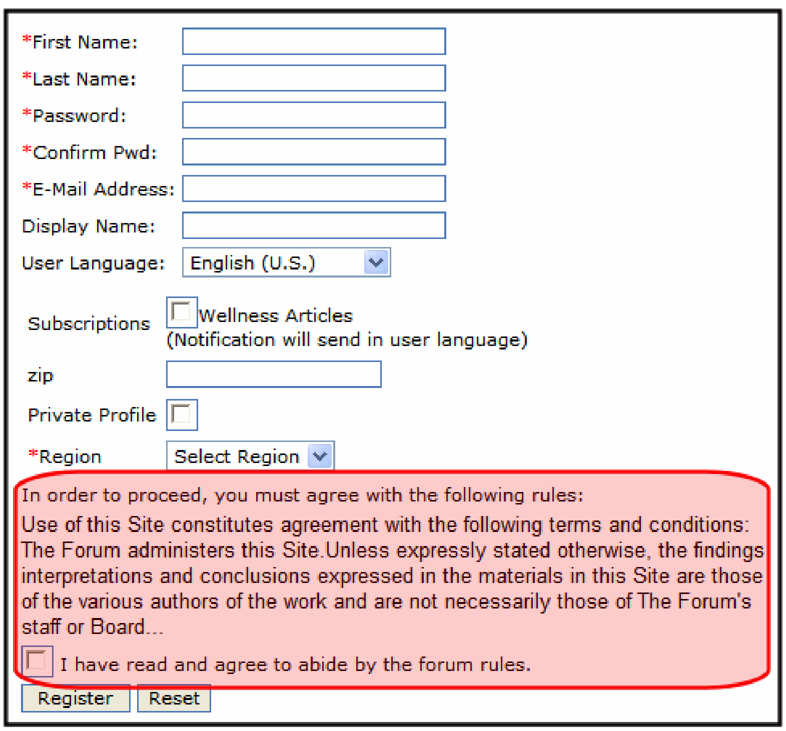
Note: For more information about how Subjects fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 7-597.

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board to which you want to add a Subject.
3. Click **New** > **Subject**.
4. Enter a Subject name and sort order. See Also: "Subject Sort Order" on page 7-605
5. Click Save ( ).

Terms & Conditions

Adding Terms & Conditions to a discussion board allows you to convey to a user the expectations when using the discussion board. Once Terms & Conditions are added, users can only post to the Forum after agreeing to the Terms.

Once any text is entered into the Terms & Conditions editor and saved, anyone posting to the site sees the following screen the first time he tries to post or reply to a Forum. The circled text is an example of your entry in the Terms & Conditions editor. The rest of the text, checkbox, and button are provided by Ektron CMS400.NET.



Adding Terms and Conditions to a Discussion Board

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board to which you want to add terms and conditions.
3. Click **View** > **Properties**.
4. Click the Edit button ( ).
5. Click the **Terms & Conditions** tab.
6. Add the terms and conditions text to editor.
7. Click the Save ( ) button.

See Also: "Implementing Discussion Boards" on page 7-600

Working with Forums

A Forum is a particular thread within a Discussion Board. To learn about how Forums fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 7-597.

For each Forum, you define the following:

- name and Description
- whether posts to it must be approved before appearing on your Web site
- if it's accepting new postings
- its sort order, which determines its sequence on the Web page within its Subject
- its Subject

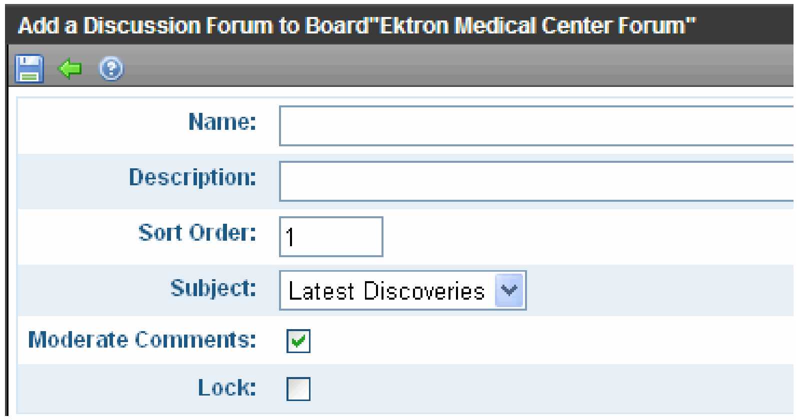
This section contains the following topics.

Creating a Forum

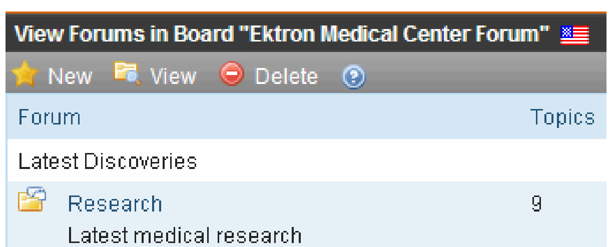
You can only create a Forum after a Discussion Board and at least one Subject have been created.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board.

3. Click **New** > **Discussion Forum**.
4. The **Add a Discussion Forum to Board** screen appears.



Complete the screen using the following table.

Field	Description
Name	Enter the name of the discussion Forum. The name identifies the Forum in the left side of the Workarea. The Forum's name appears next to a forum icon ( ). This icon distinguishes it from content and blog folders. It also appears on the Web site (see example below). 
Description	Enter a more detailed description of the Forum. The description appears on the Web site, as illustrated above.
Moderate Comments	Checking this box causes - comments to require approval before appearing on the Web site See Also: "Approving a Topic" on page 7-622 - a post to be reported to all moderators of the Forum. See Also: "Reporting a Post" on page 7-650 and "Setting Up Post Reporting" on page 7-635 Only users who are granted **Moderate** permission can approve comments, thereby allowing them to be published on the site. See Also: "Discussion Board Permissions" on page 7-638 The Smart Desktop has a **Forum Topics and Posts** category. This tells you how many posts currently require your approval before they appear on the site.

Field	Description
Lock Forum	Check this box if you want to prevent all posting to this Forum. You can do this temporarily or permanently. If a Forum is locked, only members of the Administrators user group can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea. A Discussion Board can also be locked. If a board is locked, a message on this screen indicates that. In that case, no posting is allowed to this Forum regardless of this setting.
Sort Order	Enter a number if you want to arrange the sequence of Forums within the Subject. If you do not, Forums appear in alphabetical order within a Subject.
Subject	Enter the Subject within which this Forum will appear on the Web site. To learn more about the relationship of Subjects to Forums, see "Hierarchy of Discussion Board Elements" on page 7-597.

5. Click Save ( ).

Editing a Forum

Follow these steps if you want to change any information about a Forum.

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board that contains the Forum.
3. Click the Forum.
4. Click the View Properties button ( ).
5. Click the Edit button ( ).
6. Update the screen as needed. The fields are described in "Complete the screen using the following table." on page 7-610.
7. Click Save ( ).

Deleting a Forum

You can delete any Forum. When you do, its topics and posts are also deleted. Once deleted, they cannot be retrieved.

To delete a Forum, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select the Discussion Board that contains the Forum.
3. Click the Forum.

4. Click the Delete Forum button ( ).
5. A message appears asking you to confirm.
6. Press **OK** if you are sure.

Ranking Forum Users

The User Ranking feature lets you recognize users for their Forum contributions. You can create a ranking system that determines the number of posts a user must submit to move up to the next level. Here's an example.

Rank	Number of posts
Newbie	0 - 9
Intermediate	10 - 19
Expert	20 and up

This is known as a *ladder system*, because users move to the next level after a designated number of posts.

This system lets Forum users build credibility. You can assign each rank an image, which appears below the user's name on any post (see illustration below).

The rank also appears on a user's forum profile. See Also: "Suppressing User Information from the Forum Profile Display" on page 7-653

Ranks Independent of the Ladder System

You can also create ranks that are independent of the ladder system. Such a rank bears no relationship to the number of posts a user has made. For example, after a Forum user acquires Ektron Developer Certification, he is assigned the Ektron Developer rank.

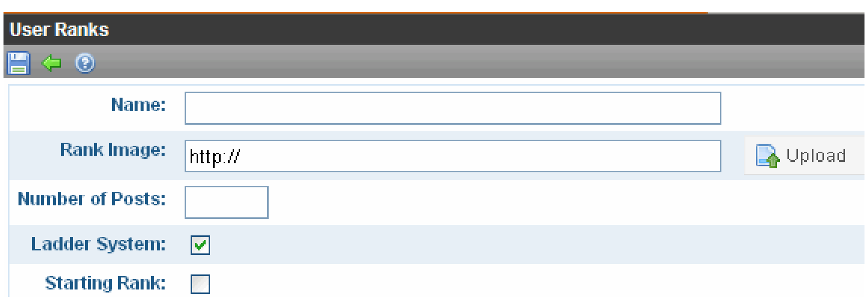
Users can be moved from a non-ladder rank to the ladder system and vice versa. Whether or not a user is in a ladder system, Ektron CMS400.NET keeps a tally of posts. So, if the user is moved into a ladder system at any time, he is placed into the correct rank.

Adding a User Rank

To add a user rank, follow these steps.

Note: You can also access the User Ranks screen from Workarea > Settings > Configuration > Discussion Board > User Ranks. If you have more than one Forum, this screen lets you pick the Discussion Board to which a rank is assigned.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board.
3. Click **New** > **User Ranks**.
4. The User Ranks screen appears.



5. Complete the screen using the following table.

Field	Description
Name	The name of the rank. For example, Newbie, Expert, Developer, or Associate.
Rank Image	Click the upload link to browse and select an image to upload. Once uploaded the path where the image is stored appears in the text box. Images are optional. If you assign an image, it appears below the user's name on any post.

Field	Description
Ladder System	Check this box if this rank is part of a *ladder system*. That is, a rank based on the number of posts a user has submitted to this Discussion Forum. See Also: "Ranking Forum Users" on page 7-612 If you uncheck **Ladder System**, both **Starting Rank** and **Number of Posts** become inactive, since those fields set up and manage the ladder system.
Starting Rank	If you are using a ladder system, use this check box to designate this rank the Starting Rank. A user is assigned to this rank when he submits the first post. A Discussion Forum can only have one Starting Rank. Also, If this is the Starting Rank, you cannot enter a number of posts.
Number of Posts	Enter the number of posts it takes to reach this rank. If the **Starting Rank** check box is checked, the number is 1 and cannot be changed.
Applies To	If you accessed this screen from **Workarea > Settings > Configuration > Discussion Board > User Ranks**, use this field to select the Discussion Forum to which this rank applies.

6. Click the Save button ( ).

Deleting a User Rank

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board.
3. Click **View** > **User Ranks**.
4. Select the rank you want to delete.
5. Click the delete ( ) button.
6. Press **OK** to the confirmation message.

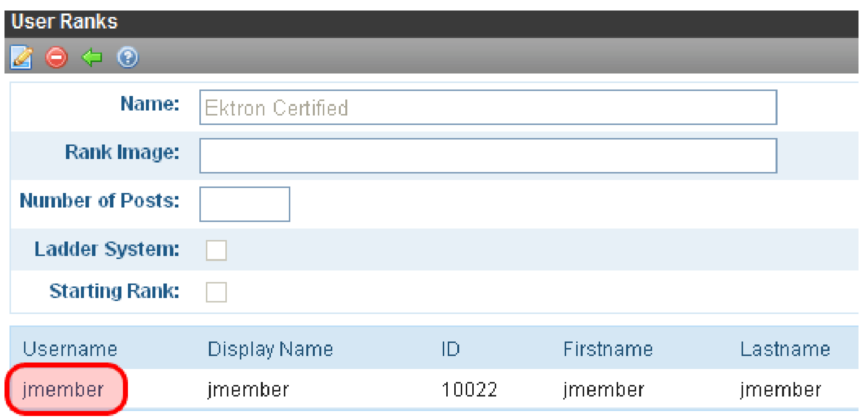
Changing a User's Rank

In order to change a user's current rank, you must know it. As mentioned above, a user's rank appears below the user name on any post he has made.

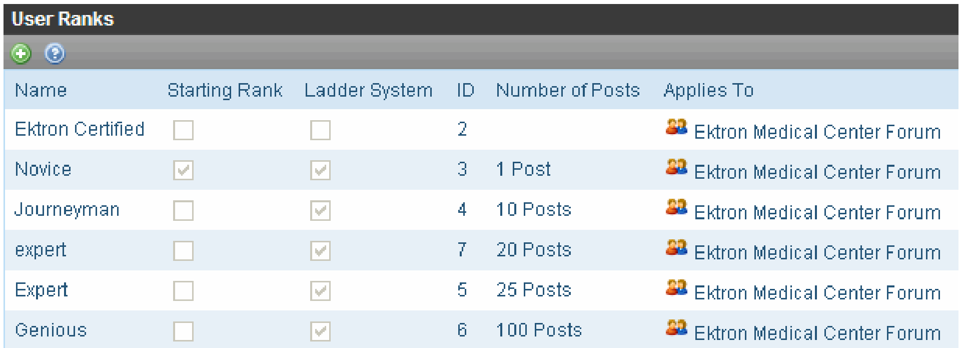
You can only move a user into and out of a ladder system. You cannot change his rank within a ladder system -- that is determined by the number of posts.

To change a user's rank, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Content** and navigate to the forum to which the user has posted.
2. Click **View** > **User Ranks**.
3. Select the rank that you want to move the user out of.
4. The User Ranks screen appears. The lower half shows all users assigned that rank.



5. Click the user that you want to move out of the rank.
6. The screen display all ranks. The current one is selected.



User Ranks					
Name	Starting Rank	Ladder System	ID	Number of Posts	Applies To
Ektron Certified	☐	☐	2		Ektron Medical Center Forum
Novice	☑	☑	3	1 Post	Ektron Medical Center Forum
Journeyman	☐	☑	4	10 Posts	Ektron Medical Center Forum
expert	☐	☑	7	20 Posts	Ektron Medical Center Forum
Expert	☐	☑	5	25 Posts	Ektron Medical Center Forum
Genious	☐	☑	6	100 Posts	Ektron Medical Center Forum

7. Click next to the desired rank.
8. Click the Save ( ) button.

Working with Topics

Topics are specific issues to be discussed in a Forum. For example, in a medical research Forum, a topic might be New Cancer Treatments. Topics can only be started within the Workarea.

Before creating a topic, you must create a Forum into which to place it. To learn more about how Topics fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 7-597.

This section contains the following topics:

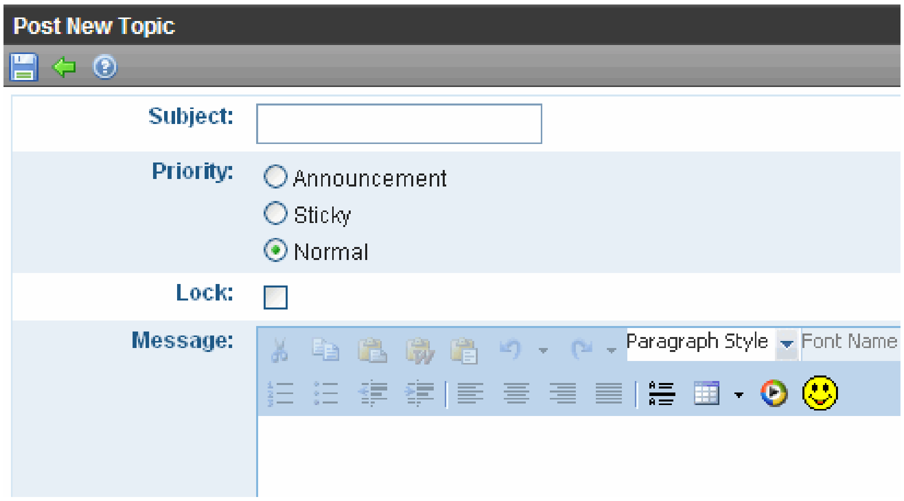
Adding a Topic to a Forum

When a new Topic is created, the first post is created from the message of the Topic.

To create a Topic, follow these steps.

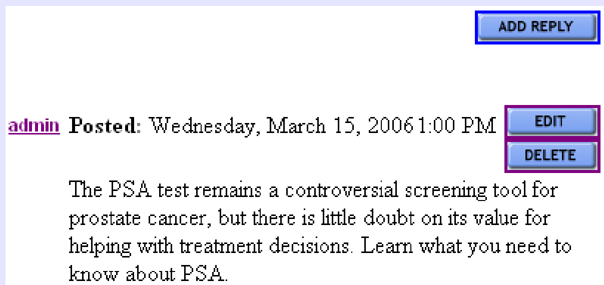
Note: If the user adding the Topic is not a Forum moderator, that user does not see the Topic in the workarea until it is approved. See Also: "Approving a Topic" on page 7-622.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. Click the New Topic button ( ).
4. The Post New Topic screen appears.



5. Complete the screen using the following table.

Field	Description
Subject	Enter a short description of the topic. The Topic Subject appears on the Forum page, as shown below. 
Priority	Set the priority level for the topic. This determines where the topic appears in the topic list on the site. The default setting is Normal. See Also: "Setting and Changing the Topic Priority" on page 7-618
Lock	Check this box if you want to prevent posting of replies to this Topic. You can do this temporarily or permanently. If a Topic is locked, only Administrator user group members can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea.

Field	Description
Message	Enter the topic text. This text appears on a new Web page after a Web site visitor clicks a Topic's Subject line. 

6. Click Save ( ).

Setting and Changing the Topic Priority

You can set a topic's priority when creating it. Within a Forum, topics are sorted by priority.

Anyone with Moderate permission can change a topic's priority. To do so, edit a Forum's properties and click the View Properties button ( ).

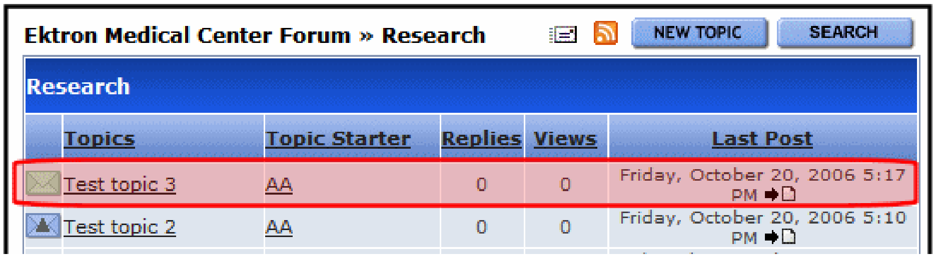
Priority Levels

There are three priority levels:

- Announcement
- Sticky
- Normal

- **Announcement** - topic always appears at the top of the list. If a list has more than one announcement, they are sorted by date with most recent on the top.

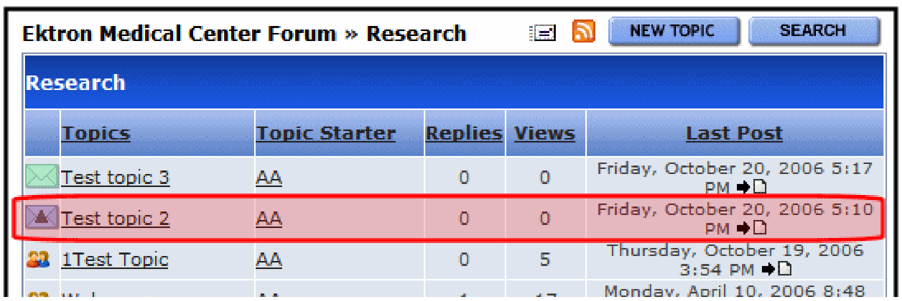
The Announcement icon ( ) indicates its priority to the left of the title.



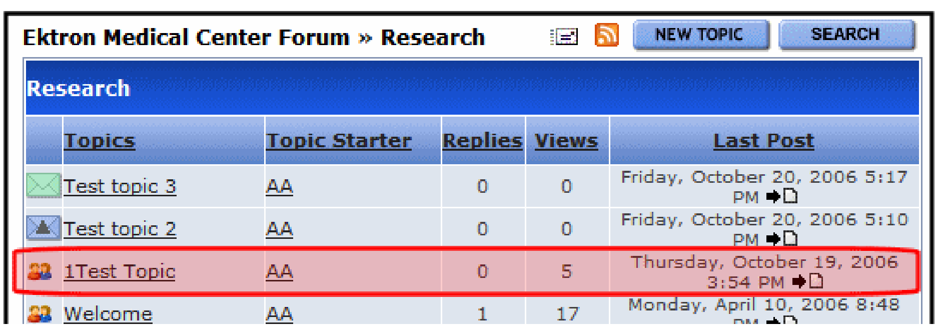
- **Sticky** - topic appears near the top of the list, just below the announcements. If a list has more than one sticky topic, they are sorted by date with most recent on the top.

The Sticky icon ( ) indicates its priority to the left of the title.

.



- **Normal** - Topics with this priority follow Announcements and Sticky topics. The Normal icon ( ) next to the topic indicates its priority.



Locking a Topic

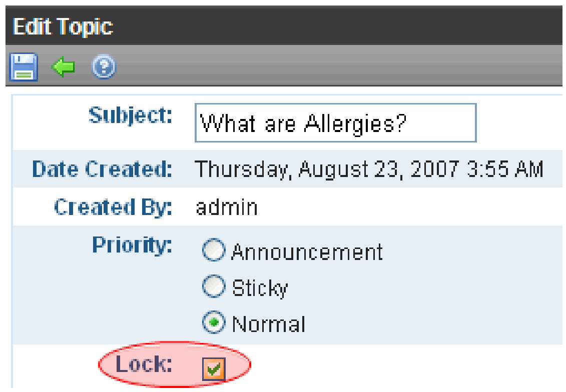
Locking a Forum Topic prevents users from posting a reply to the Topic. For example, you might create an announcement, but don't want people replying to it. Or, you might feel as though a topic has had enough discussion and want to stop further replies.

If a Topic is locked, only Administrator user group members can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea.

To lock a Topic, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. Click a topic.
4. Click the Properties button ( ).
5. Click the **Lock Topic** check box.

Note: To unlock a topic, remove the check mark from the Lock Topic check box.



6. Click Save ( ).

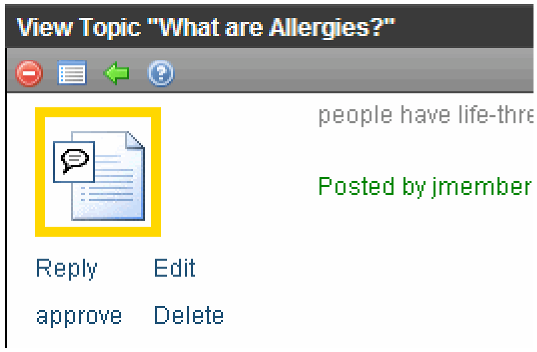
Viewing a Topic

Note: To learn about viewing a topic from your Web site, see "Using Discussion Boards on Your Web Site" on page 7-646.

To view a topic from the Workarea, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to view.

The View Topic screen displays each post within the topic. If a post is surrounded by a yellow border (illustrated below), it must be approved before it can appear on the Web site. Only users with Moderate permission can approve a post. See Also: "Assigning Permissions to a Discussion Board" on page 7-636



The following options may appear across the top of the screen, depending on your permissions.

Button	Description	For more information, see
	Delete topic and all of its posts	"Deleting a Topic" on page 7-622
	View and edit the topic's title and priority	"Editing a Topic's Title" on page 7-621
	Return to previous screen	

Under each post is a set of options that you may be able to perform on any post, depending on your permissions and the status of the post.

If an option is *underlined*, you have authority to perform it. If not, you cannot. For example, if a post's status is approved, the approve option is not underlined because it is already approved.

See Also:

- "Approving a Post in the Workarea" on page 7-624
- "Adding a Reply to a Post" on page 7-623
- "Editing a Post" on page 7-625
- "Deleting a Post" on page 7-625

Editing a Topic's Title

The only part of topic you can edit is its title.

1. In the Workarea, click the **Content** tab.

2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to edit.
4. Click the View Properties button ( ).
5. The Edit Topic screen appears. Modify the title as needed.
6. Click Save ( ).

Approving a Topic

A topic needs approval when a user without moderate permissions for the Forum adds a Topic. To approve a Topic, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to approve.
4. The View Topic screen appears

5. Click the Approve Topic link (shown in red box above).
6. The Topic is approved.

Deleting a Topic

You can delete any Topic. When you do, its posts are also deleted. Once deleted, they cannot be retrieved.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to delete.
4. The View Topic screen appears.

5. Click the Delete link (shown in red box above).
6. A confirmation message appears.
7. Click **OK** if you are sure you want to delete it.

Working with Posts

When a new Topic is created, the first post is created from the message of the Topic. Essentially, all posts to the Topic are replies to the first.

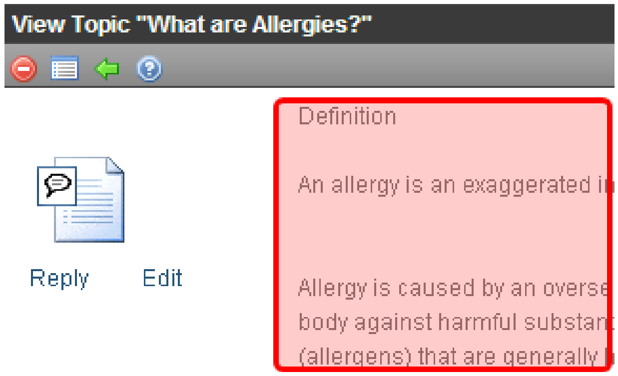
This section contains the following topics, which explain working with posts.

Adding a Reply to a Post

Note: You can also reply to a post from the Web site. See "Posting a Reply" on page 7-648.

1. In the Workarea, click the **Content** tab
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that has the post that you want to reply to.
4. The next screen, View Topic, displays all posts to the selected topic.

5. Find the post that you want to reply to by reading its text (illustrated below).



6. Click reply.
7. Enter a **Title** for the post.
8. In the **Description** field, enter the text of your post.

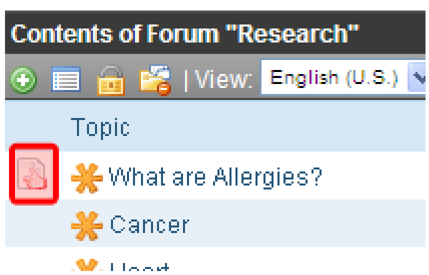
Approving a Post in the Workarea

When defining a Forum, you can check the **Moderate Comments** field. If you do, posts to the Forum must be approved before they appear on the Web site. Only users who are assigned the **Moderate** permission are allowed to approve a post. See Also: "Discussion Board Permissions" on page 7-638

You can approve a post from the Workarea or the Forum on the site. See also "Approving a Post" on page 7-649.

To approve a post in the Workarea, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that has the post that you want to reply to. (Unapproved posts have an "Approval Needed" icon in the left column, as highlighted in red below.)



4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post you want to reply to. Unapproved posts have a yellow border (Illustrated below).

6. Click approve under the post icon.

Editing a Post

You can edit the text of a post but you cannot edit its title.

Note: You can also edit a post from the Web site. See "Editing a Post" on page 7-649.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that has the post that you want to edit.
4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post that you want to edit.
6. Click edit under the post icon.
7. The Edit Reply screen appears. Within the editor, update the text as needed.
8. Click Save ( ).

Deleting a Post

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that has the post you want to delete.
4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post that you want to delete.
6. Click delete under the post icon.

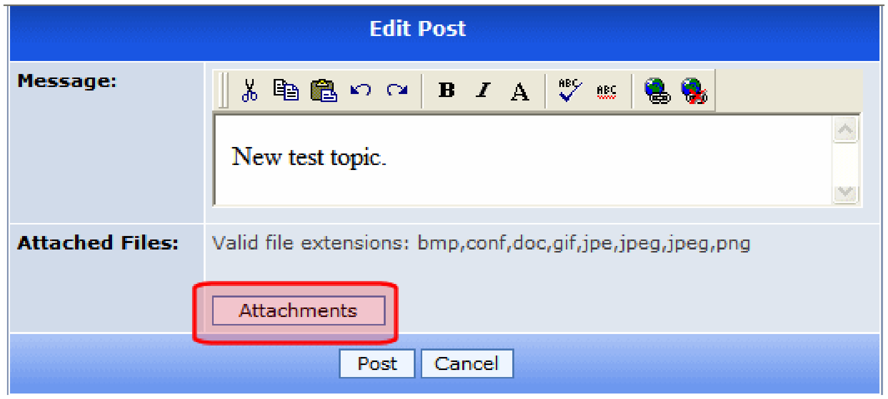
Attaching Images and Files to a Post

When creating a topic or post, you can add an attachment. In the Attached Files field, A list of the files of files that will be attached appears, In addition, a list of valid file extensions appear. The list of valid file extensions and maximum size of the file upload are defined at the Discussion Board level. See "Accepted Extensions" on page 7-602 and "Max File Size" on page 7-602.

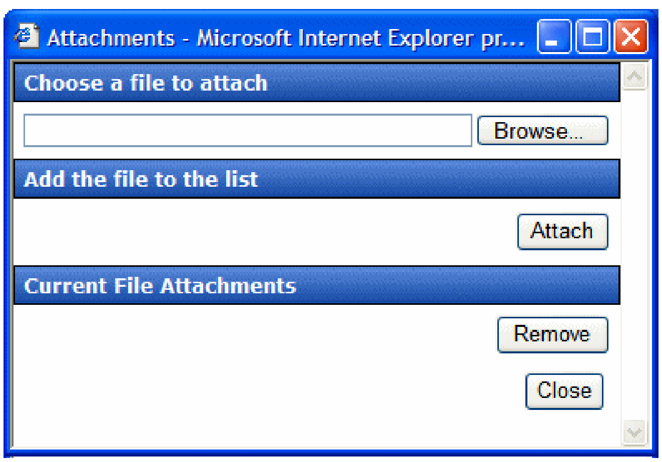
Attaching a File

To add an attachment to a topic or post, follow these steps.

1. Click the **Attachments** button below the editor.



2. The Attachments window appears.



3. Click the **Browse...** button to find the file.
4. Browse to the location of the file and select it.

5. Click **Open**.
6. Click the **Attach** button to attach the file to the post.
7. The file appears in the list of Current File Attachments.
8. Click the **Close** button.

Viewing an Attached File

To view an attached file, click its name in the post.

Removing an Attached File

To remove a file from the list of attachments, follow these steps.

1. Click the **Attachments** button below the editor.
2. Highlight the attached item.
3. Click the **Remove** button.
4. Click the **Close** button.

Searching a Forum's Posts

The Forum server control includes a search feature that lets site visitors search through all posts on your site. Any user can access the search from the Forum screen (see below).

When a site visitor clicks **Search**, he can search the current Forum (the default value), select a different Forum, or search all Forums.

Moving a Topic and Its Posts to Another Forum

If you want to move a topic and its associated posts in one forum to another, follow these steps.

Prerequisite: The forum to which you want to move the topic and posts must exist. See "Creating a Forum" on page 7-609.

1. Access a page on your Web site that has a login button.
2. Sign in as a member of the Administrators group or as a Moderator of the board.
3. Navigate to a page with Discussion Board.
4. Select a forum from the Discussion Board.
5. Navigate to a topic page.
6. Click the **Move to...** dropdown list. (It appears in the right corner above the posts.)

7. Select the topic to which you want to move.
8. Confirm that you want to move all posts.

Replacing Words in a Post

You can configure Ektron CMS400.NET to replace unwanted words in a post. This feature is useful for changing words that are obscene, indecent, or should not appear on your site. In addition, Replace Words can fix commonly misspelled words. For example, *the* can replace *teh*. See Also: "Adding a Replacement Word" on page 7-630

The Replace Words feature works with exact matches but does not append words. For example, if you replace *car* with *auto*, the sentence *I bought the car from the cartel* becomes *I bought the auto from the cartel*. Note that cartel did not change to autotel even though the word car appears in cartel.

This feature is more fully explained through the following topics.

- "Using Regular Expressions" on page 7-628
- "Adding a Replacement Word" on page 7-630
- "Viewing Existing Replacement Words" on page 7-630
- "Editing a Replacement Word" on page 7-630
- "Deleting a Replacement Word" on page 7-631

Using Regular Expressions

If you would like the Replace Words feature to modify words that contain a word you do not want used, you can use Regular Expressions. A Regular Expression, often referred to as regex, is a pattern of metacharaters placed around a word that describes a string. Used for string manipulation, regex allows you to detail a succinct description of a group of words without having to detail each word in the group.

Regular Expression	Description
.	Matches any character, similar to a wildcard. For example, .ar matches any three letter word ending in *ar*, such as car, bar, tar or far.
|	Acts as an *or* operator. For example, steak|stake would find steak or stake.
[ ]	Matches one character that is between the brackets. For example, [rst] matches *r*, *s* or *t*. [d-g] matches *d*, *e*, *f*, or *g*. Another example, [bc]ar matches *bar* and *car*. If you need to match a dash (-), use it a the beginning or end of the group. For example, [xyz-] or [-xyz].
[^]	Matches one character that is not in the group. For example, [^rst] matches any character other than *r*, *s* or *t*. Another example, [^bc]ar does not match *bar* or *car*, but does match words, such as *tar* or *far*.
^	Matches the beginning of any line. For example, ^[bc]ar matches *bar* or *car*, but only at the beginning of a line.
$	Matches the end of any line. For example, ^[bc]ar matches *bar* or *car*, but only when it appears at the end of a line.
( )	Marks a sub expression. For example, alt(a|e)r finds *altar* or *alter*.
*	When an expression is followed by *, it matches zero or more versions of the expression. For example, [rst]* finds *(blank)*, *r*, *s*, *t*, *rs*, *sr*, *rt*, *tr*, *st*, *ts*, *rst*, *rts*, *srt*, *str*, *trs* and *tsr*.
+	When an expression is followed by +, it matches one or more versions of the expression. This differs from * because it does not match *(blank)*. It must match at least one character. For example, r+ matches *r, rr*, *rrr* and so on.
{*x*,*y*}	Must match at least *x* times and not more than *y* times. For example, s{2,4} matches *ss*, *sss* and *sss*. You can also use {*x*} to specify an exact match. For example, s{3} matches *sss*. You can use {*x*,} to specify that the match is at least *x* amount of times. For example, s{4} matches *ssss*, *sssss*, *ssssss* and so on.
?	Must match the preceding character zero or one times. For example, Boa?rder matches *boarder* and *border*.

Adding a Replacement Word

To add a replacement word to a Forum, follow these steps.

Note: In addition to using Replace Words for a specific Forum, you can access the Replace Word feature from the Workarea > Settings > Configuration > Discussion Board > Replace Words. If you have more than one Forum, this allows you select to which Discussion Boards the Replace Words feature is applied.

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **New** > **Replace Word**.
4. The Replace Word screen appears.
5. Add the word to be replaced in the **Old Word** textbox.
6. Add the replace word in the **New Word** textbox.
7. Select the language for the Replace Word.
8. Click the Save button ( ).

Viewing Existing Replacement Words

To view a list of existing words that are replaced, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Replace Words**.
4. A list of word to be replaced appears.

Editing a Replacement Word

1. In the Workarea, click the **Content** tab
2. Select a Forum from the folder structure.
3. Click **View** > **Replace Words**.
4. Click either the Old Word or the New Word to edit.
5. Click the Edit button ( ).
6. Change the Old Word, New Word or Language.
7. Click the Save button ( ).

Deleting a Replacement Word

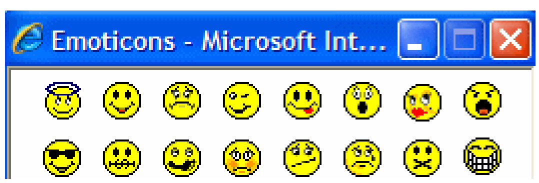
1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Replace Words**.
4. Click either the Old Word or the New Word to delete.
5. Click the Delete button ( ).
6. A dialog box asks if you are sure you want to delete.
7. Click **OK**.

Creating and Editing Emoticons

An emoticon is an icon used to express emotion in a Forum post. For example, .

There are two ways to insert an emoticon.

- A Forum participant clicks the emoticon toolbar button . Next, a small window appears with available emoticons (shown below). The user clicks one to insert it.



- A Forum participant enters a few characters that resemble the image. For example, to insert , the user enters `O:\)`.

While working in a post, the user only sees the text. But when the post is saved, Ektron CMS400.NET converts the text to the corresponding emoticon. In all subsequent work with the post, users see only the emoticon.

"Viewing Emoticons" on page 7-632 explains how to find the list of available emoticons and the characters used to insert each one.

You can view and modify or delete a standard set of emoticons. You can also create your own.

Inserting Emoticon Images

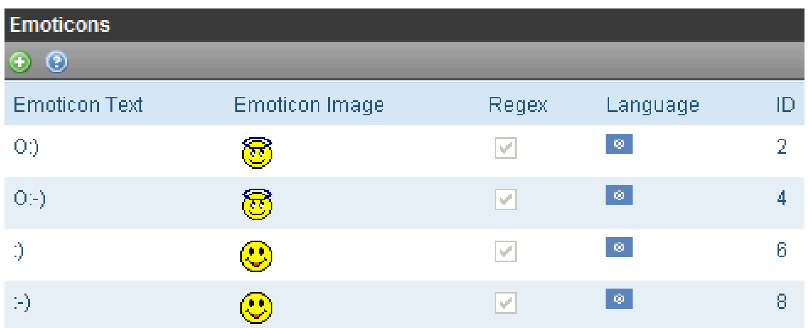
Place emoticon images in the following folder: *webroot*`\Workarea\threadeddisc\emoticons`. Administrators reference these files when editing or creating new emoticons.

Viewing Emoticons

A standard set of emoticons is supplied with Ektron CMS400.NET. After viewing them, you can add new ones as well as delete or modify standard ones.

To see Ektron CMS400.NET's emoticons, follow these steps.

1. Within the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Discussion Boards** > **Emoticons**.
2. A list of emoticon images and text appears.


Emoticons

Emoticon Text	Emoticon Image	Regex	Language	ID
O:)				2
O:-)				4
:)				6
:-)				8

Editing Emoticons

To edit an emoticon, follow these steps.

1. Within the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Discussion Boards** > **Emoticons**.
2. Click the emoticon text or image that you want to edit.
3. Click the Edit button ().
4. Use the following table to guide you through the screen's fields.

Fields on the Emoticons Properties Screen

Field	Description
Emoticon Text	Enter or update the characters a Forum participant would enter to insert this emoticon.
Emoticon Image	Enter the name of the image file that will appear after a user enters the above **Emoticon text** and saves the post. Administrators place emoticon images in the `siteroot\Workarea\threadeddisc\emoticons` folder.
Regex	See "Using Regular Expressions" on page 7-628
Language	Select the emoticon's language from the dropdown list. If a Forum is language-specific, only emoticons assigned to that language or all languages are available.

See Also: "Creating and Editing Emoticons" on page 7-631

Deleting Emoticons

To delete an emoticon, follow these steps.

1. Within the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Discussion Boards** > **Emoticons**.
2. Click the emoticon that you want to delete.
3. Click the Delete button ( ).
4. Reply to the confirmation message.

Creating Emoticons

To create an emoticon, follow these steps.

1. Within the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Discussion Boards** > **Emoticons**.
2. Click the Add button ( ).
3. Respond to the fields on the screen. See"Editing Emoticons" on page 7-632.
4. Click Save ( ).

See Also: "Working with Posts" on page 7-623

Restricting an IP Address

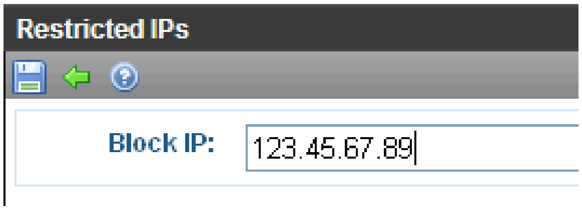
If you are not using authentication for the Forums and want to block a site visitor from posting to the Forum, you can use the Restricted IP feature to block site visitors from posting to the Forum.

Adding an IP Address the Restricted List

Note: In addition to using Restricted IPs for a specific Forum, you can access the Restricted IP feature from the Workarea > Settings > Configuration > Discussion Board > Restricted IPs. If you have more than one Forum, this allows you select to which Discussion Boards the Restricted IPs are applied.

To add an IP address to the restricted list, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **New** > **Restricted IP**.



4. Enter the IP Address to be blocked.
5. Click the Save button ( ).
6. A list of restricted IP addresses appear.

Editing a Restricted IP Address

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.

3. Click **View** > **Restricted IPs**.
4. A list of restricted IP addresses appears.
5. Click the IP address to be edited.
6. Click the Edit button ( ).
7. Edit the IP address in the **Block IP** text box.
8. Click the Save button ( ).

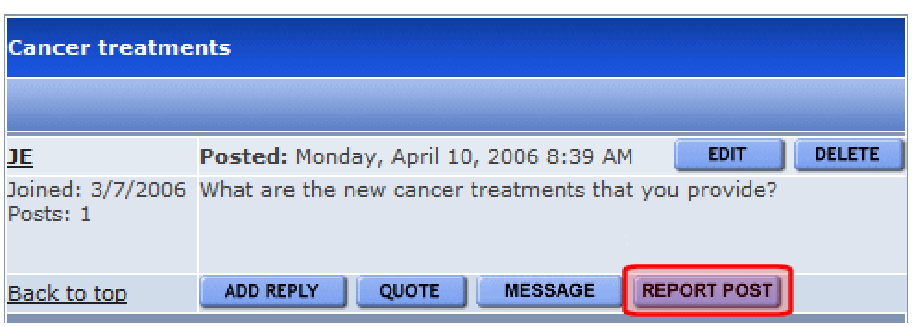
Deleting a Restricted IP Address

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Restricted IPs**.
4. A list of Restricted IP addresses appears.
5. Click the IP address to be deleted.
6. Click the Delete button ( ).
7. A dialog asks if you are sure you want to delete the restricted IP address.
8. Click **OK** to continue.
9. A list of the remaining restricted IP addresses appear.

See Also: "Restricting an IP Address" on page 7-634

Setting Up Post Reporting

When you set up the Forum Post Reporting feature, it adds a Report button to the bottom of each post. The button lets site visitors report posts to Forum moderators. For example, users can report posts that are offensive or spam posts.



When a user clicks the Report button, an email notification is sent to moderators. A moderator can then view the post and decide whether to edit, delete or leave the post. See Also: "Reporting a Post" on page 7-650

To set up a Forum for Post Reporting, follow these steps.

Warning! Your Ektron CMS400.NET Web server must be set up to send emails. See See "Configuring E-Mail for Tasks and Content" on page 1-81 .

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board from the folder structure.
3. Click **View** > **Permissions**.
4. Make sure Forum moderators have Moderate permission. See Also: "Assigning Permissions to a Discussion Board" on page 7-636
5. Click the Back button ( ).
6. Select a Forum.
7. Click the Properties button ( ).
8. Make sure the **Moderate Comments** box is checked. If it is not, click the Edit button ( ) and check the **Moderate Comments** box.
9. Click the Save button ( ).

Assigning Permissions to a Discussion Board

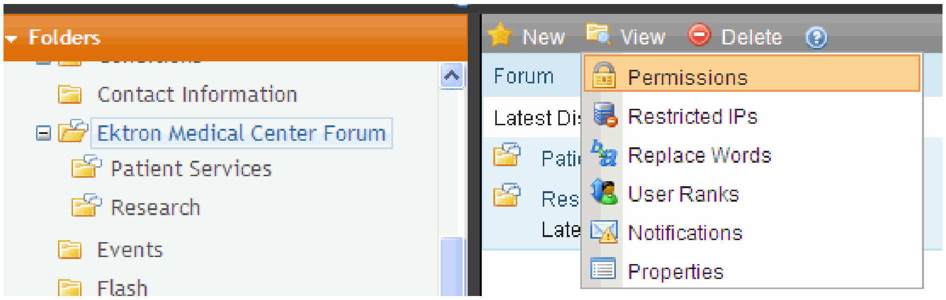
Like regular content folders, Discussion Boards have a permission table that lets you determine which users can perform which functions. (To learn more about folder permissions, see .) Because Discussion Boards have different functions than folders, their permission table is slightly different.

In addition, each Forum has permission settings. By default, a Forum inherits permissions from its parent Discussion Board. But, you can break this inheritance and customize permissions for a Forum. If you break a Forum's inheritance, only the Forum's permission table is checked -- the parent Discussion Board's permissions are ignored.

Modifying a Discussion Board's Permission Table

To access a Discussion Board's permission table, navigate to and click the board so it appears in the Workarea. Then, click **View** > **Permissions**.

Note: Only Administrators group members can access the Discussion Board Permission Table.



Below is an example of a Discussion Board permission table for regular users. Membership users have fewer permissions. See Also: "Discussion Board Permissions" on page 7-638

Discussion Board permissions are more fully explained through the following topics.

- "Initialization of Discussion Board Permission Values" on page 7-637
- "Discussion Board Permissions" on page 7-638
- "Discussion Forum Permissions for Membership Users" on page 7-639
- "Granting Discussion Board Permissions to CMS Users and User Groups" on page 7-640
- "Removing Discussion Board Permissions from CMS Users and User Groups" on page 7-641
- "Editing Discussion Board Permissions for CMS Users and User Groups" on page 7-641
- "Assigning User Permissions to Forums" on page 7-641

Initialization of Discussion Board Permission Values

When you create a Discussion Board, Ektron CMS400.NET seeds its permission table with values from the parent folder, as described in the following table.

Parent Folder Permission	Discussion Board Permission
Read only	Read only
Edit	Edit Topic
Add	Add Topic
Delete	Delete Topic
Add Folders	Add Forum
Edit Folders	Edit Forum
Delete Folders	Delete Forum

Note: Because there are no corresponding permissions for the Discussion Board's **Moderate** and **Post/reply** permissions, their initial value is blank.

So for example, if the user JSmith has permission to perform all functions for a folder, and a Discussion Board is created in that folder, JSmith initially receives all permissions listed above for the Discussion Board. However, you can edit the permissions as needed.

As soon as you create a Discussion Board, it is disconnected from the parent folder's permission table. Subsequent changes to the parent's permissions have no effect on Discussion Board permissions.

Discussion Board Permissions

The following table lists all permissions that may be granted to regular users. Only some permissions can be granted to membership users (that is, site visitors who register to participate in the Forum).

Permission	Give the user ability to	Can be assigned to membership users	For more information, see
Read only	View Forums and posts; cannot submit a post	Yes	
Edit Topic	Edit a topic's title	No	"Editing a Topic's Title" on page 7-621

Permission	Give the user ability to	Can be assigned to membership users	For more information, see
Add Topic	Add new topics	Yes	"Adding a Topic to a Forum" on page 7-616
Delete Topic	Delete a topic	No	"Deleting a Topic" on page 7-622
Post/Reply	Post a new topic or reply to an existing one, either from the Workarea or the site	Yes	"Adding a Topic to a Forum" on page 7-616; "Adding a Reply to a Post" on page 7-623
Moderate **Warning!** Everyone who has Moderate permission will receive notifications when a post is reported. See Also: "Reporting a Post" on page 7-650	Approve and delete posts and topics. Also, receive notifications when a post is reported using the report post feature; only applicable if the Forum's Properties field **Moderate Comments** is checked.	Yes	"Moderate Comments" on page 7-610
Add Forum	Create a new Forum	No	"Creating a Forum" on page 7-609
Edit Forum	Edit a Forum	No	"Editing a Forum" on page 7-611
Delete Forum	Delete a Forum	No	"Deleting a Forum" on page 7-611

Discussion Forum Permissions for Membership Users

By default, membership users are assigned the following permissions:

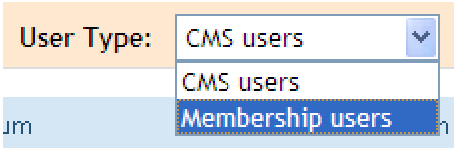
- Read only

- Add Topic
- Post Reply

They cannot be granted Edit or Delete topic nor advanced permissions (Add, Edit or Delete Forum). However, if a membership user creates a new topic, he does have the ability to delete it.

To change the default permissions, follow these steps.

1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View** > **Permissions**.
3. Click the **User Type** dropdown field and choose **Membership Users**.



4. The View Permissions for Board screen appears.
5. Add new member users and groups, remove them, or change their permissions.

Granting Discussion Board Permissions to CMS Users and User Groups

To give a CMS user or user group permissions to work with a Discussion Board, follow these steps.

1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View** > **Permissions**.
3. Click the Add button ( ).
4. All users and groups who are not currently assigned permissions appear. Click any user or group.
5. The Add Permission for Folder screen appears with the selected user or group.
6. Assign appropriate standard and advanced permissions then click the Save button ( ).
   See Also: "Assigning Permissions to a Discussion Board" on page 7-636

Removing Discussion Board Permissions from CMS Users and User Groups

To remove a user or user group from the Discussion Board permission table, follow these steps. After you remove the user, Discussion Boards do not appear within his Workarea.

1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View** > **Permissions**.
3. Click the Delete icon ( ).
4. Select the user or group that you want to remove from the Permission table.
5. A confirmation message. Click **OK**.
6. The user is removed.

Editing Discussion Board Permissions for CMS Users and User Groups

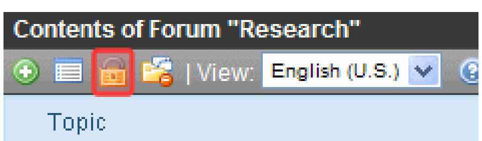
To edit a user or user group's Discussion Board permissions, follow these steps.

1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View** > **Permissions**.
3. Click the user or group whose permissions you want to edit.
4. The Edit Permissions screen appears.
5. Change the settings as appropriate. See Also: "Discussion Board Permissions" on page 7-638
6. Click the Save button ( ).

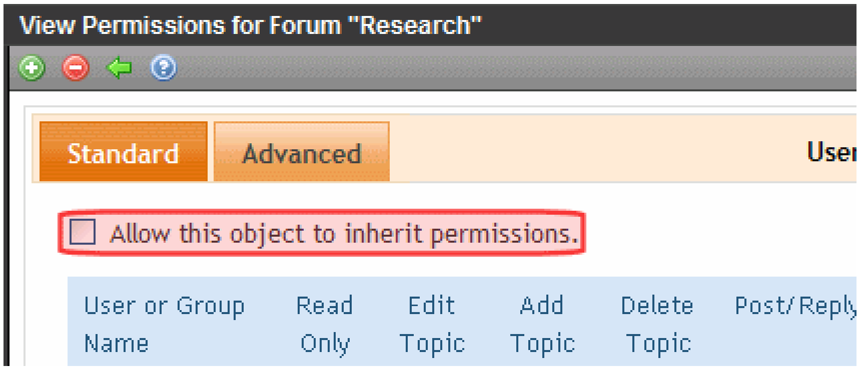
Assigning User Permissions to Forums

You can use all of the permission features available to Discussion Boards with any Forum. To access a Forum's Permission Table, follow these steps.

1. Open **CMS Workarea** > **Content**.
2. Click the Forum.
3. Click the View Permissions button on the Contents of Forum screen (circled below).



4. A Permission Table appears.See Also: "Discussion Board Permissions" on page 7-638



Setting a Forum's Permission Table Values

A Forum initially inherits (that is, copies all permissions from) its parent Discussion Board's permission settings.

When you first view a Forum's permission table, you see these settings plus a check box that allows you to maintain the inheritance or break it (circled above).

If you *break* inheritance by unchecking the **Allow this object to inherit permissions** box, the Forum permission screens change from view-only to edit. At this point, you can modify the Forum's permissions as needed.

To later *restore* inheritance, check the box. When you do, the parent Discussion Board's permissions overwrite any Forum-specific changes. The Forum then reverts to a read-only state. Any permission changes must be made at the Discussion Board level while inheritance is enabled.

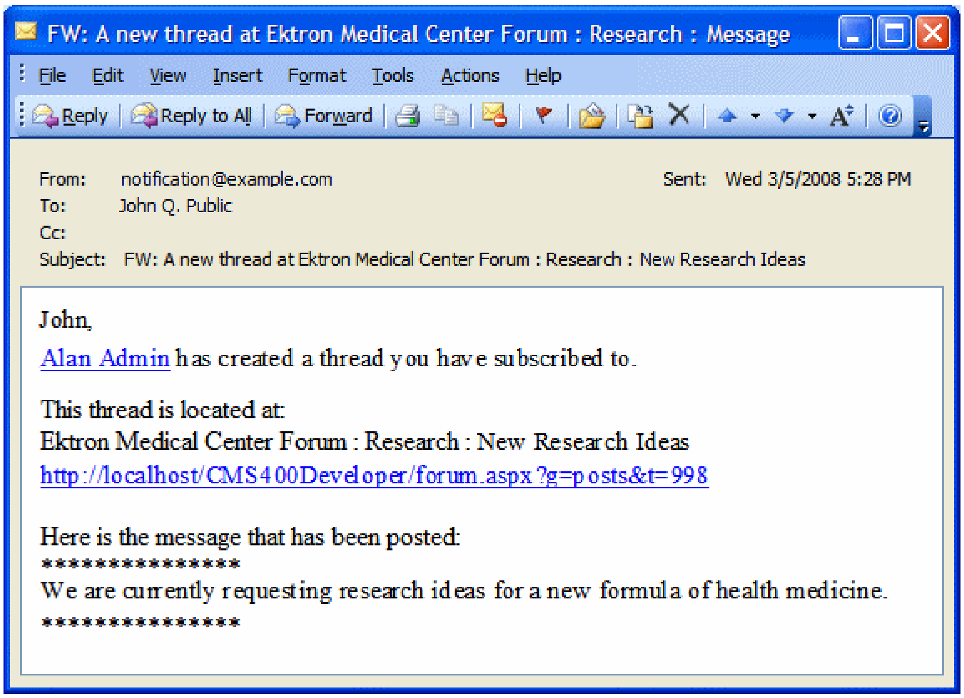
Sending Notifications When a New Forum Topic or Post is Created

The Discussion Board's Email Notification feature enables Ektron CMS400.NET to generate email for a list of registered users whenever a new forum topic or post is created.

For example, anyone may register to be notified whenever a new forum topic or post is created. As soon as the new forum topic or post is created on the discussion board, registered users receive an email announcement with a link to the new topic or post. The recipient clicks the link and immediately accesses the page.

As a result, a self-selected group of users can be instantly notified when user's post information to your discussion board relating to their interests. Once the messages are set up, you don't need to do anything -- everything happens in the background.

Sample Discussion Board Email Notification



See Also: "Creating the Email Message" on page 7-643

Creating the Email Message

You can create an email message to be sent when a new post is added to the discussion board or when a new topic is added. A simple editor lets you apply some XHTML formatting the message.

Including Variables in the Default Message

The messages can include variables that retrieve information about the new post or topic and display it in the message text. The variables are surrounded by at signs (@). For example:

```
@appPosterDisplayName@ has created a thread you have subscribed to.
```

In the email, this text might read:

```
Alan Administrator has created a thread you have subscribed to.
```

You can use the following variables in the body of an email notifications.

Variable	Displays this information in the email
@appTopicTitle@	The title of the topic.
@appTopicId@	The integer ID of the topic.
@appRecipientDisplayName@	The display name of the person receiving the email.
@appRecipientId@	The recipient's integer ID.
@appRecipientFirstName@	The first name of the person receiving the email.
@appRecipientLastName@	The last name of the person receiving the email.
@appRecipientEmail@	The email address of the person receiving the email.
@appHostUrl@	The host site's URL.
@appForumUrl@	The forum's URL.
@appPostMessage@	The text of the message that was posted to the discussion board.
@appPosterId@	The integer ID of the person who created the post.
@appPosterDisplayName@	The display name of the person who created the post.
@appPosterProfileUrl@	The profile URL for the person who created the post.
@appPostUrl@	The URL of the post on the Web site.

To create a message, follow these steps.

1. In the Workarea, go to **Settings** > **Configuration** > **Discussion Boards** > **Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the message.
4. At the **Type** field, select either **NewForumTopic or ForumPost**.
5. Select whether to make the email message a Default message.
6. In the editor, enter the message text. Use the variables listed in the table above to retrieve information about the about the new post or topic and display it in the message.
7. Click the Save button ( ).

.

Inserting the Forum Server Control

After creating at least one hierarchy of Discussion Board elements, place a Forum server control on a Web page. See "Forum Server Control" on page 7-666.

If you want require site visitors to authenticate, the web page that hosts the Forum should also contain

- a Membership server control (or a link to page that has one). This lets site visitors/membership users register for Discussion Boards.
- a Login server control that lets the site visitor/membership user log in

Note: Ektron recommends adding text below the Login server control to remind the site visitor to enter his email address at the **User** field. For example, "At the **User** field, enter your email address."

Inserting Discussion Board Server Controls

Ektron CMS400.NET provides three server controls for use with the Discussion Boards. See "Discussion Board Server Controls" on page 7-665.

Inserting the Forum Server Control

After creating at least one hierarchy of Discussion Board elements, place a Forum server control on a Web page. See "Forum Server Control" on page 7-666.

If you want require site visitors to authenticate, the web page that hosts the Forum should also contain

- a Membership server control (or a link to page that has one). This lets site visitors/membership users register for Discussion Boards.
- a Login server control that lets the site visitor/membership user log in

Note: Ektron recommends adding text below the Login server control to remind the site visitor to enter his email address at the **User** field. For example, "At the **User** field, enter your email address."

Using Discussion Boards on Your Web Site

This section explains what can be done when using a Discussion Board on your site.

Approving a Topic

A Topic needs to be approved when a user who does not have moderate permission for the Forum adds a Topic. When you view topics on the site, any that need approval are highlighted with a different color background.

From this screen, you can click the **Approve** link next to the topic's title. You could also click the Topic's title to view it and click the **Approve** button (APPROVE) on that screen.

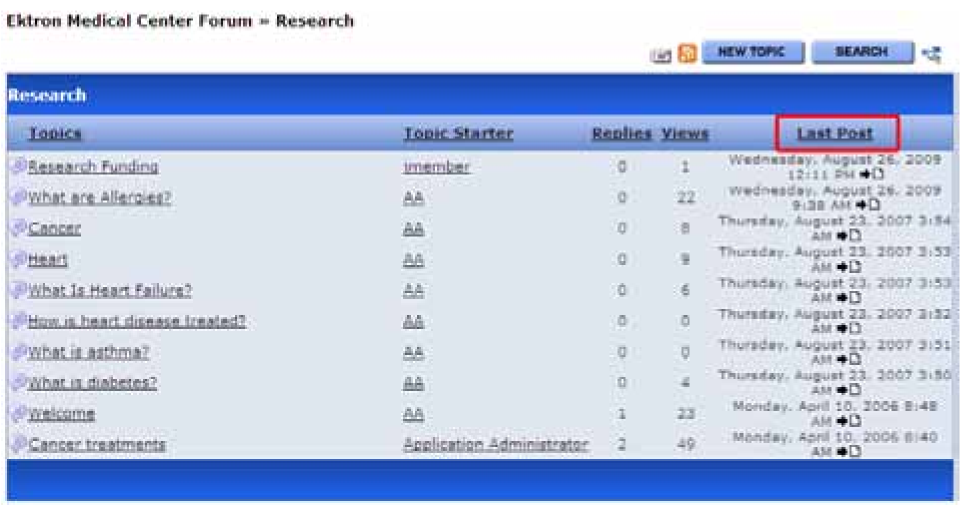
Sorting Topics

Topics can be sorted by the columns of a Forum. To sort a Forum:

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click any of the column titles to sort by alpha or numerical order.

On the first click, items are sorted first by any numeric (1-10) values, then by alpha values (A to Z). Clicking a column title a second time sorts the items in reverse.

When the page is first viewed, the list is sorted by Last Post.



Deleting a Topic

Topics on the site can be deleted from a Forum by the users who created them or by users with the Moderate permission. This includes Membership users. See Also: "Moderate" on page 7-639 and "Discussion Board Permissions" on page 7-638.

Warning! When you delete a topic, any replies or posts associated with the topic are also deleted.

To delete a topic:

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click the topic you wish to delete.
4. Click **Delete Topic**.
5. A dialog appears asking you to confirm the deletion.

6. Click **OK**.

The topic and all associated posts and replies are deleted.

Posting a Reply

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click **Add Reply**.

Note: If a topic is moderated, a message appears stating that your reply is pending moderator approval.

There are two editors that site visitors can use when replying:

- eWebEditPro (scaled-down version)
- eWebEdit400

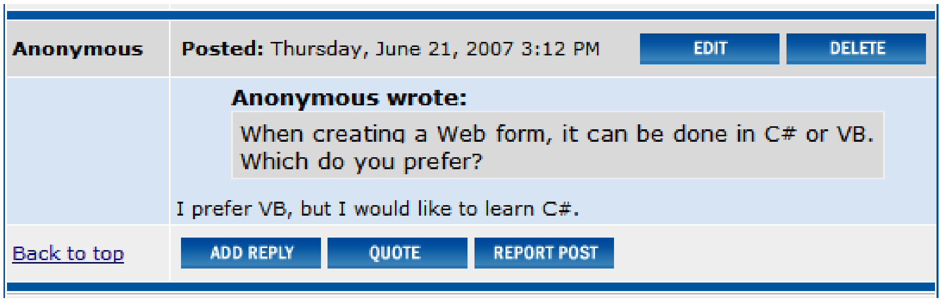
For users who sign in before posting, this decision is made for the user at the **Forum Editor** field on the Edit User screen.

If users does not sign in, eWebEdit400 is the editor.

If a site visitor is using an Apple Macintosh computer, eWebEdit400 is the editor regardless of the **Forum Editor** field value on the Edit User screen.

Quoting a Post

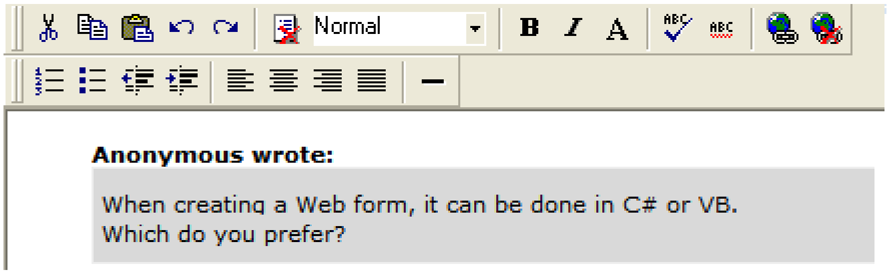
Quoting a post's comments means that your reply begins with the original post's comments. You can then add your comments and even edit the quoted post, so that you can include only the portion on which you are commenting.



To quote a post, follow these steps.

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click a Topic.
4. Find the post you want to quote.

5. Click the **Quote** button.
6. The editor appears with the quoted information at the top of the text area.



.

7. Add your comments below the quote.
8. Click Post.

Editing a Post

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Find the topic you want to edit.
4. Click **Edit**.

Approving a Post

When defining a Forum, you can check the **Moderate Comments** field. If you do, posts to the Forum must be approved before they appear on the Web site. Only users who are assigned the **Moderate** permission are allowed to approve a post. See Also: "Discussion Board Permissions" on page 7-638

You can approve a post from the Workarea or the Forum on the site. See also "Approving a Post in the Workarea" on page 7-624.

To approve a post from the Forum, follow these steps.

1. Log into the site.
2. Navigate to the Forum.
3. Click the Moderate button (

).
4. The Forum’s Control Panel appears.

5. Click the topic.
6. The topic appears. Posts requiring approval have an Approve button ().

7. Click the Approve button ().
8. A screen appears stating that the post has been approved.
9. The post now appears on your Web site.

Deleting a Post

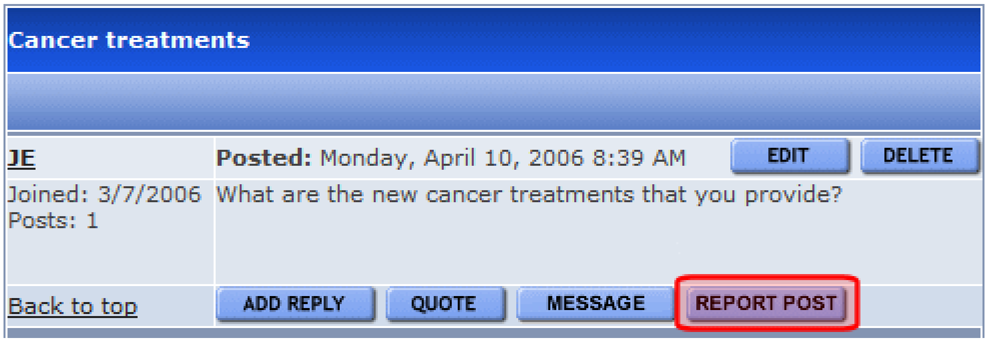
1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Find the topic you want to delete.
4. Click **Delete**.

Reporting a Post

You can allow site visitors to inappropriate report posts, such as spam or offensive posts.

When a site visitor clicks the **Report Post** button (located at the bottom of the post), an email notification is sent to all Forum moderators. Any moderator can review the post and decide to

.

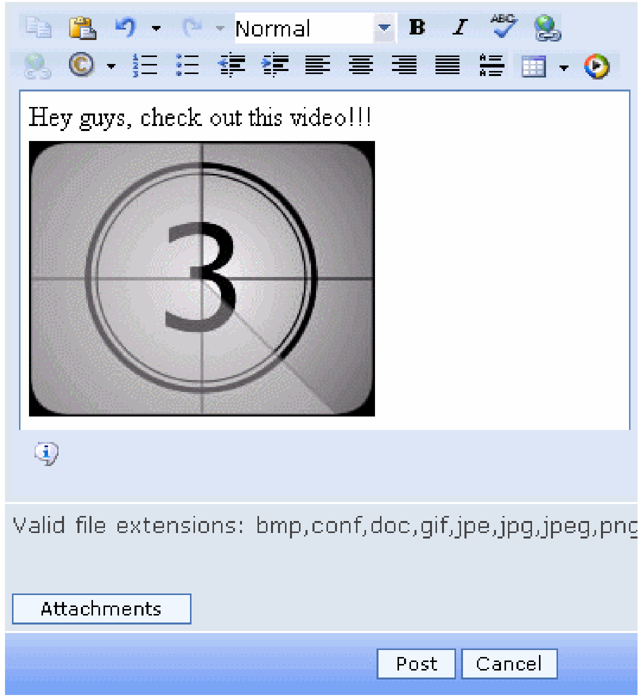


Adding Video to a Post

A user can add video to a post by clicking the Add Video button ( ) in a Forum post using eWebEdit400. The following prerequisites must be in place for a user to perform this action:

- the **embed** tag must be added to the Accepted HTML property in the Workarea Forum's properties. See Also: "Accepted HTML" on page 7-602.
- a user must be using eWebEdit400 See Also: "Using eWebEdit400" on page 7-22
- the video must be in the **.wmv** format
- the video must reside in a hosted location. For example, http://www.example.com/myvideos/fridaylunch.wmv

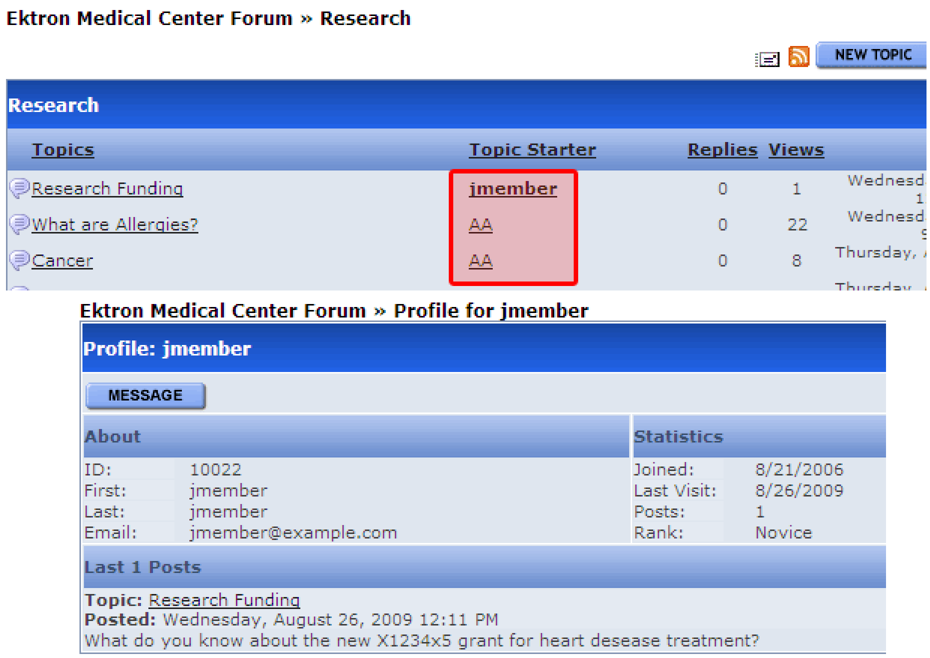
Once you click the Add Video button ( ), enter the path to the video in the dialog box and click **OK**. A place holder is then added to the post.



Suppressing User Information from the Forum Profile Display

Anyone browsing to a Discussion Forum can view information about its contributors by clicking the user name, as shown below.

.



However, if the Forum server control's `HideUserProfile` property is `true`, non-administrator users cannot see the profile, even if the **Private Profile** setting is set to Public. For more information, see "How Users Suppress Profile Information" on page 7-655 and "How Administrators Suppress Profile Information" on page 7-655.

Administrators can see the profile, regardless of how the `HideUserProfile` property is set.

What Information is Contained in the Profile?

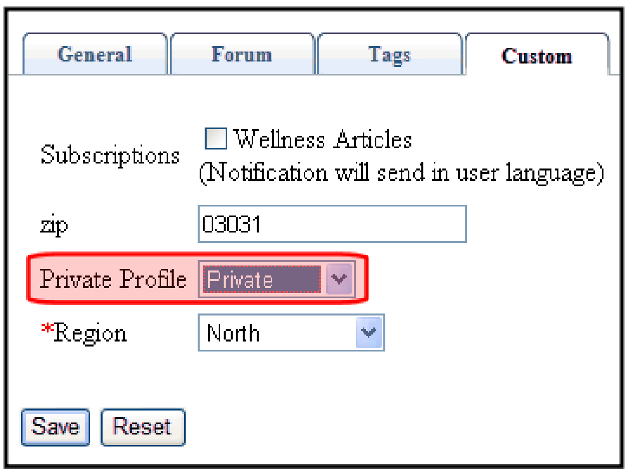
The profile contains the following information about a user:

- **First Name** - the first name of the user
- **Last Name** - the last name of the user
- **Email** - the email address of the user
- **Joined** - the date the user joined
- **Last Visit** - the date the user last visited the site
- **Number of Posts** - the amount of posts a user has contributed
- **Post History** - a list of posts the user has contributed

How Users Suppress Profile Information

Users can determine if their profile is viewable via the **Private Profile** drop down box on the Membership Registration screen (shown below) and the Edit Profile screen. If **Private Profile** is set to Private, profile information is suppressed. If it is set to Colleagues, only a user's colleagues can see his profile. When set to public, everyone can see a user's profile information.

Note: If the Forum server control's `HideUserProfile` property is set to `true`, non-administrator Forum visitors cannot see a user profile, even if the **Private Profile** drop down box is set to Public.



Note: The Membership Registration screen appears wherever your developer inserts the Membership Server Control. For more information, see "Membership Server Control" on page 16-24.

How Administrators Suppress Profile Information

If you want to suppress the display of user names as an administrator, follow these steps.

Note: If the Forum server control's `HideUserProfile` property is set to `true`, non-administrator Forum visitors cannot see the profile, even if the **Private Profile** check box is unchecked.

1. If the user is a *regular user*, go to **Settings** > **Users** and select the user whose information you want to suppress.

   If the user is a *membership user*, go to **Settings** > **Community Management** > **Memberships** > **Users** and select the user whose information you want to suppress.

2. In the User Properties area of the screen, check the **Private Profile** checkbox.

Outputting a Forum as an RSS Feed

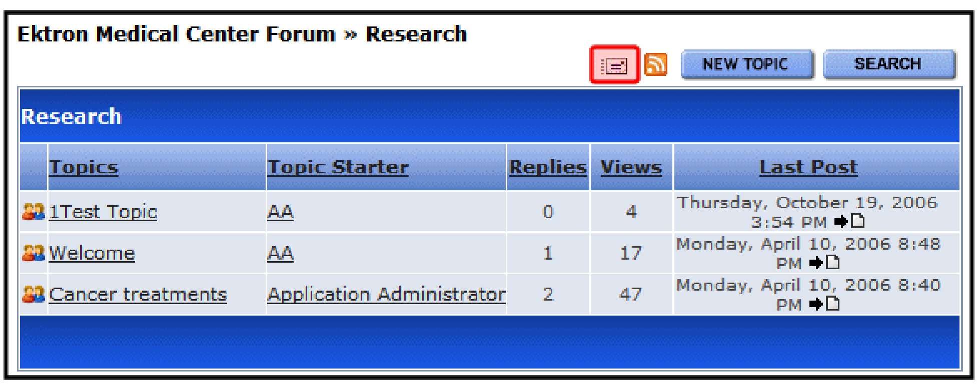
You can output a Forum as an RSS feed by clicking the RSS feed button (). Each level of the Forum has an RSS feed button. This allows you to output a specific topic as an RSS feed.

This following is an example of the output.

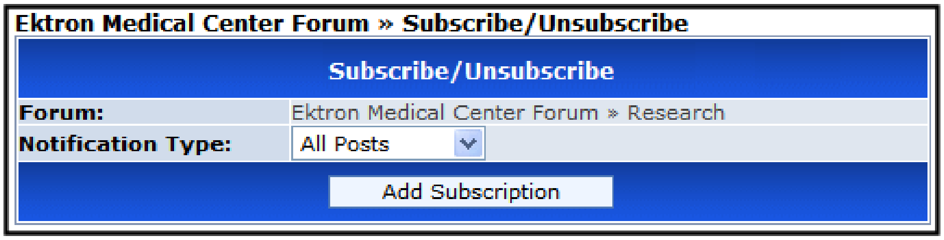
```
 <?xml version="1.0" encoding="UTF-8" ?>
- <rss version="2.0">
<!-- Generated by Ektron CMS400.NET -->
 - <channel>
    <title>Ektron Medical Center Forum</title>
   <link>http://test/webform.aspx</link>
    <description>Ektron Medical</description>
  - <item>
<title>Research</title>
<link>http://test/webform.aspx?g=topics&f=108</link>
    - <description>
 <![CDATA[ Latest medical research ]]>
</description>
<pubDate>Wed, 11 Oct 2006 17:50:04 GMT</pubDate>
    </item>   </
channel>   </
rss>
```

Subscribing to a Discussion Board

After logging in, discussion board users can subscribe to Forum posts and replies by clicking the Subscribe button ( ) (highlighted below).



The button appears at each Discussion Board level, so that a user can subscribe to Forums and topics of interest. After clicking the button, the following screen appears.



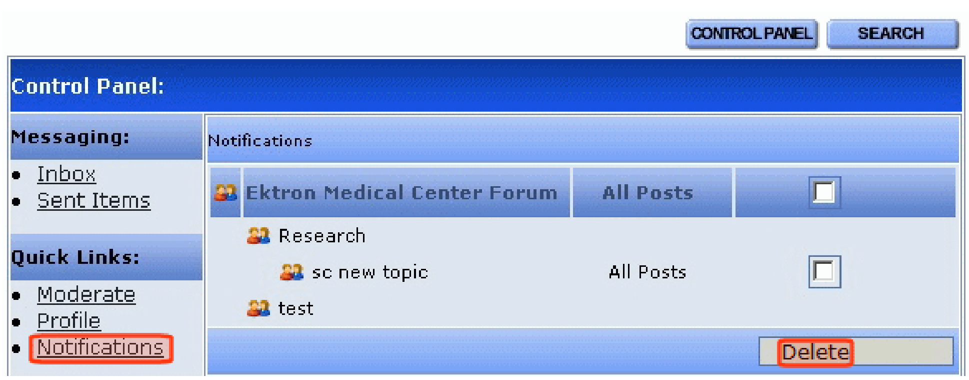
The user selects a notification type, listed below.

- **All Posts** - notifies you when any post or reply is added
- **Replies to Me** - notifies you when someone replies to your post

Next, he clicks the **Add Subscription** button. A page notifies him that his subscription was added.

Reviewing Subscriptions

To review your Forum subscriptions, go to the Control Panel and click **Notifications** in the lower left corner. A screen indicates each Discussion Board level to which you have subscribed, as illustrated below.



Deleting a Subscription

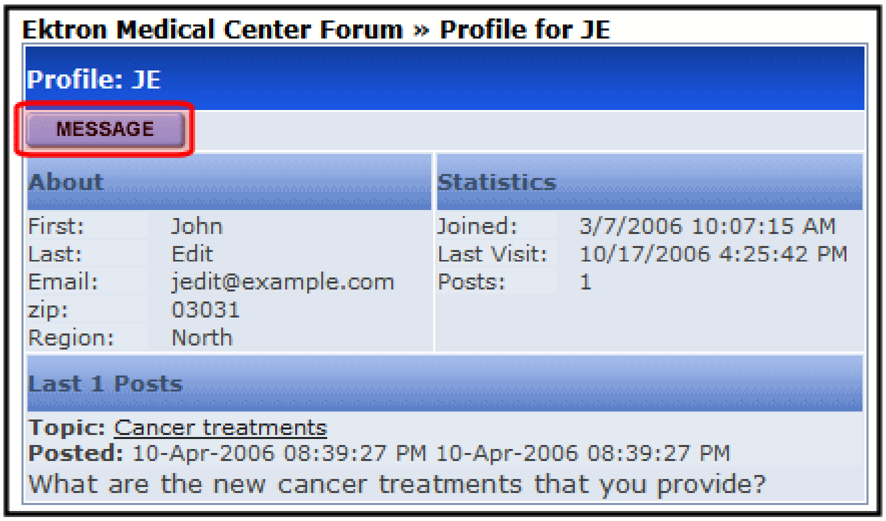
To delete any subscription, check the corresponding check box and click the **Delete** button (highlighted above).

Sending a Private Message

Logged in users can send a private message to the person who created a post or reply. Only the sender and receiver can view private messages. This requires both users to be either a CMS400.NET user or a Membership user.

To send a private message, follow these steps.

1. Navigate to a post.
2. Click the User's name.
3. When the User Profile appears, click the Message button.



4. The Message screen appears.

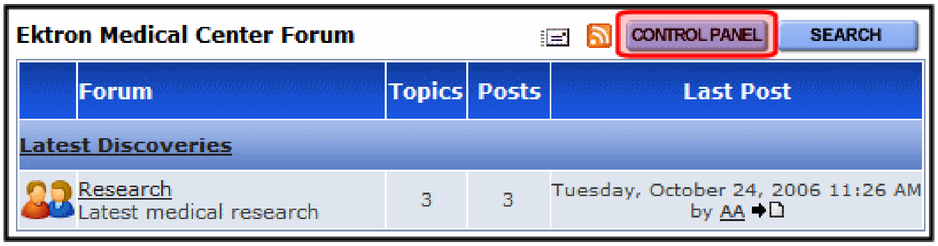
Note: The **To:** field is filled automatically. Users cannot add additional members.

5. Enter a Subject.
6. Enter a Message.
7. Click the Post button.
8. Users are notified that a message was sent.

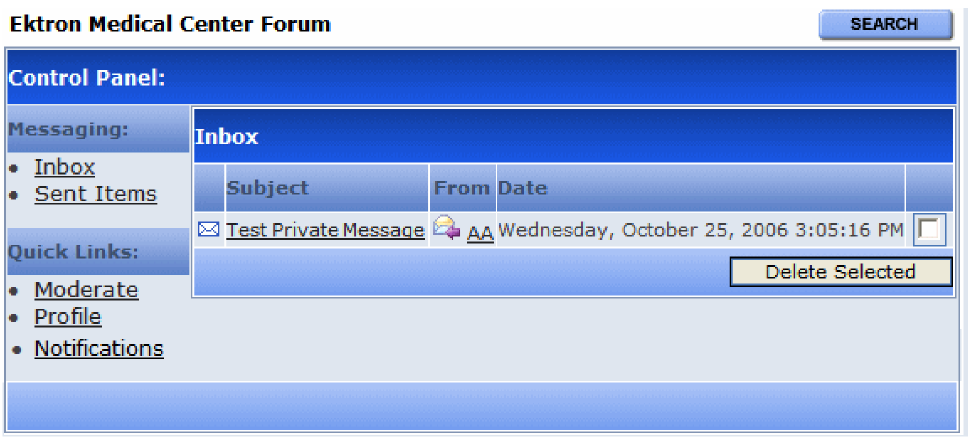
Using the Control Panel

The Control Panel allows logged in users to view your profile, read, reply to and delete private messages. It also allows users with moderate permissions to moderate the Forum. The Control Panel button is located at the Forum level.

.



Clicking the Control Panel button opens control panel.



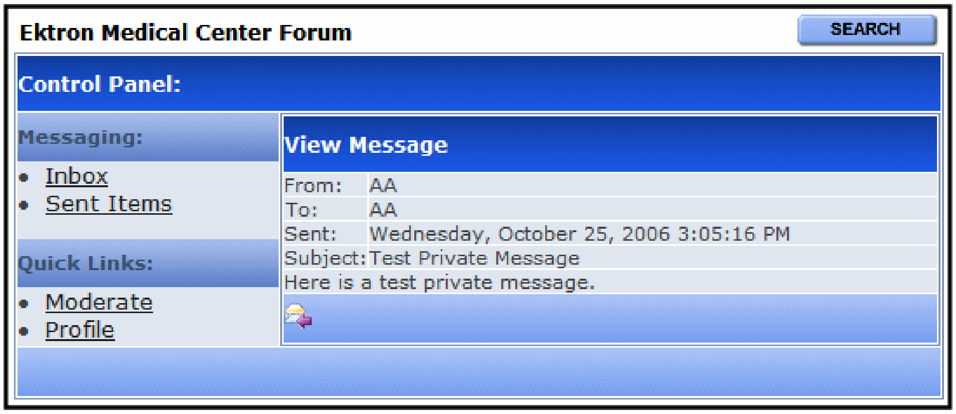
The Inbox view appears by default. From this view, users can read a message by clicking on it. Once a message is read, its icon changes from unread ( ) to read ( ).

In addition, users can view information about the person who sent the message by clicking their name. Users can also delete the message by clicking the corresponding check box then the delete button. To switch to a different view, click its link.

The user can also check his subscriptions. See "Reviewing Subscriptions" on page 7-657.

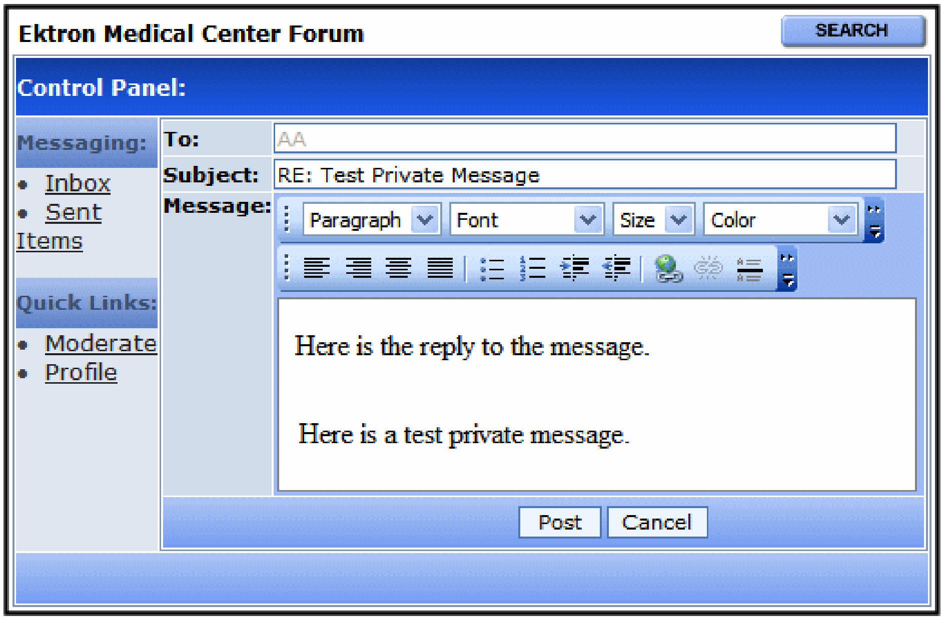
Viewing and Replying to Messages

From the Inbox or Sent Items in the Control Panel, users can view a message by clicking on it. On the View Message screen, users can see who sent the message, to whom the message was directed, when it was sent, the subject and the contents of the message.



Users can reply to a message by clicking the reply button (). Once clicked, the editor opens in the control panel, and a user can reply.

Warning! When replying to a private message, users add their response to the existing message. Only one message is created.



Once a user adds a reply to the private message, he clicks the **Post** button. He is then informed that the message was sent.

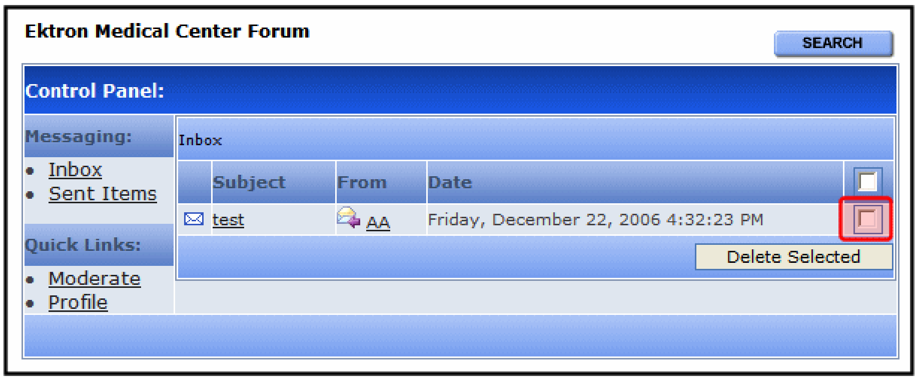
Deleting a Private Message

To delete a private message, follow these steps.

1. Click the Control Panel button on the front page of the Discussion Board.

.

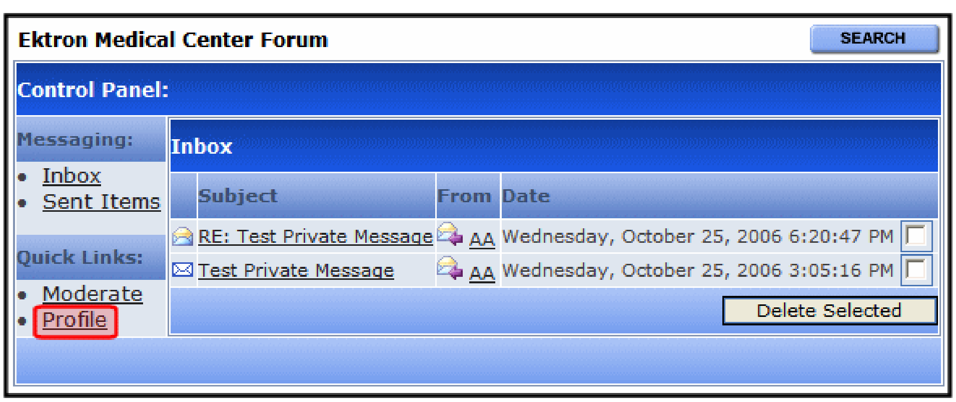
2. Click the check box next to the message.



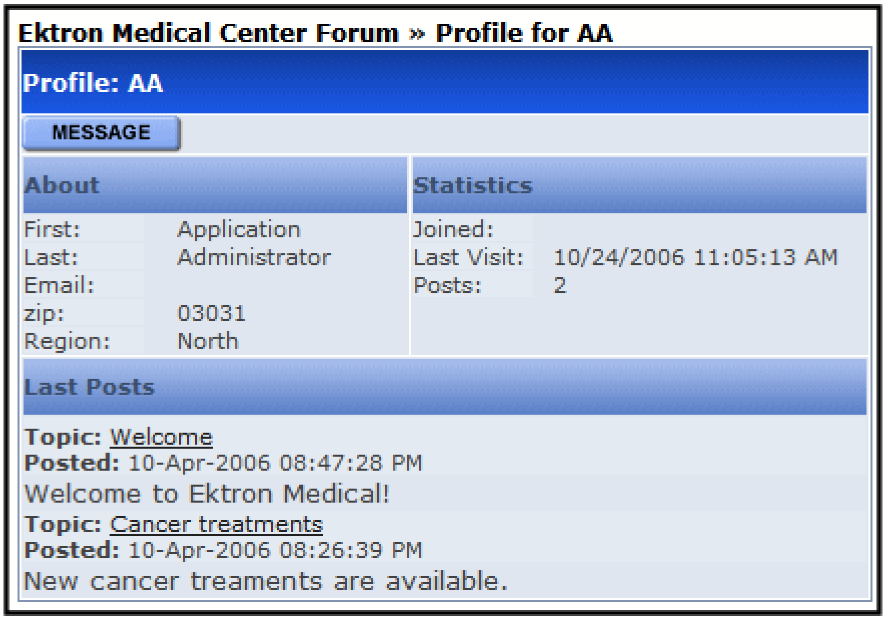
3. Click the **Delete Selected** button.
4. A confirmation box asks if you want to delete all selected messages. Click **OK**.
5. The message is deleted.

Viewing a User Profile From the Control Panel

To view a profile from the Control Panel, click the Profile link in the Control Panel. See Also: "What Information is Contained in the Profile?" on page 7-654

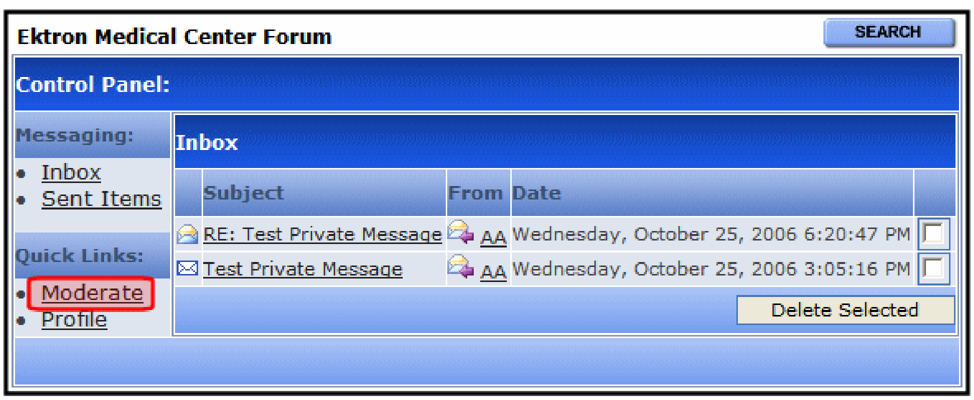


Once the Profile link is clicked, the user's profile page appears.

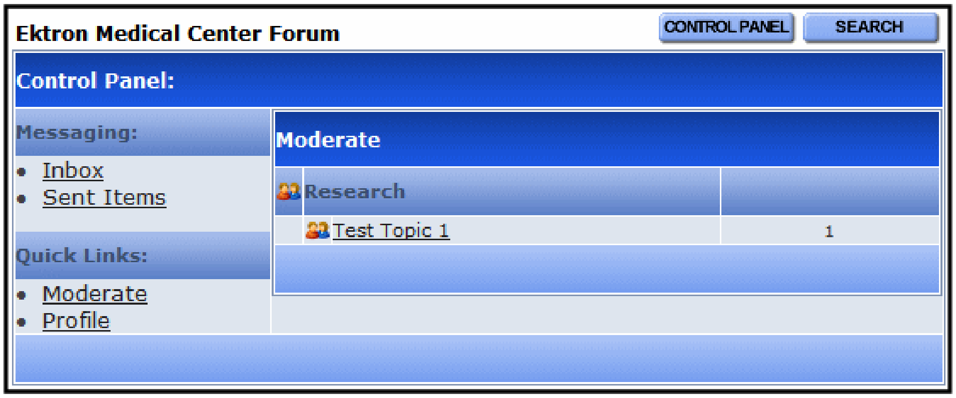


Moderating From the Control Panel

Users who have permission to moderate a Forum can do so from from the Control Panel by clicking the **Moderate** link.



Once **Moderate** is clicked, the user sees a list of items that need approval.



Clicking an item opens the post. From this screen, you can edit, approve, or delete the post. See Also: "Approving a Post" on page 7-649.

Using Discussion Boards in Community Groups

Beginning in version 8 of Ektron CMS400.NET, the community groups can have their own discussion board. This provides forum discussions for the community that are limited to the forum members.

All of the features of the Discussion Board system are available to a forum in a Community Group. However, only one step is needed to first create a Discussion Board in the database.

The following example shows a discussion forum on a community group page.

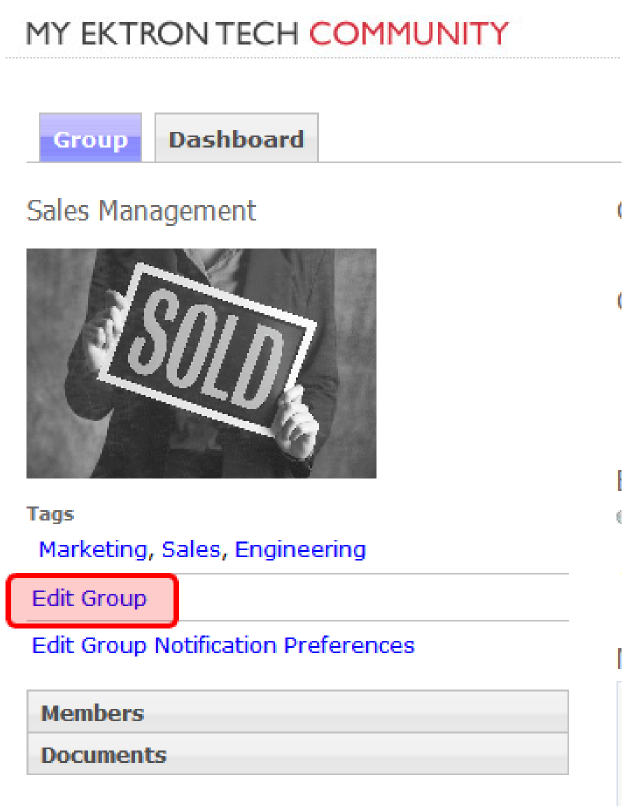
Creating a Community Discussion Board in the Database

To use a group discussion board, you must first add the group discussion forum into the database. Each group needs to do this one time when they decide to have a discussion forum for their group.

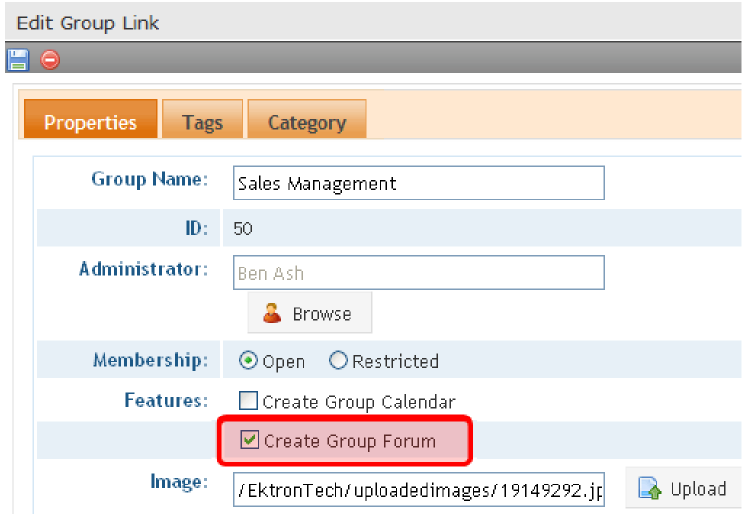
Add a group discussion forum database by following these steps.

1. Login to your Web site.
2. Navigate to your group web page.
3. Click the Edit Group link.

   In this example, the Edit Group link (circled below) is located on this group profile page of the eIntranet Starter Site.



4. The Edit Group Link window appears
5. Check the Create Group Forum checkbox (circled below) to create a group forum in the database.



Warning! You cannot uncheck this option at a later time after the group forum database has been created.

6. Click the Save button.

Now a group forum exists in the database and can appear on the group page.

Discussion Board Server Controls

The Discussion Board feature provides a forum where topics can be discussed on your Web site. A CMS or membership user with Add Topic permission creates a topic and posts a starter question. Any site visitor can then reply.

Ektron provides three server controls for use with Discussion Boards.

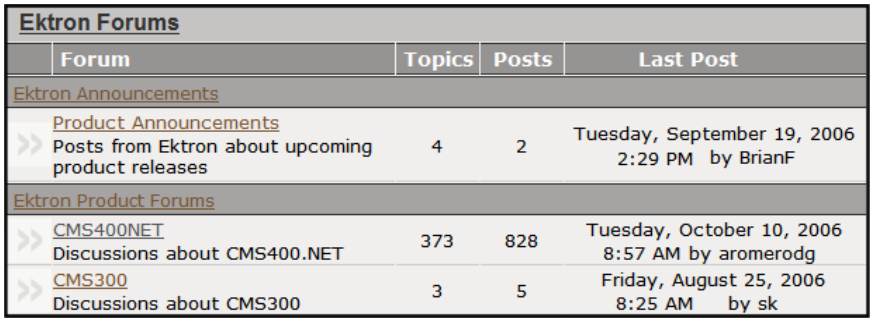
- "Forum Server Control" on page 7-666 - use to place a Discussion Board on a Web page
- "ActiveTopics Server Control" on page 7-677 - use to display the most active or most recent topics and posts
- "PostHistory Server Control" on page 7-679 - use to display a list of posts for a user

For more information about Discussion Boards, see "Discussion Boards" on page 7-596. When using the Forum server control, see "Inserting the Forum Server Control" on page 7-645.

Forum Server Control

Warning! After placing a Forum server control on a page, follow the procedure described in "Updating the Page Command" on page 7-674. Otherwise, the user may get an error when posting a reply.

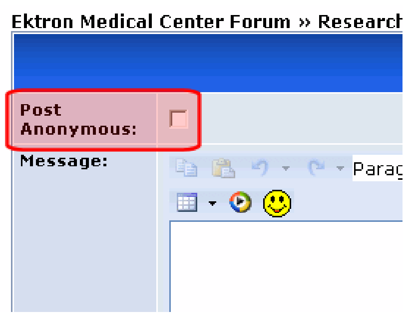
The Forum server control displays a Discussion Board on a Web page.



Ektron Forums			
Forum	Topics	Posts	Last Post
Ektron Announcements			
Product Announcements Posts from Ektron about upcoming product releases	4	2	Tuesday, September 19, 2006 2:29 PM by BrianF
Ektron Product Forums			
CMS400NET Discussions about CMS400.NET	373	828	Tuesday, October 10, 2006 8:57 AM by aromerodg
CMS300 Discussions about CMS300	3	5	Friday, August 25, 2006 8:25 AM by sk

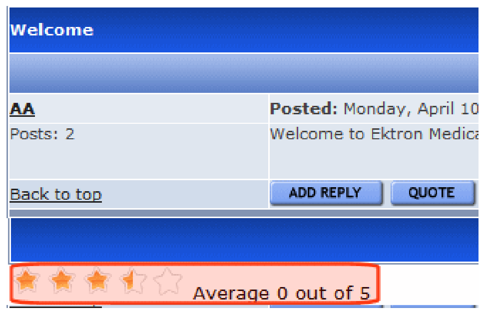
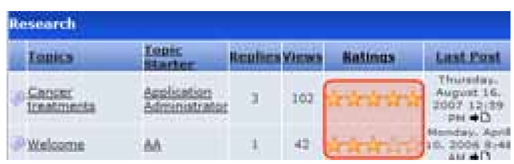
Forum Server Control Properties

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

<table>
<tr><th>Property</th><th>Value</th><th>Data Type</th></tr>
<tr><td>AllowAnonymousPost</td><td>Set to True to allow site visitors the option of posting anonymously to the forum. When true, a Post Anonymous checkbox appears above the text editor used to create a post.

If a site visitor adds a check mark to this box, the word Anonymous appears where the Display Name normally</td><td>Boolean</td></tr>
</table>

Property	Value	Data Type
	appears. The default is **True**. **True** - make the Post Anonymous checkbox available to site visitors when they create a post. **False** - disable Post Anonymous checkbox.	
Authenticated	Indicates if you are logged in to CMS Explorer and can use it to browse to Content, Collections, etc.	Boolean
BoardID	The ID of the Discussion Board to display on this page if one is not defined in a query string parameter. If you don't know the ID, click the Ellipses button (...), then sign in and select a Discussion Board.	Long
CacheInterval	Sets the amount of time, in seconds, a server control's data is cached. The default is 0 (zero). For example, if you want to cache the data for five minutes, set this property to 300. See Also: "Caching with Server Controls" on page 21-31	Double
CustomOrderBy	Provide a property's Friendly Name defined in the Indexing Service to order search results by that property. For example, if you define DocAuthor, results will be sorted by the document's author. Results can be ascending or descending based on OrderDirection. If you enter an invalid property, no search results are returned. If you specify both `CustomOrderBy` and OrderBy, the `OrderBy` property is ignored. The Friendly Name of a property can be found in **Computer Management** > **Services and Applications** > **Indexing Service** > ***Your Index*** > **Properties** > **Friendly Name column**.	String

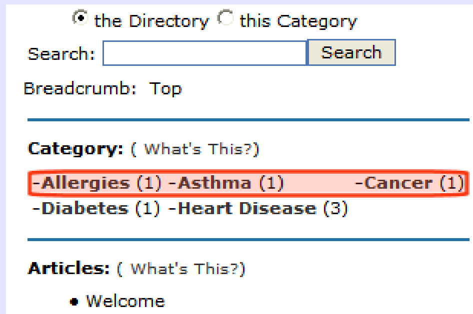
Property	Value	Data Type
DefaultObjectID	The Static ID of a community group.	Long
DynamicForumParameter	Gets or sets the QueryString parameter to read a forum ID dynamically. The default is "**f**". Note that a Forum resides one level below a Discussion Board.	String
DynamicGroupParameter	Gets or sets the QueryString parameter to read a group's ID dynamically. The default is "**g**".	String
DynamicObjectParameter	Dynamic Parameter for the community group id. Default is "**id**".	String
DynamicParameter	Gets or sets the QueryString parameter to read a discussion board's ID dynamically. Set to "None - Use Default" if you want to always display the default discussion board. Note that a Discussion Board is one level above a Forum. **boardid** - reads a Threaded Discussion Board's ID dynamically. **None - Use Default** - use the default discussion board's ID. **ID** - reads a discussion board's ID dynamically.	String
DynamicThreadParameter	Gets or sets the QueryString parameter to read an individual thread's ID dynamically. The default is "**t**". Note that a Thread resides two levels below a Discussion Board and one level below a Forum.	String
EditorCSS	Set the style sheet for the Editor when a site visitor creates or edits a post. By default, this property is blank. When a style sheet is not supplied, the style sheet defined in the Theme property is used.	String
EditorToolbar	Enter a comma separated list of items that you want to appear on the Editor's toolbar. The default is **StyleMenu,FontMenu,ParagraphMenu, TextFormatMenu,LinkMenu,ClipBoardMenu, SymbolsMenu,EmoticonSelect,WMV,Table** See Also: "Adding and Removing Toolbar Items From the Editor" on page 7-675.	String

Property	Value	Data Type
EnableForumQuickSelect	If you set this property to `true`, a dropdown list of all forums appears below the Topic list.  The site visitor can click a forum and jump immediately to it.	Boolean
EnableThreadRating	If you set this property to `true`, a ContentReview server control appears on any topic screen run by this server control. The site visitor can use the control to rate the topic thread.  An average rating for the thread appears next to each topic on the forum screen.  	Boolean
ExcludeList	Enter a comma-separated list of custom user properties to exclude from the Forum's profile page. For example, to suppress the **Subscriptions** field value, enter **subscriptions**. See Also: "Custom User Properties" on page 15-12 and "Suppressing User Information from the Forum Profile Display" on page 7-653	String

Property	Value	Data Type
FilterXslt	Enter the path to an XSLT file used to filter forum content, such as, HTML Attributes, Tags and unwanted words in a user's forum post. This path can be relative or absolute. The user's post is filter once he clicks the **Submit** button. By default, this property points to `<webroot>/<siteroot>/Workarea/Xslt/ForumFilter.xslt` The above file removes hrefs with javascript:, vbscript: and "on" events in the link. You can modify this file or create a new one. **Warning!** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of your Web site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade. For additional sample code used to create a filter XSLT, see the following KB article: http://dev.ektron.com/kb_article.aspx?id=485	String
Hide	Select **False** to display this server control on the page. Select **True** to suppress it.	Boolean
HideUserProfile	Set to **True** to suppress user profiles. The default is **True**. **True** - hides user profiles from non-administrator users. **False** - displays user profiles from non-administrator users. However, an administrator can view a profile regardless of how this property is set. On the other hand, if the **Private Profile** is set to Private for any user, his profile information is not visible, regardless of this setting. If Private Profile is set to Colleagues, only colleagues can see profile information. When the profile is visible, only properties and their values not listed in the `ExcludeList` property (above) appear. For more information, see "Suppressing User Information from the Forum Profile Display" on page 7-653.	Boolean
JavascriptEditorHeight	Set the height in pixels for the eWebEdit400 content designer. The default is **400**. The minimum height is 300.	Integer
JavascriptEditorHTMLMode	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Set to **True** to allow users to edit their posts and replies in HTML. The default is **False**.	String

Property	Value	Data Type
JavascriptEditorToolbar	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Decide which buttons are available in the JavaScript Editor.	String
JavascriptEditorWidth	Set the width in pixels for the eWebEdit400 content designer. The default is **625**. The minimum width is 500.	Integer
Language	Set a language for viewing content. This property shows results at run-time (in a browser). Setting this property to **-1** (negative one) causes the Forum server control to display topics from all available languages.	Integer
ObjectType	Describes the type of forum displayed by this server control. **CommunityGroup** - Used for forums inside a Community page. **DiscussionBoard** - Used for forums on templates that are not Community pages.	String
OrderBy	The order of search results. For example, you want to sort search results by last modified date. **Title** - The content title (alphabetical). **ID** - The content ID number. **Date Created** - The date the content was created. **Date Modified** - The date the content was most recently modified. **Editor** - The user who last edited the content (alphabetical). **Rank** - The rank assigned to the content. See Also: "Search Result Ranking" on page 9-27 **Note**: The **OrderDirection** field determines the *direction* of the search results. For example, if you sort by ID and **OrderDirection** is set to **Descending**, the results sort by ContentID number with the highest number at the top of the list. **Warning!** Specifying a `CustomOrderBy` property overrides this property.	String
OrderDirection	The direction in which search results are sorted. The default is **Ascending**. **Ascending** - Alphabetical results from A to Z; numeric values low to high; dates from oldest to most recent **Descending** - Alphabetical results from Z to A; numeric values high to low; dates from most recent to oldest	String

Property	Value	Data Type
ProfileLink	Enter a link to the user's social networking profile page, a part of ektron's community platform. This allows a user to click another user's name link or avatar and be taken to the user's profile page. There are two variables used within the link that represent the user's ID and the user's display name. **{0}** - represents the user's ID. **{1}** - represents the user's display name. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `userprofilepage.aspx?uid={0}&dn={1}` The default for this property is `?g=profileu={0}`. When the default for this property is used, users are forwarded to a user's profile page that is included with the forum control.	ItemLinkTargets
ProfileLinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the Friends control. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	String
ShowCategories	If set to **true**, when this server control appears, the user see a **Filter by Category** option. This option helps a site visitor zero in on relevant content. If **false**, the **Filter by Category** option does not appear. See Also: "Filtering Search Results by Category" on page 9-81	Boolean
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Value	Data Type
TaxonomyCols	Use this property to determine the number of columns on the Taxonomy screen available from this Discussion Board. In the illustration below, taxonomy categories are arranged in three columns (the default value). 	Integer
TaxonomyMarkupLanguage	If you want to use an .ekml file to format the Taxonomy screen available from this Discussion Board, enter it here. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\CMS400Developer \workarea\customfiles\markup\mylistsummary.ekml`. See Also: "Ektron Markup Language" on page 21-414	String
Theme	Enter the custom theme's folder name. The theme can be relative to the site root or located in the current folder. For example: Relative - `Theme="/workarea/csslib/themes/winter"` Current Folder - `Theme="mytheme"` If you do not specify a theme, the property uses the location defined by the Discussion Board's CSS theme property in the Workarea. See Also: "Using a Custom Theme" on page 7-674	String
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The `<span>` tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The `<div>` tag is used when you want to apply attributes to a block of code. **Custom** - Lets you use custom tag.	String

Updating the Page Command

To prevent an error from appearing when a user posts a reply to the Web page that hosts the Forum server control, follow these steps.

1. Open the Web form onto which you inserted the Forum server control.
2. Access Source view.
3. Go to the top line of the Web form, which begins with `@ Page`.

```
<%@ PageLanguage="VB"AutoEventWireup="false"
CodeFile="Default2.aspx.vb"Inherits="Default2" %>
```

4. Near the end of the line, enter `validaterequest=false`.
5. Build the page.

Using a Custom Theme

This property allows you to specify a custom location for your themes. By doing so, you prevent them from being overwritten when you upgrade.

If you do not specify a theme in the server control, Ektron CMS400.NET uses what is defined in the Discussion Board's properties **CSS Theme** field located in the Workarea.

To create a custom theme, follow these steps.

1. Create a new subfolder on your site. In this example, we use a winter theme:

```
<web root>/<your site>/Workarea/csslib/winter.
```

2. Copy all files in the `/Workarea/Threadeddisc/themes` folder to the `winter` folder.
3. Change the image files to match your theme.

Warning! To find the name of an image, right click on it while viewing it in a browser. Next, select properties. The name appears at the top of the dialog box.

4. Change the Discussion Board's .css file to match your theme and save it with a custom name. (You do not need to do this if an existing .css file meets your theme's needs.)

Warning! Make sure the **CSS theme** property in the Workarea is pointing to the proper CSS file. See Also: "Working with Discussion Boards and Subjects" on page 7-600

5. View the Discussion Board in a browser to see the changes.

Adding Video to a Post

A user can add video to a post by clicking the Add Video button ( ) in eWebEdit400. The following prerequisites must be in place for a user to perform this action:

- the **embed** tag must be added to the Accepted HTML property in the Workarea Forum's properties. See Also: "Accepted HTML" on page 7-602
- a user must be using eWebEdit400

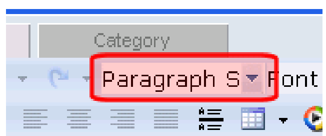
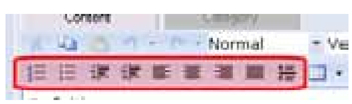
- the video must be in the `.wmv` format
- the video must reside in a hosted location. For example, `http://www.example.com/myvideos/fridaylunch.wmv`

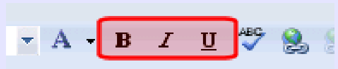
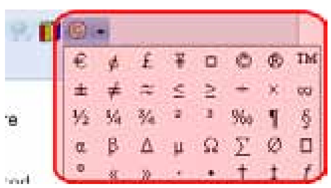
Once you click the Add Video button ( ), enter the path to the video in the dialog box and click OK. A place holder is then added to the post.

Adding and Removing Toolbar Items From the Editor

Warning! You cannot create new buttons and add them to the Forum Editor. You can only add and remove existing buttons.

Toolbar items on the Forum Editor can be added and removed by editing EditorToolbar property. This property contains a series of string values that represent each item, listed below.

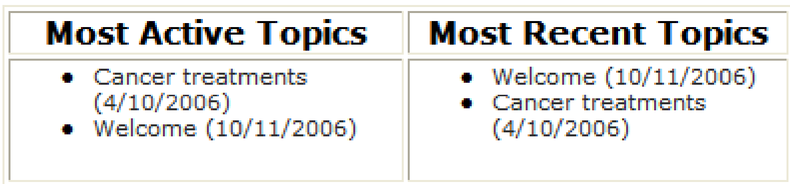
String Value	Item	Description
StyleMenu		Display a list of paragraph styles. Users can select from the list to apply a style to selected text.
FontMenu		Display a list of available font styles, sizes and colors.
ParagraphMenu		Controls the display of buttons that affect a paragraph. This includes: - Numbered List - Bullet List - Outdent - Indent - Align Left - Align Center - Align Right - Justify - Horizontal Rule

String Value	Item	Description
TextFormatMenu		Controls the display of buttons that format text. This includes: ■ Bold ■ Italics ■ Underline
LinkMenu		Controls the display of buttons that allow a user to add and remove hyperlinks links and work with the library. This includes: ■ Hyperlink Manager ■ Remove Link ■ Library
ClipBoardMenu		Controls the clip board buttons that allow a user to cut, copy and paste content. This item also controls the Undo and Redo buttons.
SymbolsMenu		Controls the display of the Symbol button which allows users to insert symbols and special characters.
EmoticonSelect		Controls the display of the Emoticon button.
WMV		Controls the display of the Insert WMV button.
Table		Controls the display of the Insert table button.

ActiveTopics Server Control

The ActiveTopics server control displays either the most active topics for a forum or the most recent ones. The most active are determined by how many new posts are added to a topic or how many replies a post receives. The most recent are determined by the date of the post.

Below is an example of two ActiveTopics server controls. One control is set to Active, the other is set to Recent.



The items in the list are clickable links, which open to the topic.

ActiveTopics Server Control Properties

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc.	Boolean
BoardID	The ID of the board from which to get entries. If you don't know the ID, click the Ellipses button (...), then sign in, browse to, and select a Discussion Board.	Long
CacheInterval	Sets the amount of time, in seconds, the server control's data is cached. The default is 0 (zero). For example, if you want to cache the data for five minutes, set this property to 300. See Also: See "Caching with Server Controls" on page 21-31	Double

Property	Value	Data Type
DisplayMode	Choose between Active or Recent. In Active mode, the server control displays a list of the most active posts. In Recent mode, the server control displays a list of recently added posts. The default is Active. **Active** - display a list of the most active posts. **Recent** - display a list of the recently added posts.	eDisplayMode
Hide	Select **False** to display this server control on the page. Select **True** to suppress it.	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxNumber	The maximum number of topics listed. The default is **10**.	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

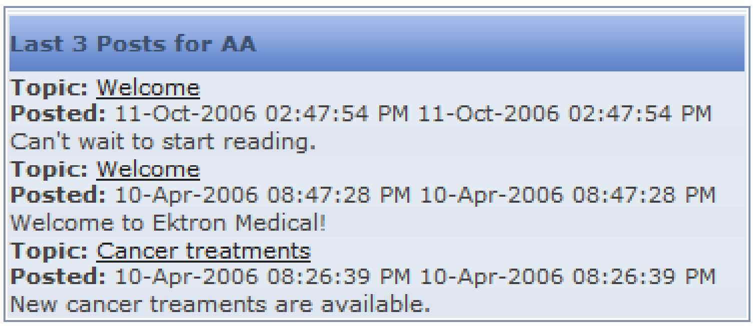
URLPath	Enter the path to the Forum server control's Web page. For example:
	`http://<your site>/siteroot/forum.aspx.`
	or
	`/CMS400Developer/forum.aspx.`
	If your Forum page and your Active Topics page are in the same folder, you can just enter the name of the page. For example:
	`forum.aspx.`
		String

WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The `<span>` tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The `<div>` tag is used when you want to apply attributes to a block of code. **Custom** - Lets you use custom tag.	String

PostHistory Server Control

The PostHistory server control displays a list of forum posts for a given user. The posts are displayed in order by date and contain the following:

- **Topic** - the topic that contains the post
- **Posted** - the date the post was created
- **Content** - the content within the post



PostHistory Server Control Properties

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc.	Boolean
BoardID	The ID of the Discussion Board from which to get a user's posts. If you don't know the ID, click the Ellipses button (...), then sign in, browse to and select the Discussion Board.	Long

Property	Value	Data Type
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: See "Caching with Server Controls" on page 21-31	Double
Hide	Select **False** to display this server control on the page. Select **True** to suppress it.	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxNumber	The maximum number of posts listed. The default is **10**.	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
URLPath	The URL path to the page the where the Forum server control is located.	String
UserID	The ID of the user for whom to get the post history.	Long
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The `<span>` tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The `<div>` tag is used when you want to apply attributes to a block of code. **Custom** - Lets you use custom tag.	String

Validating XHTML Content and Accessibility

By validating XHTML content and accessibility, you can ensure your content is XHTML compliant and that individuals with disabilities can navigate and understand your site.

This chapter has three sections:

Validating with eWebEdit400

eWebEdit400 can check content for the following types of compliance.

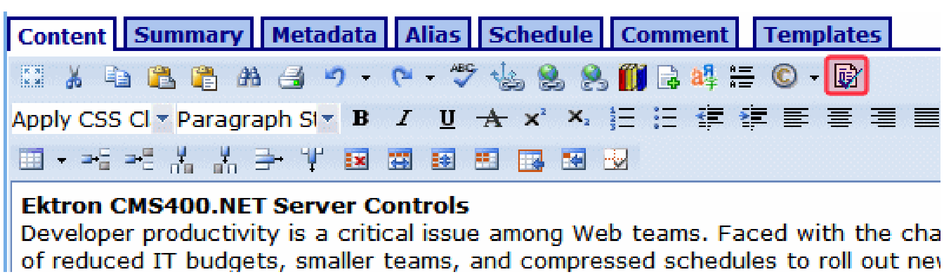
- **Design** - checks for the design standards such as proper closing tags and unique field names.

Note: There is nothing you need to do to enable this type of validation, nor can you customize it.

- **XHTML standards** - see "Validating Content for Compliance with XHTML Standards" on page 7-684.
- **Section 508 Validation** - accessibility standards established by agencies such as W3C Markup Validation Service - see "Setting up and Customizing Accessibility Validation" on page 7-683.
- **Smart Form Data** - makes sure that data entered into a smart form's field is the correct type and format. This selection only checks smart form fields if validation for the field was turned on when it was added to the Smart Form. Validation for each field type is explained in "Data Designer Field Types" on page 7-308.

Note: An additional type of validation ensures that when a site visitor completes an HTML form, the information is formatted correctly. For example, a Social Security number must have three numbers, a dash, two numbers, another dash, and four numbers. This type of validation is explained "Form Validation" on page 7-232.

An editor can validate content while editing by clicking the Validate button () (illustrated below).



In addition, eWebEdit400 automatically validates content whenever the user tries to save, check in or (submit for) publish content. See Also: "Step 1: Enable Accessibility" on page 7-683

When validation is checked, any errors appear on the screen. If the content passes validation, a message states **The content is valid**.

The rest of this section provides details about validating XHTML content through these topics.

- "Validating Content for Compliance with XHTML Standards" on page 7-684

- "Setting up and Customizing Accessibility Validation" on page 7-683

Setting up and Customizing Accessibility Validation

To have eWebEdit400 check content for compliance with accessibility standards, follow these steps.

See Also:

- "Step 1: Enable Accessibility" on page 7-683
- See "Step 2: Use Dialogs to Enter Accessibility Information" on page 7-683
- "Customizing Accessibility Checks" on page 7-684

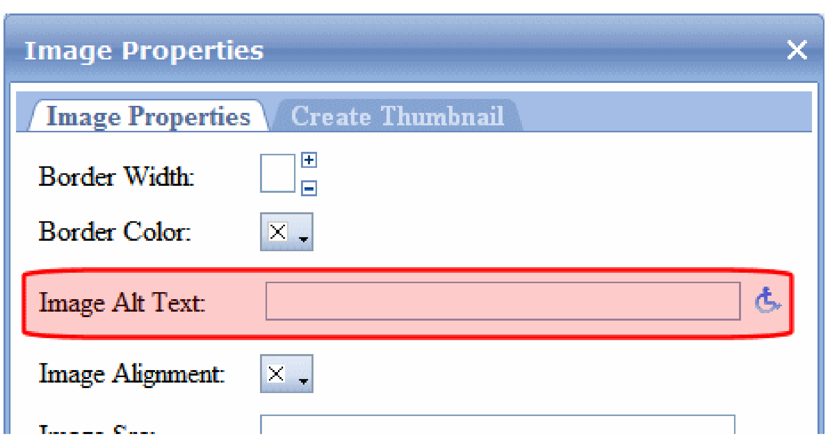
Step 1: Enable Accessibility

In the Ektron CMS400.NET Workarea, accessibility options appear on the **Settings** > **Configuration** > **Setup** screen under **Accessibility/Section 508 Evaluation** (below **Editor Options**). The options are explained below.

- **Do not validate** - do not check content for compliance with accessibility standards
- **Warn if fails** - the user is warned but allowed to publish the content
- **Enforce** - the user must bring the content into compliance before submitting it for publication or publishing it; however, can save it or check it in after being warned.

Step 2: Use Dialogs to Enter Accessibility Information

Several dialog boxes let the content editor enter accessibility information. An example is below.



The table below lists dialog boxes in which accessibility information can be entered.

Dialog	Field	How filled if no value exists
Image Properties	Image Alt Text:	Uses the image's title
Table Wizard - Cell Properties Tab	Abbreviation: Categories:	Not automatically filled when no value exists
Table Wizard - Accessibility Tab	Caption: Summary:	Not automatically filled when no value exists
Hyperlink Manager (Includes Quicklinks)	Tooltip:	Contents of **Link Text** field copied

Customizing Accessibility Checks

All standard accessibility checks are stored in the *site root*/Workarea/Content Designer/ektaccesseval.xslt file. If you want to customize which checks are applied, edit that file.

To change or disable the .xslt file that eWebEdit400 uses to validate for accessibility, edit this line of *site root*/Workarea/Content Designer/ValidateSpec.xml.

```
<validate>
```

```
<xslt id="ektaccesseval" name="Section 508 Validation" enabled="true" src="[srcPat-
h]/ektaccesseval.xslt"/>
```

Validating Content for Compliance with XHTML Standards

Ektron CMS400.NET content can be validated against the XHTML 1.1 standard. To do so, you must define the Web sites that validate schema files and schema namespaces.

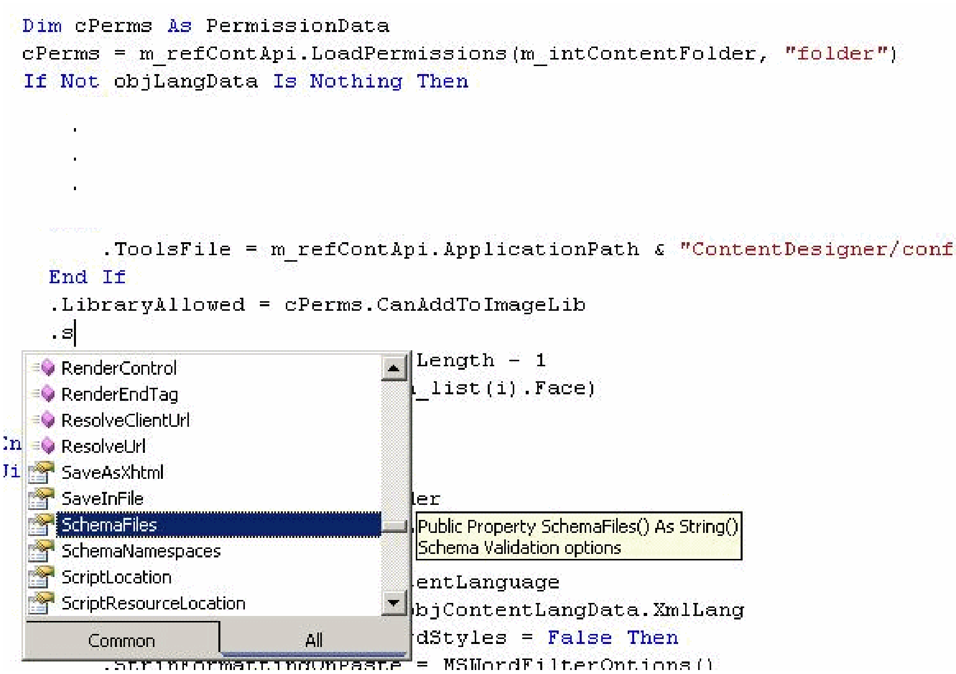
Here are two sites that can validate content using the WC3 Markup Validation Services.

- schema files - `http://www.w3.org/2002/08/xhtml/xhtml1-transitional.xsd`
- schema namespaces - `http://www.w3.org/1999/xhtml`

Defining the XHTML Validation Schemas

To validate content against XHTML standards, follow these steps.

1. Using Visual Studio, open *site root*/Workarea/edit.aspx.vb.
2. Find the section indicated below.



3. Using Intellisense, enter `SchemaFiles` and `SchemaNamespaces` properties to define the validating Web sites. They accept an array of strings and go in pairs. Here are examples.

C#

```
ContentDesigner1.SchemaFiles = new string[] {"http://www.w3.org/2002/08/xhtml/xhtml1-
transitional.xsd"};
```

ContentDesigner1.SchemaNamespaces = new string[] { "http://www.w3.org/1999/xhtml" };

VB.Net

```
With m_ ContentDesigner1
.SchemaFiles = New String() {" http://www.w3.org/2002/08/xhtml/xhtml1-transitional.xsd"}
.SchemaNamespaces = New String() {"http://www.w3.org/1999/xhtml"}
```

End With

Customizing Validation

In the `site root folder\Workarea\ewebeditpro\cms_config.aspx` file, you can specify a set of validation options for plain text and calculation field types. (Data in other field types cannot be validated.) For these field types, you can assign standard and custom validation checks. The checks are applied when data is inserted into one of the field types, and when the user tries to save a Data Design document whose fields have validation attributes.

You can modify the standard options and enter your own criteria for each field. You can also establish dependencies between fields. For example, a value is only required for a field if a certain Checkbox field is checked.

Validation Elements in the Configuration Data

The default configuration file includes standard validation options for plain text and calculation field types.

```
<validation name="calculation">
   <choice name="none" treeImg="text">
      <caption localeRef="dlgNV8n" />
      <schema datatype="string" />
```

and

```
<validation name="plaintext" visible="false">
   <choice name="none" treeImg="text">
      <caption localeRef="dlgNV8n" />
```

The validation sections let you control the drop-down list of validation choices for a field type (for example, Plain Text). Here is an overview of that section of the cms_config.aspx file.

```
<datadesign>
<validation> (0 or more)
<choice> (0 or more)
<caption>
<schema>
<calculate>
<regexp> OR
<script> OR
<xpath>
<validate>
<regexp> OR
<script> OR
<xpath>
<errormessage> (optional)
```

Details are provided below.

Validation Attributes

Attribute	Description	Possible values
visible	Controls whether the **Validation** field appears on the field's Properties dialog.	true, false
enabled	Controls whether the **Validation** field is active or “grayed out” on the field's Properties dialog. If set to **true**, the **Validation** field is active; if **false**, it appears but is grayed out.	true, false
name	The field type to which the validation configuration data applies. A separate `<validation>` element must exist for each field type.	plaintext, calculation

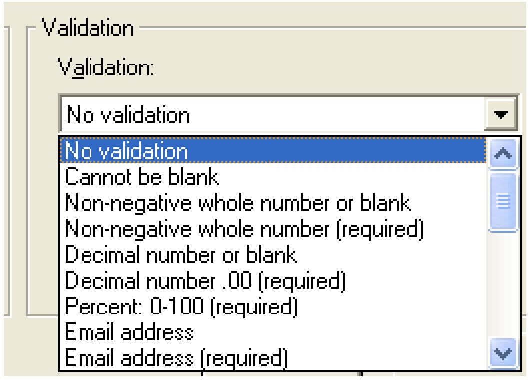
Validation Sub-elements

Element	Description	For more information, see
Choice	The calculation or validation expression for standard fields	"Choice Sub-element" on page 7-687
Custom	The calculation or validation expression for custom fields	"Defining Custom Validation" on page 7-691

Choice Sub-element

Every item in the validation drop-down list must be defined within a set of `<choice>` tags. Within the `<choice>` tags, you define a caption, a schema, and either a calculation or validation expression.

The default validation choices appear below.



Choice Attributes

Attribute	Description
name	Assign a new name to each choice.
treeImg	The icon to display for this field in the Select Field or Group dialog. See "Icons on the Select Field or Group Screen" on page 7-696. Unlike toolbar icons, you cannot create your own icons. Note: This attribute only applies to the Data Design of a Smart Form -- it does not apply to HTML forms.

Choice Sub-Elements

Element	Description	For more information, see
caption	Defines the displayed text for this choice. The attributes and description are the same as `<caption>` elements for commands.	
schema	Defines a W3C XML schema (WXS) definition for this choice. The definition may be a simple type defined by the `datatype` attribute and/or a WXS fragment. Note: This attribute only applies to the Data Design of a Smart Form -- it does not apply to HTML forms.	"Defining a Schema Fragment" on page 7-688
calculate	Defines an expression which normalizes a value prior to checking validation	"Defining a Calculation" on page 7-689
validate	Defines an expression that determines if a value is valid	"Defining Validation" on page 7-691

Defining a Schema Fragment

When defining a schema fragment, the “xs” namespace prefix is required for WXS tags. Also, the WXS fragment must be valid for inclusion in an xs:restriction (simple type). That is,

```
<xs:simpleType>
<xs:restriction>
...fragment...
</xs:restriction>
</xs:simpleType>
```

Simple Data Types

The simple data types are defined by W3C XML Schema definition language 1.0.

Note: The datatype value should *not* include a namespace prefix. For example datatype="string" is correct; datatype="xs:string" is incorrect

Examples

- Using only a datatype attribute

```
<schema datatype="string"/>
```

- Using only a schema fragment

```
<schema>
<xs:simpleType>
<xs:union memberTypes="xs:nonNegativeInteger">
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:length value="0"/>
</xs:restriction>
</xs:simpleType>
</xs:union>
</xs:simpleType>
</schema>
```

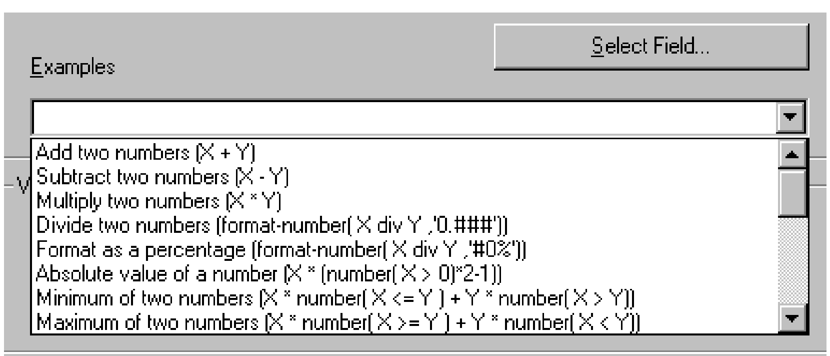
- Using a datatype attribute *and* a schema fragment

```
<schema datatype="string">
<xs:minLength value="1"/>
</schema>
```

Defining a Calculation

Use the `<calculate>` element to define an expression that normalizes a value prior to checking validation. For example, a calculation can truncate digits in a decimal, remove excess white space, or capitalize text. The expression must return a value of the same data type and format as the original value.

Several sample calculations are delivered with Ektron CMS400.NET. They appear when the user clicks the **Examples** drop-down on the Calculated Field dialog. These calculations are explained in "Explanation of Examples" on page 7-336.



You can only define one expression for `<calculate>` and `<validate>`.

The expression element choices are listed below. Use whichever language is easiest.

- Regular Expression (JScript)
- JavaScript
- XPATH

Expression	Description
Regular Expressions (JScript)	
<regexp>	Defines a regular expression supported by JScript. You can define a regular expression *either* between the tags *or* using attributes. If between the tags, the expression must begin with a slash (/) character. The g, i, and m flags are allowed. For example: `<regexp>/\S+/</regexp>`.
<regexp patternings-exp-pattern”	A regular expression pattern (without the “/” chars).
<regexp global=”true|false”	Specifies whether the pattern matches only the first occurrence or all occurrences within the text. This corresponds to the g flag.
<regexp ignorecase=”true|false”	Specifies if the match is case-sensitive. This corresponds to the “i” flag.
<regexp multiline=”true|false”	Specifies if the match, when using ^ and $, is applied to each line in text that has multiple lines. This corresponds to the “m” flag.
<regexp wholeline=”true|false”	Specifies whether the pattern applies to the whole text or not. This is the same as placing “^(“at the beginning of the pattern, and “)$” at the end of the pattern.
JavaScript	
<script value=”javascript-expression”	Specifies a JavaScript expression to be evaluated. The field's value is available in a property named 'this.text'. For example `<script value="this.text.toUpperCase()"/>`
XPATH (See Also: "Learn More about XPath" on page 7-697)	
<xpath select=”xpath-expression”	Specifies an XPath expression to be evaluated. The field's value is available using “.”.

Defining Validation

Use the `<validate>` element to define an expression that determines if a value is valid. The expression must return a Boolean (true or false) result. For example:

```
<validate>
```

```
    <regexp>/^\d+$/</regexp>
</validate>
```

To construct the `<validate>` element, use the same expression element options as `<calculate>`. See Also: "Defining a Calculation" on page 7-689

Defining an Error Message

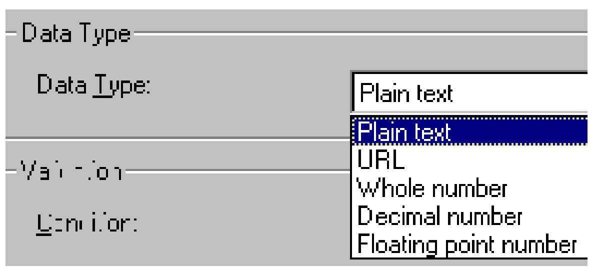
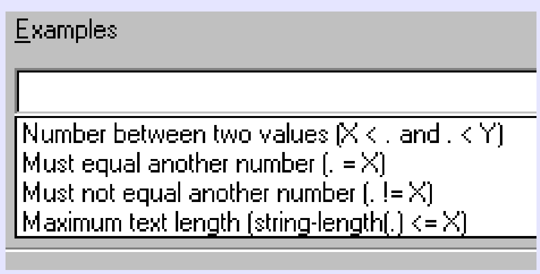
Use the `<errormessage localeRef="id">` element to define a message to display when the data is not valid. For example, “Must be a number between 1 and 10, inclusive.”

The text may be within the `<errormessage>` tags or referenced using localeRef into the localeNNNN.xml file.

Defining Custom Validation

Note: This section only applies to the Data Design of a Smart Form -- it does not apply to HTML forms.

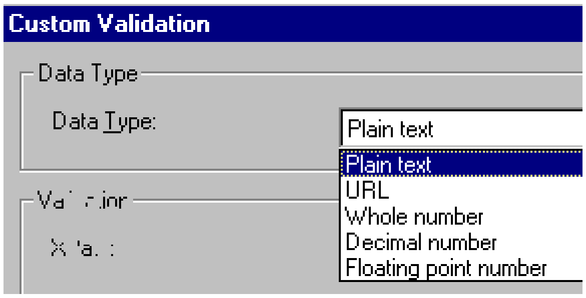
Use the `<custom>` element to change the standard values that appear in the following fields of the Custom Validation dialog.

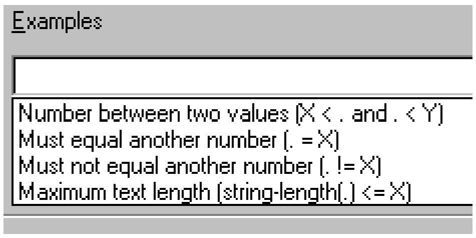
Field	Screen image
Data Type	
Examples	

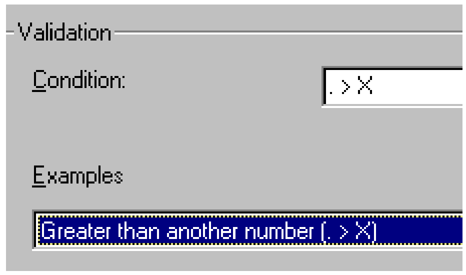
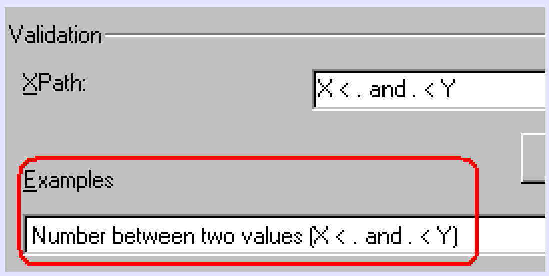
To change the list of options, modify the `<custom>` element of the cms_config.aspx file. This section describes the `<custom>` element’s attributes and child elements.

```
<datadesign>
<validation>
:
<custom> (optional tag)
<caption>
<selections name="datatype">
<listchoice> (0 or more)
```

```
<selections name="examples">
<listchoice> (0 or more)
```

Element or Attribute	Description
<custom>	Specifies basic data types available when customizing validation. The types are defined in the `<listchoice>` elements (see below).
<custom visible="true|false"	Controls whether the **Custom Validation** field appears on the Properties dialog.
<custom enabled="true|false"	Controls whether the **Custom Validation** field is active or "grayed out" on the Properties dialog. If set to **true**, the **Custom Validation** field is active; if **false**, it is grayed out.
<caption localeRef="id">	Specifies text to display in the validation drop-down list. The default caption is "**(Custom)**".
Selections element for Data Type field	
<selections name="datatype">	The name must be `datatype`.
<selections enabled="true|false"	Controls whether the drop-down list is active or "grayed out" on the Properties dialog.
<selections visible="true|false"	Controls whether the drop-down list appears on the Properties dialog.
Listchoice element for Data Type field	
<listchoice>	Defines the values in the Custom Validation dialog Data Type drop-down list.
<listchoice value="simple-data-type"	Enter each data type that should appear in the Custom Validation dialog's Data Type drop-down list.  The simple data types are defined by W3C XML Schema definition language 1.0.

Element or Attribute	Description
	See Also: "Defining a Schema Fragment" on page 7-688
<listchoice treeImg="id"	Specifies the icon to display for this field in the Select Field or Group dialog. See "Icons on the Select Field or Group Screen" on page 7-696. Unlike toolbar icons, you cannot create your own.
<listchoice localeRef="id"	The text that describes this Data Type on the Custom Validation dialog. This element can refer to a string in the localeNNNN.xml file. Or, you can enter the string between the `<listchoice>` tags.
<listchoice default="true|false"	Use this attribute to indicate the default choice in the Custom Validation dialog's Data Type drop-down list.
Selections element for Examples field	
<selections name="examples">	The name must be "examples".
<selections enabled="true|false"	Determines if the **Examples** drop-down list and label are active or "grayed out" in the Custom Validation dialog. 
<selections visible="true|false"	Determines if the **Examples** drop-down list and label appear.

Element or Attribute	Description
Listchoice Element for Examples field	
<listchoice>	Defines the values in the Examples drop-down list.
<listchoice value="xpath-expression-example"	The XPath expression appears in the **Examples** drop-down list of the Custom Validation dialog. 
<listchoice localeRef="id" -	The text that describes the examples on the Custom Validation dialog.  This element can refer to a string in the localeNNNN.xml file. Or, you can enter the string between the `<listchoice>` tags.

Saving Invalid Documents

Use the `publishinvalid` attribute of the `<standard>` element to determine if an invalid document should be saved. This attribute lets you decide if a user can save an XML document when the data in one or more fields does not satisfy the validation criteria.

In Data Entry mode, an example would be if a field requires a non-negative whole number, but the user does not insert a value in that field.

If the `publishinvalid` attribute's value is `true`, content is not checked for validity when it is saved.

If `false`, the content is checked for validity during a save. If the content is valid, it is saved. If it is invalid, the user is notified, and a custom script can be created to allow the content to be saved or prevent it.

Note: If the `publishinvalid` attribute is not defined in the `<standard>` element, the default is **true** so that Ektron CMS400.NET is backwards compatible with previous releases.

Custom Script that Handles Saving Invalid Files

To determine whether or not an invalid XML document should be saved, write a client-side script that is called when invalid content is found. The routine should ask if the user wants to save the invalid content. The script should return `True` to save the content, or `False` to abort the save.

Below is an example of such a script.

```
<script language="JavaScript1.2">
<!--
eWebEditPro.instances["MyEditor1"].onerror = myOnErrorHandler;

function myOnErrorHandler()
{
   if (EWEP_STATUS_INVALID == this.status && "save" == this.event.source)
   {
     var strMsg = "Content is invalid.";
     strMsg += "\nError Code: " + this.event.reason;
     strMsg += "\nError Reason: " + this.event.message;
     alert(strMsg);
     return false; // prevent save
   }
}
//-->

</script>
```

The onerror Event

If the content is invalid, an onerror event is generated. This event provides two additional properties for the event object when it fires:

- reason (a numeric error code)
- message (text describing the error)

As with the regular onerror event, the `source` property is available. You can display the values of these properties in an error message that informs the user why the document is not valid.

Calculated Fields

A Calculated Field lets you include values that are calculated, typically from values in other fields. For example, you can multiply two field values. The equation used is an XPath expression.

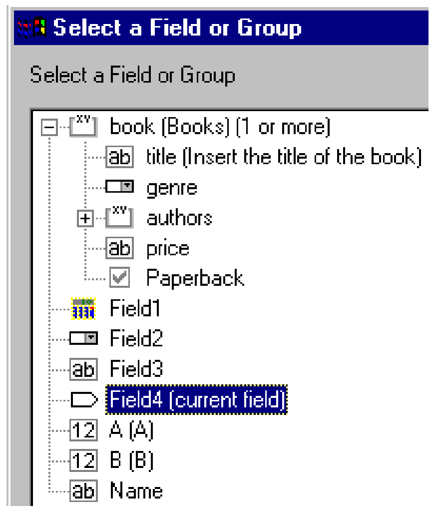
You can validate a Calculated Field, just like the Plain Text Field. For instance, the total of a series of numbers should be less than 100.

For more information about calculated fields, see

Icons on the Select Field or Group Screen

Note: This section only applies to the Data Design of a Smart Form -- it does not apply to HTML forms.

Use the following icons to denote a field on the Select A Field or Group Screen (illustrated below). These are the valid values for the `treeImg` attribute.



Icon	Name
	calculation
	calendar
	checkbox
	droplist
	fieldset
	hidden
	hyperlink
	number
	password

Icon	Name
	picture
	richarea
	text
	textbox

Learn More about XPath

Xpath Operators

Content copied from www.w3schools.com/xpath.

Operator	Description	Example	Result
Numerical expressions perform arithmetic operations on numbers. XPath converts each operand to a number before performing an arithmetic expression.			
+	addition	6 + 4	10
-	subtraction	6 - 4	2
*	multiplication	6 * 4	24
div	division	8 div 4	2
mod	division remainder	5 mod 2	1
Equality/ greater/ less than expressions test equality between two values			
=	equals	price = 9.80	true (if price is 9.80)
!=	is not equal	price! = 9.80	false
<	less than	price < 9.80	false (if price is 9.80)
< =	less than or equal to	price <= 9.80	true
>	greater than	price > 9.80	false

Operator	Description	Example	Result
>=	greater than or equal to	price >= 9.80	true
Boolean expressions compare two values			
or	or	price = 9.80 or price = 9.70	true (if price is 9.80)
and	and	price <=9.80 and price = 9.70	false
Identifying a path and element			
.	the current element	. > 100	true if element exceeds 100
..	the current element's parent	count(../*)	counts the number of elements at the same level as the current element
Grouping and separating			
[ ]	predicate	../*[0]	../*[0] - returns the parent's first child element
|	specify multiple elements	sum(X | Y | Z)	If X=1 and Y =2 and Z=3, sum(X | Y | Z) = 6

Xpath Functions

Content copied from .

Operator	Description	Example
last	Returns the position number of the last node in the processed node list Syntax: number=last()	
position	Returns the position in the node list of the node that is currently being processed Syntax: number=position()	
count	Returns the number of nodes in a node-set Syntax: number=count(node-set)	
name	Returns the name of a node	

Operator	Description	Example
	Syntax: string=name(node)	
string	Converts the value argument to a string Syntax: string(value)	string(314) Result: '314'
concat	Returns the concatenation of all its arguments Syntax: string=concat(val1, val2, ..)	concat('The',' ','XML') Result: 'The XML'
starts-with	Returns true if the first string starts with the second string. Otherwise, it returns false. Syntax: bool=starts-with(string,substr)	starts-with('XML','X') Result: true
contains	Returns true if the second string is contained within the first string. Otherwise, it returns false. Syntax: bool=contains(val,substr)	contains('XML','X') Result: true
substring-after	Returns the part of the string in the string argument that occurs after the substring in the substr argument string=substring-after(string,substr)	substring-after('12/10','/') Result: '10'
substring-before	Returns the part of the string in the string argument that occurs before the substring in the substr argument Syntax: string=substring-before(string,substr)	substring-before('12/10','/') Result: '12'
substring	Returns a part of the string in the string argument Syntax: string=substring(string,start,length)	substring('Beatles',1,4) Result: 'Beat'
string-length	Returns the number of characters in a string Syntax: number=string-length(string)	string-length('Beatles') Result: 7
normalize-space	Returns the whitespace-normalized version of a passed string. All leading and trailing whitespace is stripped, and all sequences of whitespace get combined to one single space. Syntax: normalize-space('string')	normalize-space(' some text ') would return some text

Operator	Description	Example
translate	normalize Syntax: string=translate(value,string1,string2)	■ translate ('12:30','30','45') Result: '12:45' ■ translate ('12:30','03','54') Result: '12:45' ■ translate ('12:30','0123','abcd') Result: 'bc:da'
boolean	Converts the value argument to Boolean and returns true or false Syntax: bool=boolean(value)	
not	Returns true if the condition argument is false, and false if the condition argument is true Syntax: bool=not(condition)	not(false())
true	Returns true Syntax: true()	number(true()) Result: 1
false	Returns false Syntax: false()	number(false()) Result: 0
lang	Returns true if the language argument matches the language of the xsl:lang element. Otherwise, it returns false. Syntax: bool=lang(language)	
number	Converts the value argument to a number Syntax: number=number(value)	number('100') Result: 100
sum	Returns the total value of a set of numeric values in a node-set Syntax: number=sum(nodeset)	sum(/cd/price)
floor	Returns the largest integer that is not greater than the number argument number=floor(number)	floor(3.14) Result: 3
ceiling	Returns the smallest integer that is not less than the number argument Syntax: number=ceiling(number)	ceiling(3.14) Result: 4
round	Rounds the number argument to the nearest integer Syntax: integer=round(number)	round(3.14) Result: 3

XPath References

To learn more about XPath, check these Web pages.

Topic	URL
W3C Spec - XPath 1.0 spec	http://www.w3.org/TR/xpath
Tutorial	www.w3schools.com/xpath/default.asp

Content Reports

The reports folder contains several reports to help you manage the workflow of content through Ektron CMS400.NET. In most cases, you choose a report that corresponds to the content's status, then view all content in that status. If appropriate, you can perform tasks on selected content. For example, you can check in checked-out content.

This chapter explains how to access the reports folder in your Workarea, set criteria that determine the information on the reports, and actions you can perform on them.

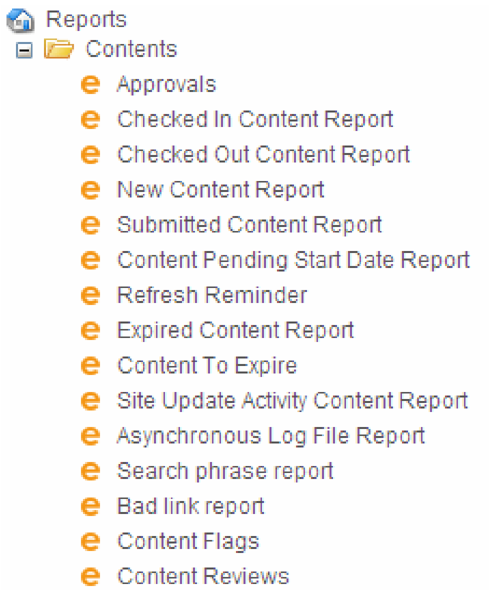
See Also:

- Accessing the Reports Folder
- "List of Conte" on page 7-703
- "Common Report Topics" on page 7-704
- "eCommerce Reports and Widgets" on page 17-237

(continued in Accessing the Reports Folder)

List of Conte

Report	Displays content in this status	For more information, see
Approvals	Requiring your approval	"Approvals Reports" on page 7-710
Checked In Content	Checked in	"Checked In Report" on page 7-712
Checked Out Content	Checked out	"Checked Out Report" on page 7-713
New Content	New (that is, created and saved but never published)	"New Content Report" on page 7-714
Submitted Content	Submitted for publication	"Submitted Report" on page 7-715
Content Pending Start Date	Approved and pending a start date	"Content Pending Start Date Report" on page 7-716
Refresh Reminder Report	End date has been reached	"Refresh Reminder Report" on page 7-717
Expired Content	Expired date has been reached	"Expired Content Report" on page 7-718
Content to Expire	Will expire within specified number of days	"Content to Expire Report" on page 7-719
Site Update Activity Content Report	Content created or updated in selected folders and within a selected date range	"Site Update Activity Report" on page 7-721
Asynchronous Log File Report	A log report of the Asynchronous process	"Asynchronous Log File Reporting" on page 20-13”
Search Phrase Report	Frequency of search terms	"Search Phrase Report" on page 7-724
Preapproval Groups	User groups that have been assigned to folders in order to preapprove content	"Preapproval Groups Report" on page 11-37
Bad Link Report	Invalid links to external URLs	"Bad Links Report" on page 7-725



Common Report Topics

The following topics apply to the reports.

- "Information on the Reports" on page 7-704
- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Information on the Reports

Each report displays the following information about its content.

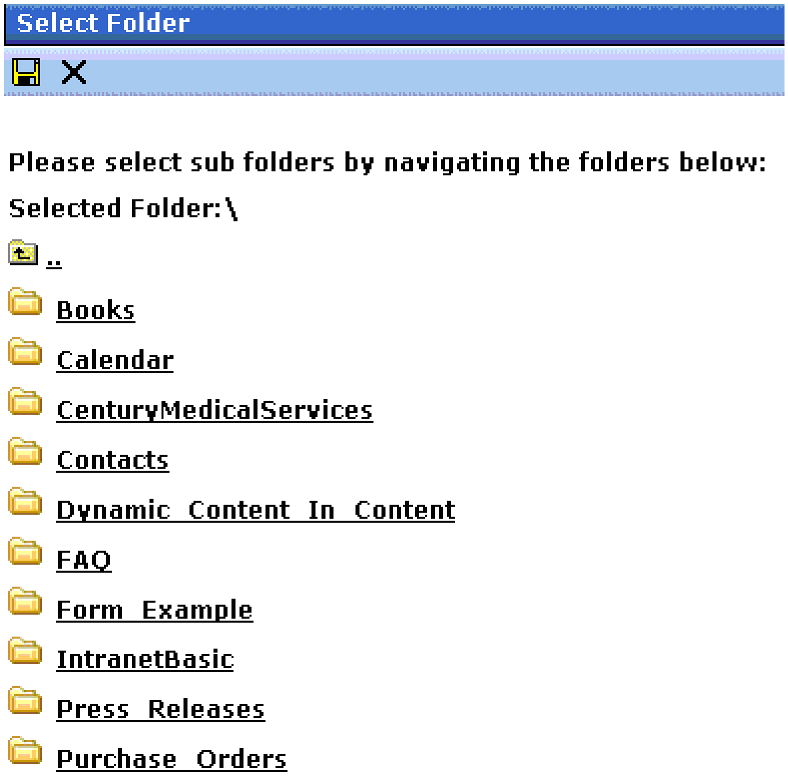
Field	Description
Title	Title of content.
ID	Internal number assigned to content by Ektron CMS400.NET.
Date Modified	If a Start Date was assigned to the content, it appears here.
Last Editor	The user who last edited the content.
Path	Folder location of content.

Report Toolbar Options

Toolbar Button	Description	For more information, see
	email this report to selected users	"Emailing Reports" on page 7-708
	Select a folder whose content appears on the report. Content in other folders is ignored.	"Selecting Content by Folder" on page 7-705
	Go to previous screen	
View: English (U.S.)	Select the language of the content you want to see on the report	

Selecting Content by Folder

You can select a folder and only view the content in that folder that satisfies the other report criteria. For example, the Checked in Content Report can show only content whose status is checked in and which resides in the Contacts folder.



Only content in the selected folder appears. The report does not include content from subfolders of the selected folder.

To select content by a folder, follow these steps.

1. From the Smart Desktop, select a report.
2. Click the Select a Folder button ( ).
3. The top level folders appear.
4. If the folder you want is on the list, click the corresponding checkbox.

   If the folder you want is a subfolder, click the parent folder's name. A new screen appears, showing the selected folder's subfolders. Click the corresponding checkbox.
5. Click the Save button ( ) to finalize your folder selection.
6. The screen displays all content items in the selected folder that satisfy all report criteria.

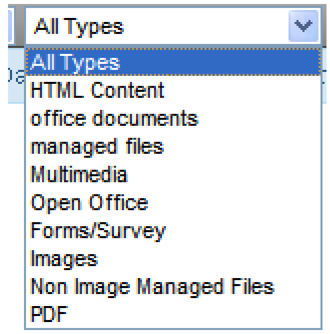
Selecting Content by Type

After viewing any report, you can select a content type and only view the content of that type that satisfies the other report criteria. For example, the Checked in Content Report can show only Office documents.

To select a content type, follow these steps.

1. From the Smart Desktop, select a report.

2. Use the file types pull-down to select a file type.
3. The screen refreshes and only displays files of that type.



Sorting and Filtering Content Reports

Upon viewing a report's content, you have additional options for filtering report data by user and content folder.

The filtering options for each content report are identical. The following section uses the Checked-In Content report as an example.

Filter by User

To display only content that was checked in by a user, click the name of the user in the report display. When you do, the report redisplays, showing only content which that user checked in.

Filter by Content Folder

To display only content checked in to a selected folder, click the folder on the report display. When you do, the report redisplays, showing only content in that folder.

Note: You can also select a folder and view reports in that folder only. See Also: "Selecting Content by Folder" on page 7-705

Performing an Action on Several Content Items

You can perform the following actions on several or all content items in the Approvals, Checked in, and Checked out reports.

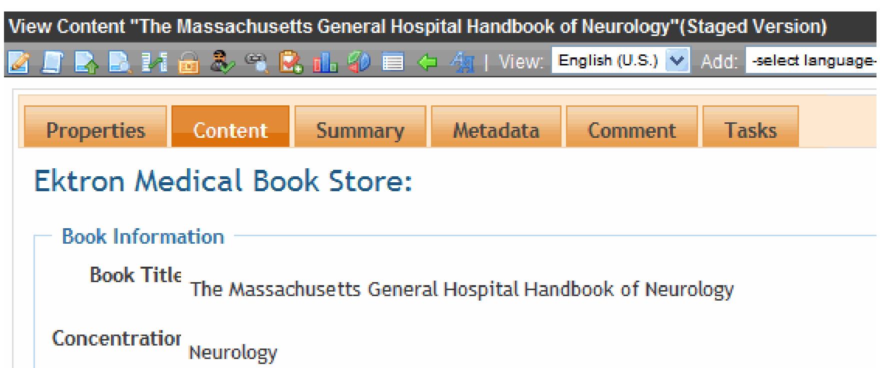
Report	Action you can perform
Approval	Approve
Checked in	Submit for publication
Checked out	Check in

To select several reports, check the relevant checkboxes (illustrated below). To select all reports, click the **Select All** button in the upper left corner.

Then, click the button at the top left to perform the action on the selected content items.

Viewing/Editing Content on the Report

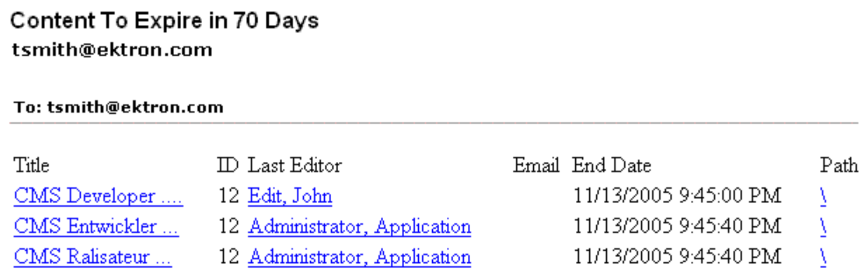
To view (and possibly edit) any content on a report, click it. It appears on the View Content screen (illustrated below).



The View Content screen provides several toolbar options that you can perform on the content.

Emailing Reports

You can email any report. You might do this, for example, to notify a user that several content items are checked out to him. All information in the report appears in the email. A sample appears below.



Content To Expire in 70 Days
tsmith@ektron.com

To: tsmith@ektron.com

Title	ID	Last Editor	Email	End Date	Path
CMS Developer	12	Edit, John		11/13/2005 9:45:00 PM	\
CMS Entwickler ...	12	Administrator, Application		11/13/2005 9:45:40 PM	\
CMS Ralisateur ...	12	Administrator, Application		11/13/2005 9:45:40 PM	\

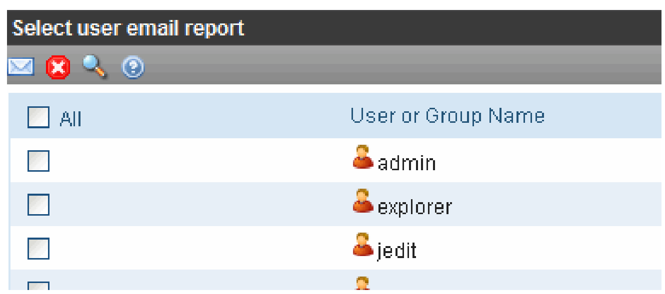
You can click any content item on the report and proceed to that page of your Web site.

To email any report, follow these steps.

1. Display the report you want to email.

2. Click the email button ( ).

3. A list of all users and user groups in your Ektron CMS400.NET appears.



Note: Users appear first in alphabetical order (by username), followed by user groups. The icon for user groups has two heads (see below).

4. Click inside the checkbox of every user or group to receive a copy of the report.

Searching for Report Recipients

If you cannot easily find a user, a search of all users and groups is available. To use it, follow these steps.

1. Display the report that you want to email.

2. Click the email button ( ).

3. A list of all users and user groups in your Ektron CMS400.NET appears.

4. Click the Search for User button ( ).
5. The following screen appears.

6. Enter whatever information you know about the users.
7. Click the **Send email** button.
8. All users that satisfy the search criteria appear on a new screen.
9. Click the checkbox of every user or group to receive the report.

Approvals Reports

Each content item awaiting your approval appears on this report. Thus, you can quickly find all such content without searching through every folder.

The View All Content Awaiting Approval screen displays the following information about this content.

Field	Description
Title	Title of content.
Request Type	Request made for the content. Either **Publish** or **Delete**.
Start Date	Start date, if any, assigned to the content. Determines when content will go live on Web site.
Date Modified	Date the content was most recently changed
Submitted By	User who submitted content for approval.
ID	The ID number if the content.
Language	The language of the content.
Path	Path to content folder where content resides.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

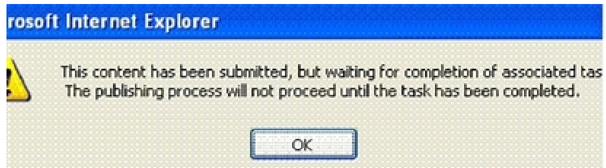
Below is an example of the View All Content Awaiting Approval screen.

Approving/Declining Content

From the approvals report, you can approve or decline content that was submitted to you. The steps below explain how to do so.

1. Access your Approvals report in the Workarea (see "Approvals Reports" on page 7-710).
2. Click the content you want to approve or decline.
3. The View Content Awaiting Approval page is displayed.
4. Perform an action using the following table as a reference.

Button	Name	Description
	Publish	Accept changes to content and publish it to site. Note: If there is a subsequent approver in the content's approval chain, this button is replaced by a Submit button. If you click **Publish** but the content item has an incomplete task assigned to another user, the content cannot be published. Instead, the following error message appears.

Button	Name	Description
		 The user to whom the task is assigned must complete it before you can publish the content.
	Decline	Reject changes and keep current version of content live on Web site. You are prompted to enter a comment that provides a reason for the decline. The author who made the change is notified by email of the decline. The content inserted by the last editor remains in the file. If you do not want it to remain, choose the **Edit** option.
	Edit	Check out content and make changes to it if desired.
	View Published/Staged	Toggle between published and submitted versions of content. This can help you compare differences.
	Back	Go back to previous screen.

Approving Multiple Content Items

See "Performing an Action on Several Content Items" on page 7-707.

The selected content is either submitted to the next publisher, published immediately, or deleted, depending on the content's approval chain.

Checked In Report

The Checked In Content report displays all the content currently in a checked-in status.

The report displays the following information.

Column	Description
Title	Title of content.

Column	Description
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Submitting Multiple Content Items

After selecting content, use the submit toolbar option ( ) to submit it for approval or publication, depending on your position in the approval chain.

Checked Out Report

The Checked Out Content report displays all content currently in a checked out status.

The report displays the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.

Column	Description
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

After selecting content, check it in using the Checkin button ( ).

New Content Report

The New Content report displays content in a *new* state, that is, it was created and saved but never published. The new content report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Submitted Report

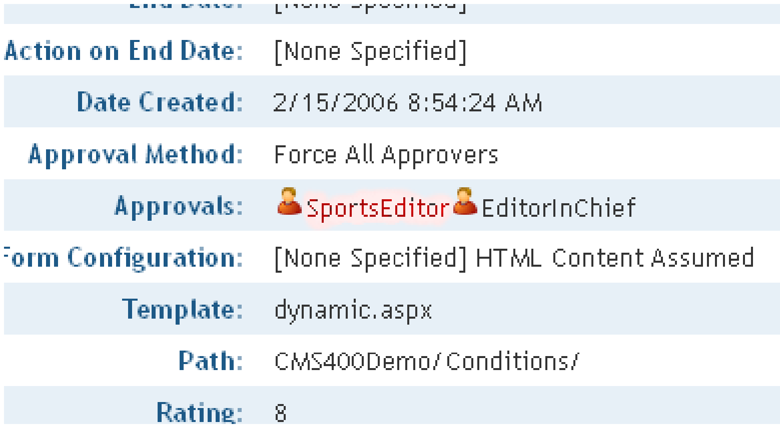
The Submitted Content report displays all content in a submitted state. The report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

Viewing Position in Approval Chain

While viewing the Submitted Content report, you can view the content's position is its approval chain. You can use this information to contact the individuals in the chain and ask them to complete their approval. To do so, follow these steps.

1. From the Submitted Content Report, click the content's title.
2. The View Content page is displayed.
3. Click the **Properties** tab.
4. The content's position in the approval chain is indicated by red text on the **Approvals** line.



See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Content Pending Start Date Report

The Pending Start Date Report displays all content that was approved, but whose start dates haven't occurred. Each content item on the report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Start Date	Date and time content will go live on Web site.
Path	Folder location of content in Ektron CMS400.NET Web site.

Editing Content with a Pending Start Date

You may edit content on the Pending Start Date Content report. To do so, follow these steps.

1. Click the content you want to view.
2. The View Content page is displayed.
3. Using the toolbar at the top of the page, perform any action available.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Refresh Reminder Report

The Refresh Report displays all content whose end date has passed and whose archive option is set to **Refresh Report**. This content is still visible on the Web site. Its appearance on this report indicates that it is due for review. See Also: "Scheduling Content to Begin and End" on page 7-195

Each item on the report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time the content was last updated.

Column	Description
Path	Folder location of content in Ektron CMS400.NET Web site.

Removing Expired Content from Site

If you review content and decide it should no longer appear on your site, follow these steps to remove it. The content will be visible if you browse to it through the Workarea, but won't appear to site visitors.

1. From the Expired Content Report, click the content.
2. From the View Content screen, click the Edit button ( ).
3. Click the **Schedule** tab.
4. Under **Action on End Date:**, click **Archive and remove from site (expire)**.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Expired Content Report

The Expired Content report displays all content whose end date has passed. Such content is no longer visible on the Web site.

Each item on the list contains the following information.

Column	Description
Title	Title of content.

Column	Description
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
End Date	Date and time the content expired.
Path	Folder location of content in Ektron CMS400.NET Web site.

Editing Expired Content

You may edit any content on the Expired Content report. To do so, follow these steps.

1. Click the content you want to view.
2. The View Content page is displayed.
3. Using the toolbar at the top of the page, perform any action available.

See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Content to Expire Report

The Content to Expire report lists all content whose end date will occur between today and a number of days that you specify. For example, if today is January 1 and you select 10 days, the report lists all content whose end date is January 1 through January 10.

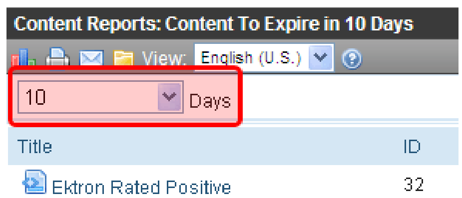
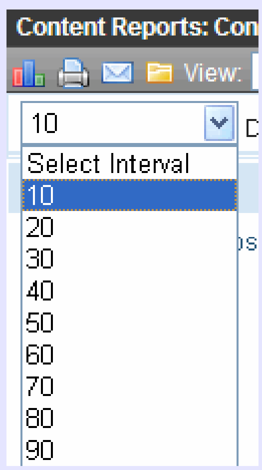
After viewing the report, you can click any content and proceed to the View Content screen for it. From there, you can edit information about it, including its end date if desired.

Each item on the list contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
End Date	Date and time the content expired.
Path	Folder location of content in Ektron CMS400.NET Web site.

Selecting the Report's Date Range

To select the report's date range, you have two options:

Option	Illustration
Enter a number in the **Days** field. Then click the View Reports button ( ).	
Select a number from the dropdown list below the **Days** field	

After selecting a number of days, click the view icon ( ) to see all content that will expire within that time frame.

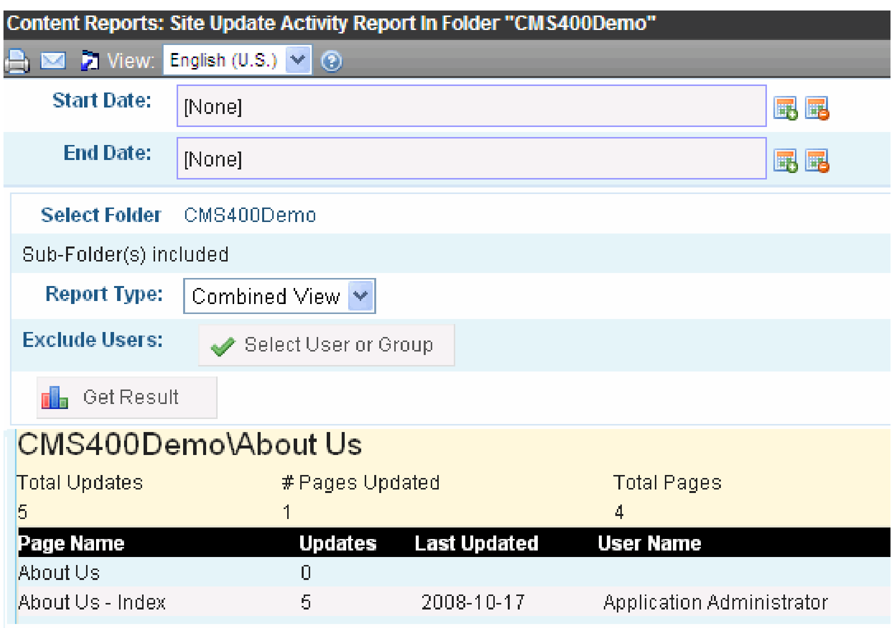
See Also:

- "Report Toolbar Options" on page 7-705
- "Selecting Content by Folder" on page 7-705
- "Selecting Content by Type" on page 7-706
- "Sorting and Filtering Content Reports" on page 7-707
- "Performing an Action on Several Content Items" on page 7-707
- "Viewing/Editing Content on the Report" on page 7-708
- "Emailing Reports" on page 7-708

Site Update Activity Report

The Site Activity Report provides a snapshot of the freshness of the content on your Web site. Specifically, it lists how many content items were published within a folder and date range you select, broken down by folder.

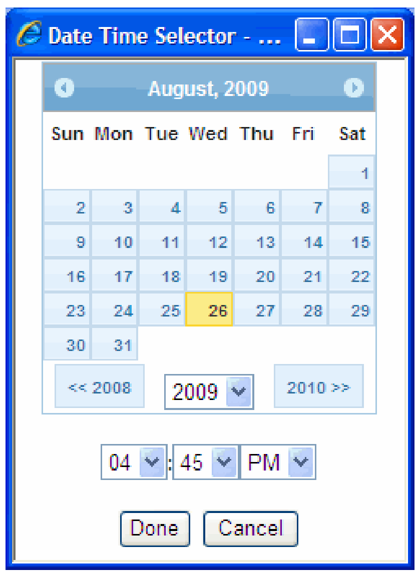
A sample report appears below.



Selecting Information to Appear on the Report

To choose which content items will appear on the report, follow these steps.

1. By default, only content in the default language appears on the report. To change the language, use the language pull-down near the top of the screen.
2. Choose a **Start Date** by clicking the calendar icon ( ).
3. A calendar appears. You can move to another month or year by clicking it. When you get to the desired month, click inside the day. The selected date turns red (see below).



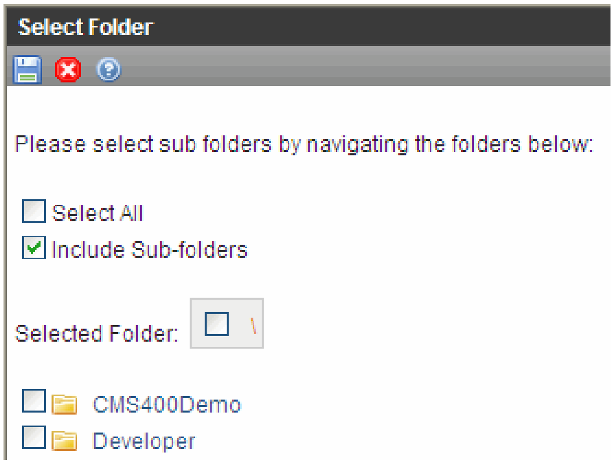
4. Click **Done**.
5. If desired, select an **End Date** using the same procedure.

Note: If you do not select an end date, the report uses today as the end date.

6. At the **Select** field, choose a folder. The Root folder is the default selection.

Note: Only folders for which you have read-only or greater permission appear.

To change that selection, click the folder name. When you do, the Select Folder screen appears.

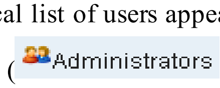


To select all folders on the screen, click the **Select All** checkbox. Otherwise, select folders by clicking the corresponding checkbox. There is also an option to **Include Sub-folders** of the selected folders.

7. Choose the Report type, which determines the information you will see on the report. Options are explained below.

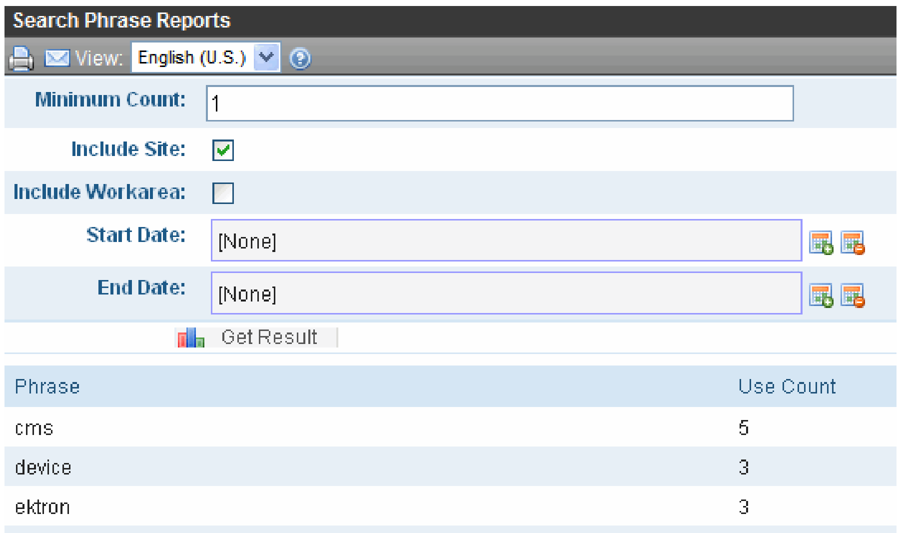
Report Type	Description
Detail View	• name of each page that was published • how many times it was published • date it was last published • users who published page • total numbers are *not* provided
Detail View Example 	
Combined View	information from Executive and Detail views

8. If you would like to exclude users or use groups from the report, use the **Exclude Users** field. For example, you want to see all updates other than those you have completed.

   When you click **Exclude Users**, an alphabetical list of users appears, followed by user groups. (User groups have a two- headed icon ()).
9. Click **Get Result**.

Search Phrase Report

This report displays all terms that were entered into the Search Text Field within a selected range of dates. You can use it to discover the kind of information site visitors are searching for.



Selection Criteria

You can narrow down the search by selecting any combination of these criteria.

- language - the language of the *search page* (either Workarea or Web site search). The user performing the search can choose a language before inserting the search text. If he does not explicitly choose a language, the search uses the default one. This report can show results from all languages or any one that you select.
- a *minimum number of occurrences* of the word or phrase to return. For example, you only want words or phrases entered into the **Search Text** field at least 10 times during the last month.
- whether to include words or phrases entered into the *Web site search* (the search page that site visitors use)
- whether to include words or phrases entered into the *Workarea search* (accessed from the View Contents of Folder screen, this search page is used by authorized CMS users to find content)
- date range

Display of Search Results

The search results show the number of times each word or phrase that satisfies the selection criteria appears. They are arranged in this order.

- words or phrases with the most occurrences appear first
- if several words or phrases have the same number of occurrences, they are arranged alphabetically

Also, terms entered into the Web site search or the Basic Workarea search are surrounded by parentheses (). Terms entered into the Advanced Workarea search have no parentheses. The Microsoft search engine uses this syntax to find content.

Bad Links Report

The Bad Links Report notifies you of any invalid links to external URLs within your content. (An invalid link returns an error code to your browser.)

Note: The report does not check quicklinks embedded in the content.

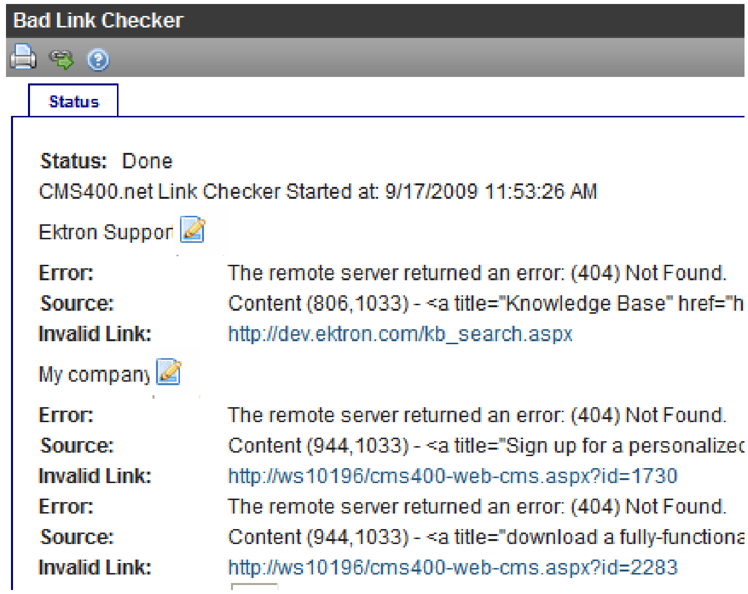
To accomplish this, the report scans the following types of content.

- published HTML content
- published XML content
- HTML forms
- XML Smart Forms
- menus
- active system templates

When the scan is complete, the report lists any item that includes an invalid URL. From the list, you can click a button to access the item, then update or remove the bad link.

Running the Bad Links Report

To run the Bad Links Report, go to **Smart Desktop** > **Reports**. When you select Bad Link Report, you immediately see its status, either Done or Running.



To begin scanning for bad links, click the Check Links Now button ( ). When you do, existing data is replaced by new data being collected as the report progresses.

While the report scans content, you are free to work in other areas of Ektron CMS400.NET. You can even sign off Ektron CMS400.NET. These actions have no effect on the report's collection of data.

If you want to stop the Bad Links Report at any time, click the Cancel button ( ).

After all content is scanned, the report's status changes to **Done**. If desired, you can print the report by clicking the print button ( ).

You can also launch the broken link in a browser by moving the cursor over it then clicking when the cursor turns into a hand.

Fixing Errors

The report lists the following information about each item that contains a bad link.

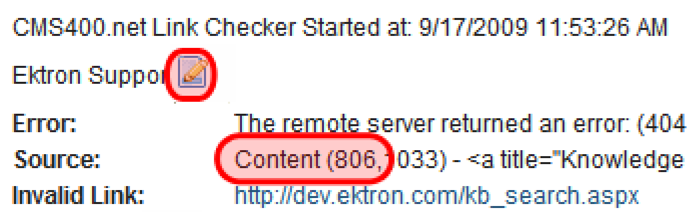
- title
- error description
- Source, that is, item type (content, menu, etc.) followed in parentheses by information about the item that has the error.

As examples

- if the error is in a content block, you see **Content** followed by its id number and language locale id
- if the error is in a Smart form, you see **Smart form** followed by its ID number
- If it's a menu, you see **Menu Item (11,0,1033)**. The three parameters are menu ID, menu item ID, and language ID.
- An error in a template looks like this:
- The beginning of the bad link's source code. Use this to help you find the bad link from Source View.

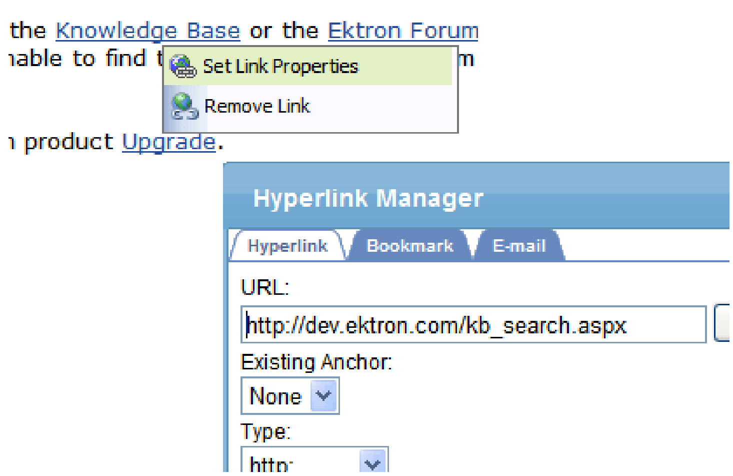
- the anchor (<a>) tag to which the bad link is assigned
- URL that could not be resolved (labeled **Invalid Link**)

To fix an error, click the edit button next to the title (highlighted below). The item opens in edit mode, so you can fix the bad link.



The error report's **Source:** field also indicates the text to which the bad link is assigned. See **content** highlighted in the above graphic.

Within the content, you select the indicated text, right click the mouse, and select **Set Link Properties** to access the hyperlink dialog. From here, you can update or remove the bad link.



Running the Bad Links Report on a Schedule

You can set the Bad Links Report to run in the background at predetermined times. If you do, you can view the report's latest results at your convenience without having to wait while it compiles.

To set up a schedule, follow these steps.

1. Open the following configuration file:

C:\Program Files\Ektron\EktronWindowsservice30\Ektron.ASM.EktronServices.exe.config

2. Within that file, go to the following line:

<add name="RunJob" type="Ektron.ASM.EktronServices.RunCMSJobManager.JobService, Ektron.ASM.EktronServices" AbsoluteTime="Weekly|5, 2:27:00 PM" Enabled="true" />

3. Use the `absoluteTime` property to set the Bad Links Report's start time and frequency. By default, the report is scheduled to run every Thursday at 2:27 p.m. The following table lists ways to indicate a schedule.

Frequency	How to indicate	Example
Hourly	Comma-separated list of integers representing the number of minutes, seconds and ms between jobs	360,0,0 (every 360 minutes or 6 hours)
Daily	A time in hh:mm:ss AM/PM format	11:30:00 PM (every day 11:30 pm)
Weekly	**Weekly |** followed by an n is an integer that corresponds to a day of the week, followed by time. Use the time format described for the Daily frequency. Use zero (0) to indicate Sunday, 1 for Monday, etc., through 7 for Saturday.	Weekly| 0 12:00:00 PM (every Sunday at noon)
Monthly	**Monthly |** followed by an integer that corresponds to a day of the month, followed by time. Use the time format described for the Daily frequency. Use zero (0) to indicate Sunday, 1 for Monday, etc., through 6 for Saturday.	Monthly| 15 11:30:00 (the 15th of every month at 11:30 PM)

Content Reviews and Content Ratings

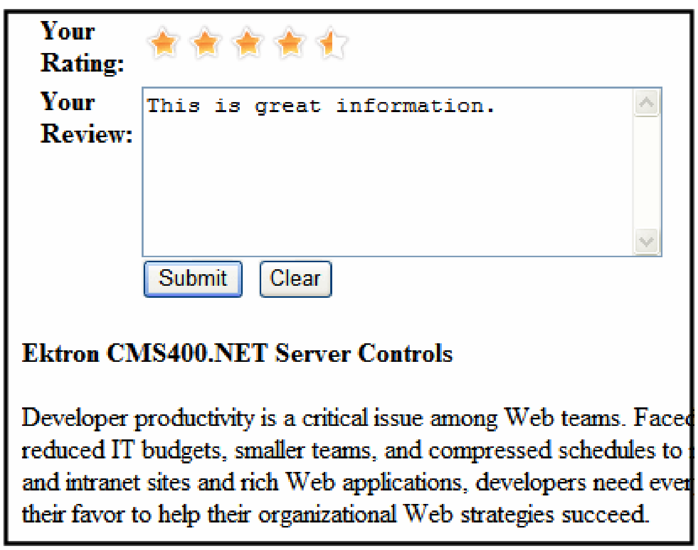
Ektron provides two ways to rate and review content, Content Reviews and Content Rating. These features allow you to determine how good your content is by the people reading it. You can run reports to determine the highest rated content or assets and tweak poorly rated or reviewed content to achieve optimal ratings.

Content Review

Ektron CMS400.NET provides a content review system so site visitors can provide reviews of content on your Web site. A visitor can rate content on a scale of one through five stars and comment. The reviews are collected from the Web page via the ContentReview server control.

Depending on the XSLT used with the ContentReview server control, you can allow half star rating increments and let site visitors submit comments (see illustration below).

Note: If a visitor is not logged in as a CMS or membership user, his browser must have cookies enabled in order to submit a content review.



In addition to consuming site visitors' reviews and displaying the information in the Workarea, the ContentReview server control can be used to display reviews on your site. See Also: "Displaying Reviews on the Site" on page 7-731

Reviews can be moderated from the Smart Desktop or the Content Review screen associated with a content item. See Also: "Moderating Reviews" on page 7-732

The content review feature is explained through the following topics.

- "Inserting the ContentReview Server Control" on page 7-730
- "Limiting Visitors to One Review" on page 7-730
- "Viewing the Content Reviews Report" on page 7-730
- "Moderating Reviews" on page 7-732
- "Purging Rating and Review Data" on page 7-736

Inserting the ContentReview Server Control

To allow site visitors to rate and review content on a Web page, your developer inserts a server control. This procedure is described "ContentReview Server Control" on page 7-736.

Limiting Visitors to One Review

Ektron CMS400.NET assumes you want to limit a user to rating a content item once. If a regular or membership user logs in before rating a piece of content, Ektron CMS400.NET remembers the user ID. For any other site visitor, Ektron CMS400.NET places a cookie on his computer.

So, whenever a page with a ContentReview server control is visited, Ektron CMS400.NET checks for the user ID or cookie. If neither exists, it displays a rating scale. If the page has already been rated by the user, the user can edit his existing rating and review by clicking a star, editing the comments, and clicking the submit button.

Viewing the Content Reviews Report

All content review data for a content item can be displayed in detail and summary format. To view this data, follow these steps.

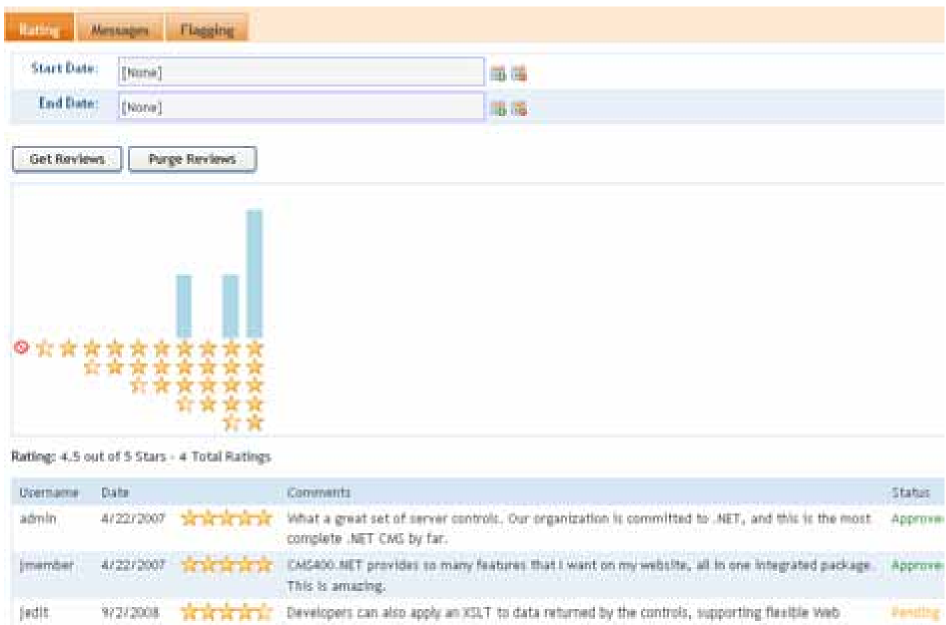
1. Sign in to Ektron CMS400.NET.
2. Do one of the following:

- Navigate to the content item in the Workarea
  - Go to **Workarea** > **Content**.
  - Navigate to the folder that contains the content.
  - Navigate to the content item.
  - Click the View Content Reports toolbar button ( ).
- If the review is awaiting moderation, use the Content Review section of the Smart Desktop.

- Go to the **Workarea** > **Smart Desktop**
- Click **Content Reviews**
- Select the content item

The Content Review shows a summary of all ratings submitted for the content.

3. click the **Get Reviews** button to see the list of review comments at the bottom.



If desired, you can select a range of dates and limit the display of ratings data to those dates. Select start and end dates (using calendar buttons at the top of the screen) and click **Get Reviews**.

See Also: "Content Review" on page 7-729

Displaying Reviews on the Site

Reviews on your site communicate how other people in your site's community feel about a product or article. It also helps build the community by empowering site visitors and allowing them to have voice.

If your site displays reviews and a user does not see his review, it is probably because moderation is enabled for the content reviews. If a user's review is pending or rejected, it is not displayed. A site or membership user can determine the status of his review by logging into the site and navigating to the Web page that hosts the review. Next to the title of his review is **Rejected** or **Pending**. The user can submit another review if his review was rejected or has been pending for too long.

The ContentReview server control's `DisplayXSLT` property handles the displays of site visitor reviews on the site. The server control can display reviews for specific content or a specific user. See Also: "DisplayXslt" on page 7-739.

Exporting Details to Excel

If Microsoft Excel is installed on your computer, you can export the ratings detail to Excel for further manipulation of the data. To do so, the **Click Export to Excel** button located at the bottom of the Content Report for the content.

Moderating Reviews

Since reviews can be displayed on your Web site, Ektron CMS400.NET lets you moderate reviews. This capability is handled by the ContentReview server control's `Moderate` property.

A site visitor can change his rating and review at any time, even if its status is pending or rejected. When a visitor changes his rating or review, the information is updated immediately in the Workarea, and the review's status changes to pending.

There are two ways to moderate reviews.

- from the **Workarea** > **Smart Desktop** > **Content Reviews** area
- from the **Content Rating** screen associated with a content item

Viewing All Pending Reviews

You can view all pending reviews by clicking the **View All** link in the Smart Desktop > Content Review screen.

From that screen you can:

- Approve or decline a review - select an **Approve** or **Decline** radio button for each item on the list. Then, click the Submit button( ).

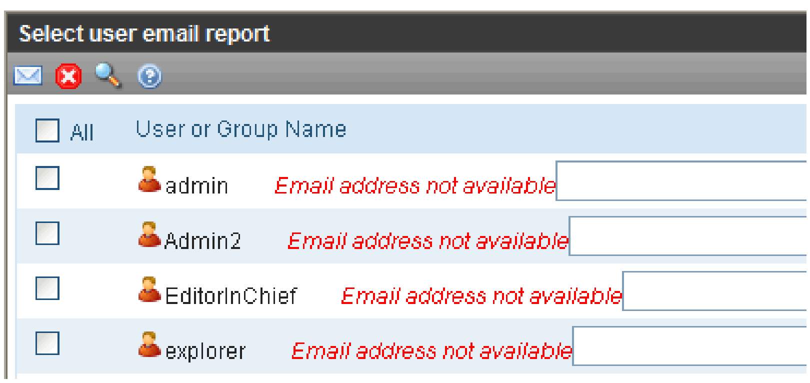
- Mark all reviews approved or all declined - click the **Mark all approved** link to set all the radio buttons to Approve. Click the **Mark all declined** link to set all the radio buttons to Decline.

- Edit the rating, review or status of an individual review - click a review's title and the Edit screen appears. Change as needed. Click the Save button ( ).

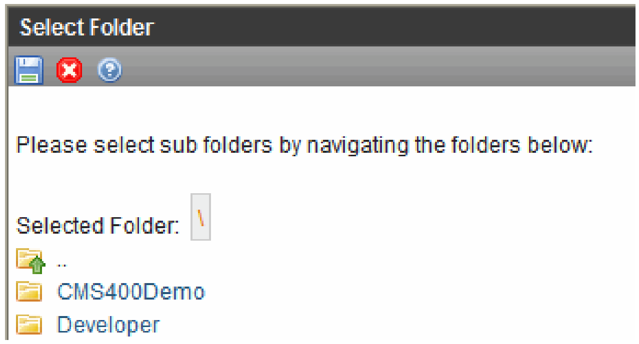
Note: After editing a rating, click the **Back Arrow** to return to the content item's Content Rating screen.

- Print a report of all pending content reviews - click the Print button ( ) to create an HTML version of the pending content review report that is ready for printing.

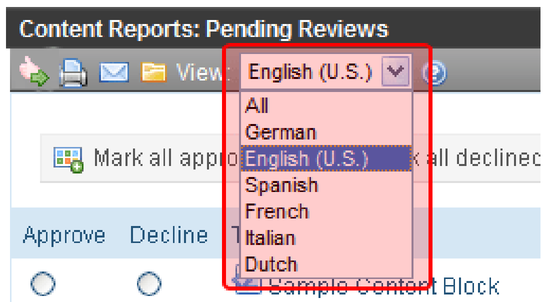
- Email a pending content review report - click the Email button ( ) to email a pending content review report to Ektron CMS400.NET users. Next, select the users to receive the report. Then, click the Email button ( ) to send the report.



- Filter content reviews by folder - because reviews are associated with content items in a folder, you can filter reviews by folder. This makes it easier to moderate reviews if you are responsible for content in a specific folder. Click the Folder button ( ) and navigate to the folder by which the reviews will be filtered. Then, click the Save button ( ).



- Filter reviews by language - from the Language dropdown box, select the language by which the reviews are filtered.

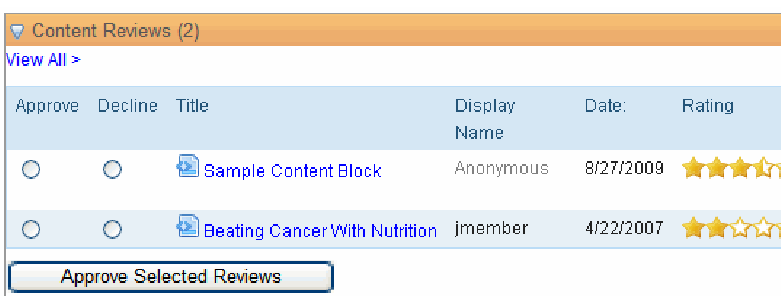


After you approve or decline reviews, click the Submit button ( ). Once reviews are approved, they appear on the site.

Moderating Reviews From the Smart Desktop

To moderate reviews from the Smart Desktop, follow these steps.

1. From the Smart Desktop, choose the Content Reviews area.



2. The latest reviews awaiting moderation appear.
3. Select an **Approve** or **Decline** button for each item in the list.

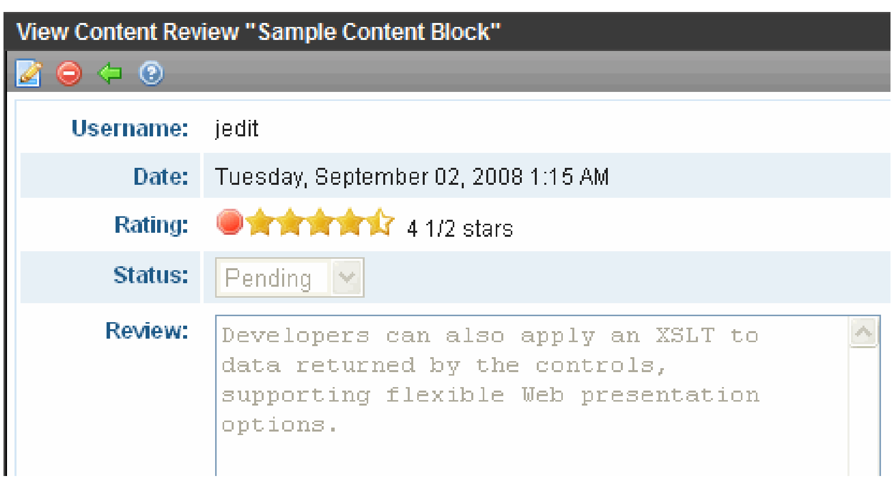
4. Click the **Approve Selected Reviews** button.
5. Once the reviews are approved, they appear on the site.

Note: A ContentReview server control set to display reviews must be on the page for reviews to be displayed. See "DisplayXslt" on page 7-739.

Moderating Reviews From the Content Review Screen

To moderate content reviews from Content Review screen, follow these steps:

1. Navigate to the Content Ratings screen for the content item using one of the methods in "Viewing the Content Reviews Report" on page 7-730.
2. Click the **Get Reviews** button.
3. A list of reviews appear for the content.
4. Click the **Title** link of the content to be moderated.
5. The View Content Review screen appears.



- To change information on this screen, click the Edit button ( ). From the Edit screen, you can change the rating, review, and status. When finished, click the Save button ( ).
- To delete the review, click the Delete button ( ).

Purging Rating and Review Data

You can remove content rating data to free up space in your database. First select the individual content and view the Ratings Report. Next select the date range of the data you want to purge using **Start Date** and **End Date**. Then click the **Purge Reviews** button. Click **OK** to the confirmation message and the rating and review data will be purged.

ContentReview Server Control

The ContentReview server control allows site visitors to rate and review content on your site. Place this control on a template page that's used to display content items or eCommerce products. For example, you might place this control on a Master page and set it's `DynamicParameter` property to ID. Then, when a Web form containing a content item or product passes its ID to the QueryString, the control can be used by a site visitor to record their rating and review.

The ContentReview server control can be used in two ways.

- It places a star-based rating scale on any page of your Web site. Site visitors use the scale to rate a content item. Depending on the XSLT, they can also submit review comments.
- It displays visitor reviews and comments. In this mode, the control can display reviews of a content item or reviews by a specific site or membership user. See Also: "Displaying Content Reviews On the Site" on page 7-737 and "Displaying a User's Reviews On the Site" on page 7-737.

Ektron CMS400.NET maintains and reports content reviews and ratings data. For more information, see "Content Review" on page 7-729.

The following topics appear in this chapter:

Displaying Content Reviews On the Site

To display content reviews on the site, follow these steps:

1. Drag and drop a ContentReview server control on a Web form.
2. Set the `DefaultContentID` property to the ID of the content for which reviews will be displayed.

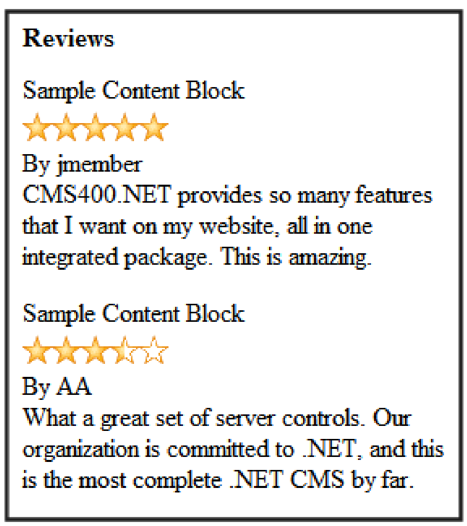
Note: You can make the reviews for the content item dynamic by leaving `DefaultContentID` blank and setting `DynamicParameter` to **ID**.

3. Set the `DisplayXSLT` property to Review List.

Note: If you want to change the look and feel of the review list, modify an existing XSL file or create your own. If you modify an existing XSL, Ektron recommends saving the modified file with a different name. Then, enter the path to the file in the `DisplayXSLT` property.

4. Set the `GetReviews` property to **Content**.
5. Save the Web form.

Below is example of content reviews displayed on a Web page.



Displaying a User's Reviews On the Site

To display reviews for a specific user on the site, follow these steps:

1. Drag and drop a ContentReview server control on a Web form.
2. Set the `DisplayXSLT` property to **Review List**.

Note: If you want to change the look and feel of the review list, modify an existing XSL file or create your own. If you modify an existing XSL, Ektron recommends saving the modified file with a different name. Then, enter the path to the file in the `DisplayXSLT` property.

3. Set the `GetReviews` property to **User**.
4. Set the `UserID` property to the ID of the user for which reviews will be displayed.

Note: You can make the list of reviews for a user dynamic by leaving the `UserID` blank and setting the `DynamicParameter` to ID.

5. Save the Web form.

Below is example of a user's reviews displayed on a Web page.

Retrieving the XML Structure of a ContentReview

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a ContentReview server control onto it.
3. Set the `DefaultContentID` property.
4. Drag and drop a Textbox on the Web form.
5. Set its `TextMode` property to **MultiLine**.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = ContentReview.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.

The XML structure of the collection appears in the textbox.

For an additional example, see the ContentReview XML page on the CMS400Developer samples page. It is located at:

In a browser:

```
http://<site root>/CMS400Developer/Developer/ContentList/ContentListXML.aspx
```

In the source code:

```
<site root>/CMS400Developer/Developer/ContentList/ContentListXML.aspx and
ContentListXML.aspx.vb
```

ContentReview Server Control Properties

The following table explains the properties of the ContentReview server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Boolean
DefaultContentID	The ID of a content block being rated by this server control. If you don't know the ID number of the content block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DisplayXslt	Select the type of review to display, or enter the path to a custom XSLT. For additional information, see "Using the DisplayXSLT Property" on page 7-741 Choices are: **Ajax 5 Stars** - a five star rating system utilizing Ajax for display. **Ajax 5 Stars Comment -** a five star rating system utilizing Ajax for display. In addition, when you hover over the stars, a review box pops-up below the stars. Comments that are added are submitted via an Ajax call. **Ajax 5 Stars with Increments** - a five star rating system with half star increments that utilizes Ajax for display. **5 Stars** - a five star rating system that allows visitors to add text reviews of content. **5 Stars with Increments** - a five star rating system with half star increments that allows visitors to add text reviews of content.	String

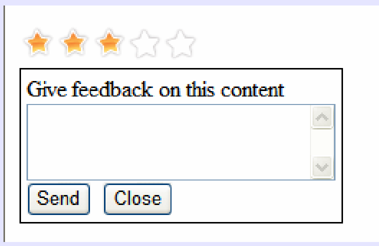
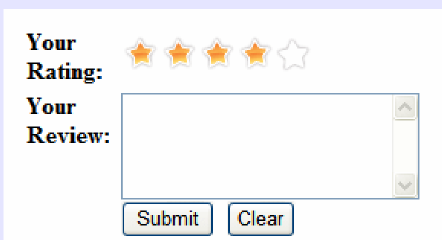
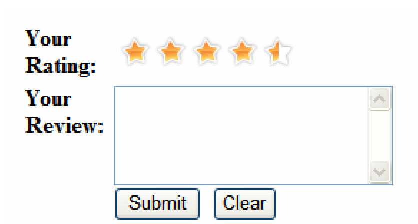
Property	Value	Data Type
	Review List - displays a list of reviews for content or a user. See Also: "Displaying Content Reviews On the Site" on page 7-737 and "Displaying a User's Reviews On the Site" on page 7-737. **Path to Custom Xslt** - enter the path to a custom XSLT. **Warning!** If you specify an external file or modify an existing file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	
DynamicParameter	To make this content review control dynamic, select **id**. When you do, this server control is attached to the content block passed as a URL parameter.	String
DynamicUserParameter	When using this control to retrieve a user's reviews, set this property to **UserId** to make the user's ID dynamic.	String
GetReviews	Returns a list of reviews for content or a user. **None** - do not return reviews. **Content** - returns reviews based on the content ID provided in the `DefaultContentID` property. **User** - returns reviews based on the User ID provided in the `UserId` property.	ReviewTypes
Hide	Select **False** to display this server control on the page. Select **True** to suppress it.	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxReviews	The number of reviews to retrieve if the `GetReview` property is set to Content or User. 0 (zero) = unlimited results. See Also: "GetReviews" on page 7-740	Integer

Property	Value	Data Type
Moderate	Setting this property to True allows CMS400.NET users to moderate reviews. See Also: "Moderating Reviews" on page 7-732	Boolean
RatingsMinimum	Sets a minimum number of reviews and ratings before displaying the average rating. When set to 0 (zero), the average rating is displayed as soon as content is rated the first time.	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
UserID	The user ID for which to get reviews. If left blank, reviews from all users are returned. If a user ID is specified, only reviews for that user are returned. **Warning!** The `GetReviews` property must be set to User for the control to use this property. See Also: "GetReviews" on page 7-740	Long
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The `<span>` tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The `<div>` tag is used when you want to apply attributes to a block of code. **Custom** - Lets you use custom tag.	String

Using the DisplayXSLT Property

The table below shows an example of each XSLT as it appears on a Web page, a description and the XSL file being used. The files are located in
`[Web Root]\[Site Root]\Workarea\Xslt`

Warning! If you want to edit an existing file, it is strongly recommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade. The files below are copies of files built, transformed and used, internally.

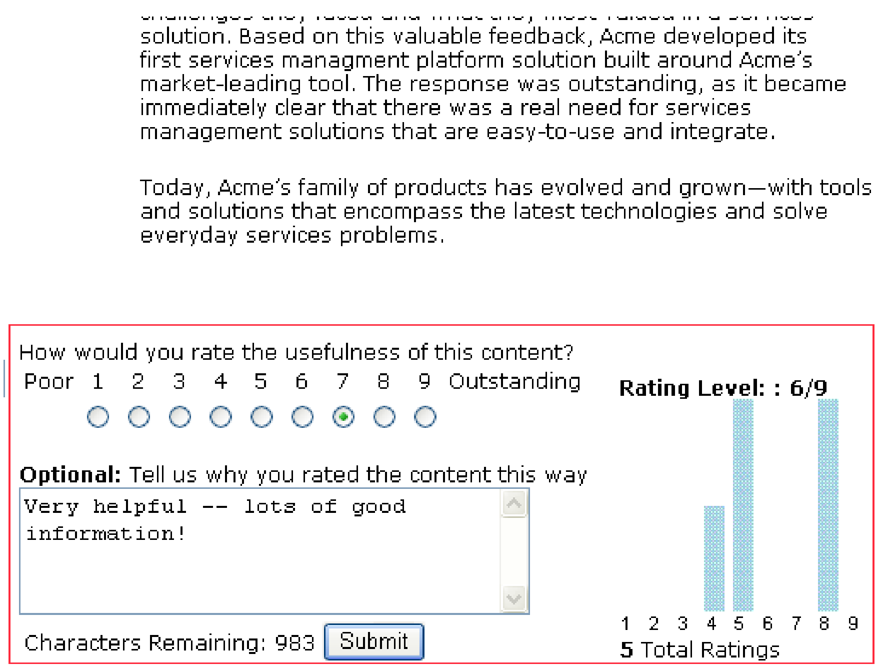
DisplayXSLT Selection	Description
Ajax 5 Stars	A five-star rating system utilizing Ajax for display. File used: rating5star.xsl 
Ajax 5 Stars Comment	A five-star rating system utilizing Ajax for display. When you hover over the stars, a review box pops-up. Visitor comments are submitted via an Ajax call. File used: rating5starComment.xsl 
Ajax 5 Stars with Increments	A five-star rating system with half-star increments that uses Ajax for display. File used: rating5starinc.xsl 
5 Stars	A five-star rating system that lets visitors add text reviews of content. File used: rating5starAddEdit.xsl 
5 Stars with Increments	A five-star rating system with half star increments that allows visitors to add text reviews of content. File used: rating5starincAddEdit.xsl 

DisplayXSLT Selection	Description
Review List	Displays a list of reviews for content or a user. File used: ratinglist.xsl See Also: "Displaying Content Reviews On the Site" on page 7-737 and "Displaying a User's Reviews On the Site" on page 7-737.

Content Rating

Ektron CMS400.NET lets you place a rating scale on any content on your Web site. The scale lets you collect feedback by giving site visitors the opportunity to rate the content. A visitor can rank the content on a numerical scale of one through nine, as well as submit a text comment (see illustration below).

Note: The user's browser must have cookies enabled in order to submit a content rating.



The content rating feature is explained through the following topics.

- "Inserting the Content Rating Server Control" on page 7-744

- "Limiting Visitors to One Rating" on page 7-744
- "Viewing the Content Rating Report" on page 7-745

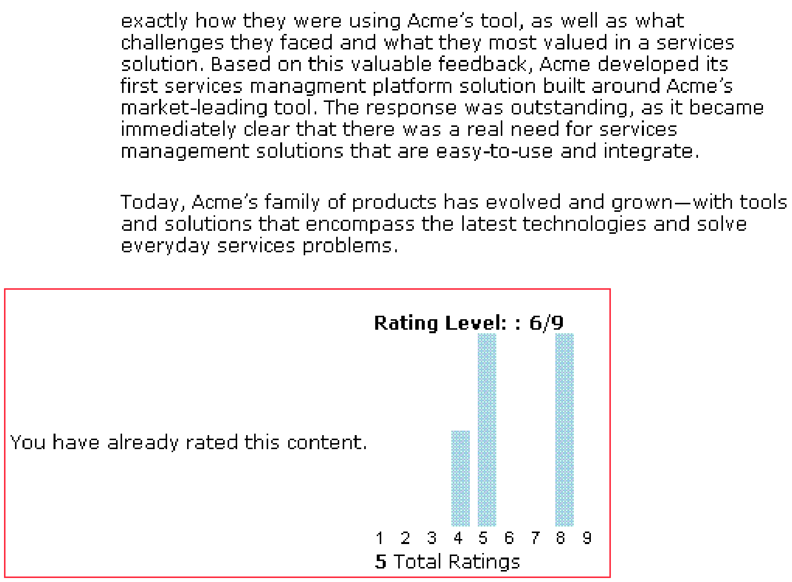
Inserting the Content Rating Server Control

To have a content ratings graph appear on a Web page, your developer inserts a server control. This procedure is described in the Ektron CMS400.NET Developer Manual section “Content Rating Server Control.”

Limiting Visitors to One Rating

Ektron CMS400.NET assumes you want to limit a user to rating a content item once. If a regular or membership user logs in before rating a piece of content, Ektron CMS400.NET remembers the user ID. If any other site visitor does not log in before rating content, Ektron CMS400.NET places a cookie on the site visitor’s computer.

So, whenever a page with a Content Rating server control is visited, Ektron CMS400.NET checks for the user ID or cookie. If neither exists, it displays a rating scale as displayed in "Content Rating" on page 7-743. If the page has already been rated by the user, the following version of the control appears.



Note: Your developer can customize many aspects of the control. So, it may not match the illustration.

Viewing the Content Rating Report

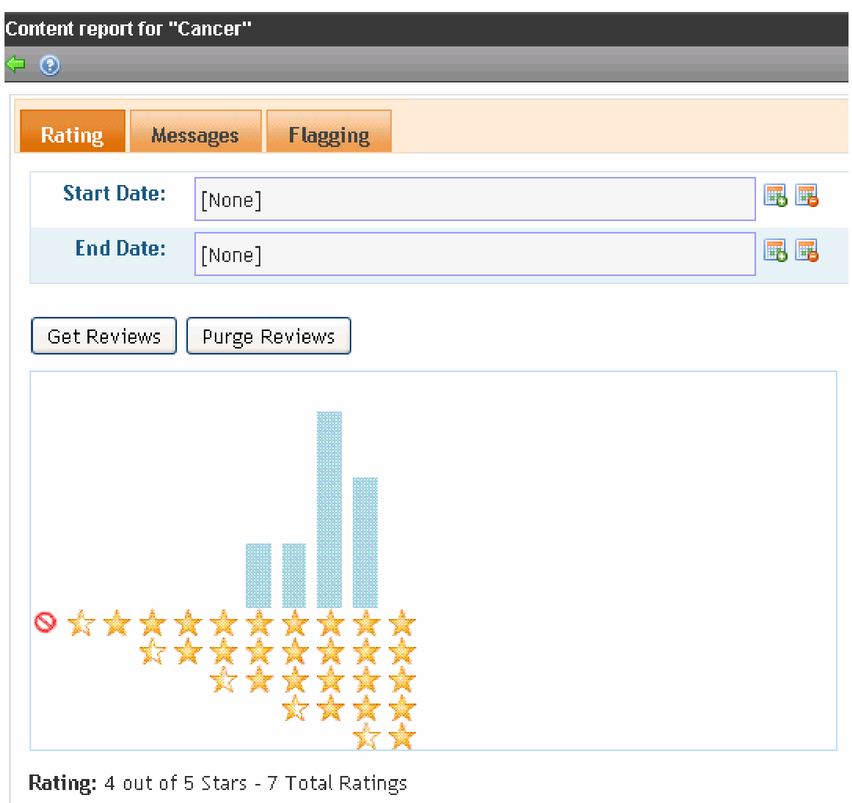
All Content Rating data for a content item is maintained and can be displayed in detail and summary format. To view this data, follow these steps.

1. Sign in to Ektron CMS400.NET.
2. Either
   - browse to the content item
   - right click the mouse
   - click **View Advanced Report**

   or

   - Go to **Workarea** > **Content**.
   - Navigate to the folder that contains the content.
   - Navigate to the content item.
   - Click the View Rating Reports toolbar button ( ).

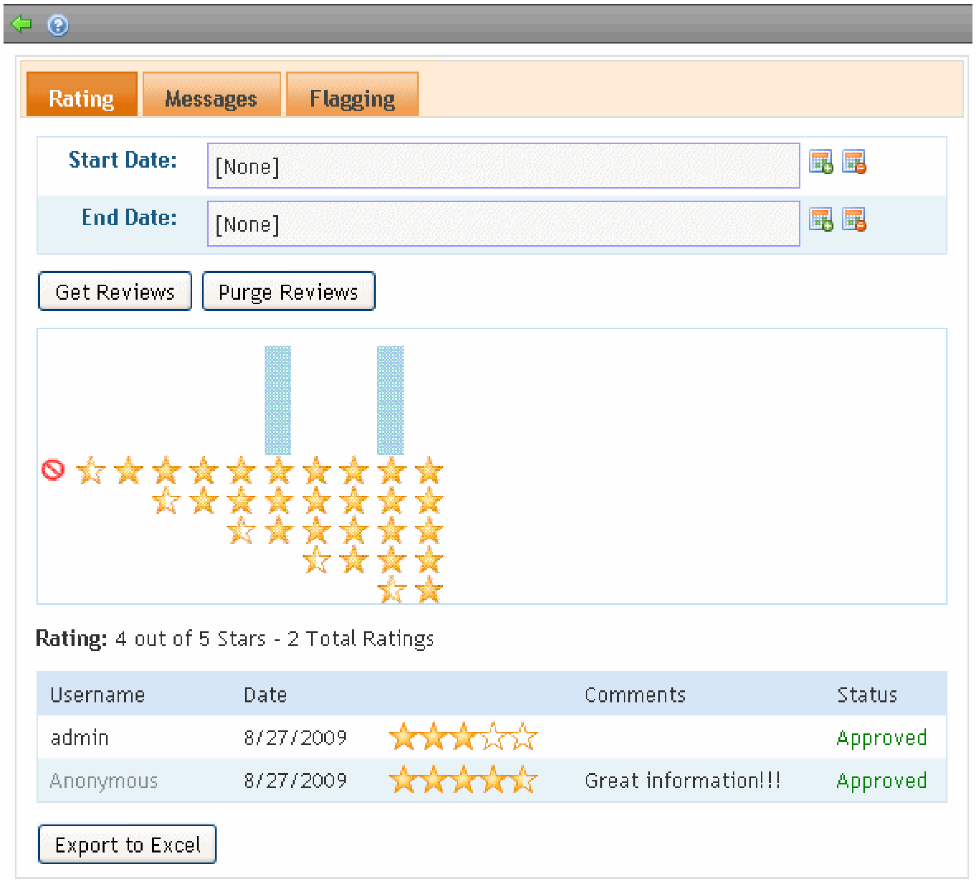
The Content Rating Report shows a summary of all ratings submitted for the content.



If desired, you can select a range of dates and limit the display of ratings data to those dates. Select start and end dates (using calendar buttons at the top of the screen) and click **Get Result**.

Viewing Content Rating Details

Also, to view details of the ratings data, click **Get Result** (see illustration below).



Exporting Details to Excel

If Microsoft Excel is installed on your computer, you can export the ratings detail to Excel for further manipulation of the data. To do so, the **Click Export to Excel** button.

Purging Rating Data

You can to remove content rating data to free up space in your database. To do so, select the date range of the data you want to purge using **Start Date** and **End Date**. Then click the **Purge** button.

ContentRating Server Control

Warning! This server control is deprecated as of the 7.0.1 Release. For optimal performance, Ektron recommends the ContentReview server control. See "ContentReview Server Control" on page 7-736

Use the ContentRating server control to place a rating scale on any page of your Web site. The scale lets site visitors rate a content item. A visitor can rank the content on a numerical scale as well as submit a text comment.

The control lets a site visitor rate a content item only once. On subsequent visits to the page, a message informs the visitor that he has previously rated the page, which can optionally display a summary of ratings for it. As a result, the control has two appearance modes: *initial* and *complete*.

Ektron CMS400.NET maintains and reports content ratings data. For more information, see "Content Rating" on page 7-743.

Content Rating Server Control Properties

The Ektron-specific Content Rating server control properties are divided into two groups:

- *Ektron* - settings that affect properties, such as the display
- *Ektron labels* - settings that affect the text labels within the control

These properties are described below.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Ektron Properties

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Boolean

Property	Value	Data Type
CompleteGraph Display	Specify a value to indicate how the ratings graph appears if a site visitor has already rated content. ■ **horizontal** - graph appears to the right of the AlreadyRatedMessage ■ **vertical** - graph appears below the AlreadyRatedMessage ■ **none** - graph does not appear	Ektron.Cms.ContentAPI .RatingGraphDisplayType
DefaultContentID	The ID of a content block being rated by this server control. It typically would be the content directly above the rating scale if no other content block is identified, or is not available. If you don't know the ID number of the content block, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DynamicParameter	To make this content rating control dynamic, select **id**. When you do, this server control is attached to the content block passed as a URL parameter.	String
GraphBarColor	The color of the bars in the graph.	System.Drawing.Color
Hide	Select **False** to display this server control on the page. Select **True** to suppress it.	Boolean
InitialGraphDisplay	Specify a value to indicate how the ratings graph appears if a site visitor has not yet rated content. ■ **horizontal** - graph appears to the right of the content rating scale ■ **vertical** - graph appears below the content rating scale ■ **none** - graph does not appear	Ektron.Cms.ContentAPI .RatingGraphDisplayType

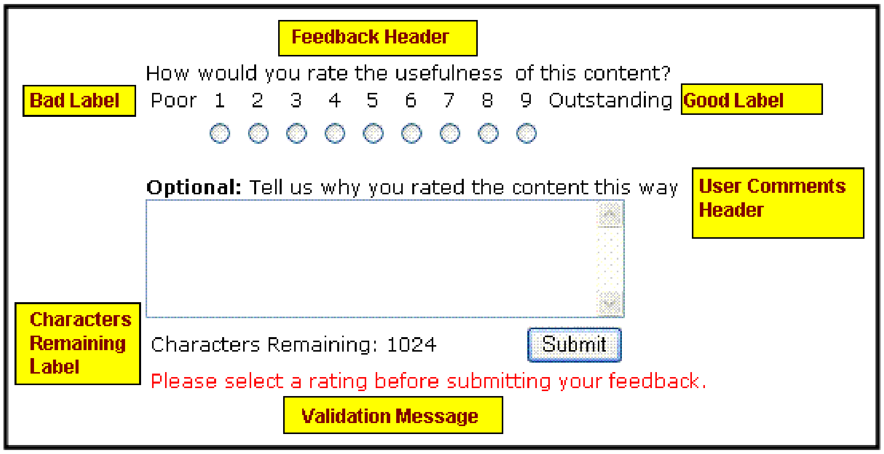
Property	Value	Data Type
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Padding	Enter the number of pixels used to create space between the rating scale and the graph. Note: If you do not display the graph, this setting has no effect.	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The `<span>` tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The `<div>` tag is used when you want to apply attributes to a block of code. **Custom** - Lets you use custom tag.	String

Ektron Label Properties

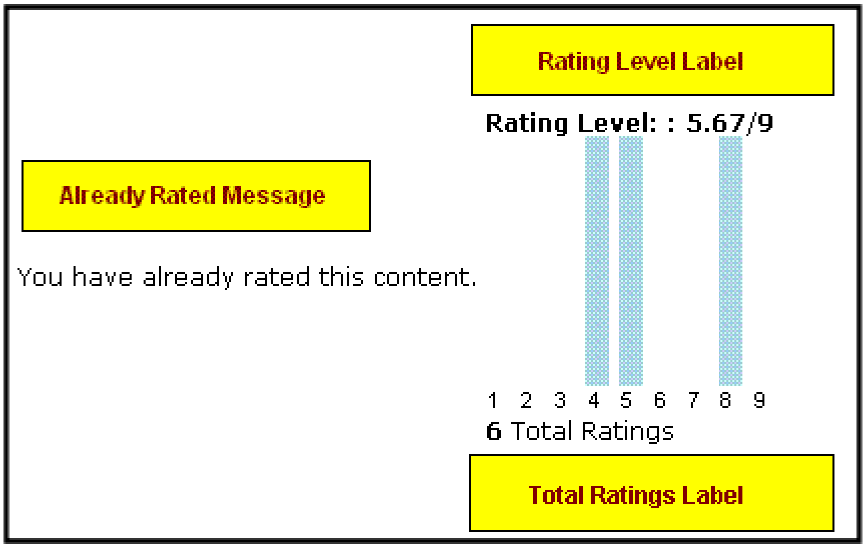
The label properties determine the text that appears in the server control. Most of them are illustrated below.

Note that the first illustration describes the initial graph, while the second describes the complete graph.

Initial Graph Display



Complete Graph Display



Property	Description	Default Text
AlreadyRatedMessage	Appears in place of the rating scale if the user previously rated the page	You have already rated this content.
BadLabel	The low end of the rating scale	Poor
CharsRemainingLabel	Number of additional characters a user may	Characters Remaining:

Property	Description	Default Text
	enter into the comment.	
CookiesRequired Message	Appears if browser cookies have been disabled	We're sorry, but you must enable cookies in your browser to rate this content.
FeedbackHeader	Introduces rating scale	How would you rate the usefulness of this content?
GoodLabel	The high end of the rating scale	Outstanding
RatingLevelLabel	Appears above the graph	Rating Level:
ThankYouMessage	Appears after site visitor selects a number, optionally enters a comment, and presses **Submit**.	Thank you for your feedback.
TotalRatingsLabel	Appears below the graph, and lists the number of rating submissions received.	Total Ratings
UserCommentsHeader	Introduces free-text comment area below rating scale	Tell us why you rated the content this way
ValidationMessage	Appears on initial display if user clicks **Submit** button before selecting rating number	Please select a rating before submitting your feedback.

Analytics

By analyzing the user traffic coming to and interacting with your site, you can better understand key elements of your Web presence. Traditional Web analytics packages help you understand where your traffic is coming from, when the traffic is occurring (including high and low points) and what pages users are interacting with. But this information is often isolated from the Web content and is, therefore, lacking the context needed to take advantage of it.

Ektron CMS400.NET has a fully-developed, Web traffic analytics provider model. By hooking into best-of-breed analytics software, like Google Analytics, your Web site’s information is integrated into CMS400.NET’s Workarea and so is at your fingertips as you use it to optimize the site experience.

Analytics can help you

- determine the popularity of areas of your site
- examine click-through rates on your calls to action
- analyze site structure and navigation
- obtain key information about your site visitors

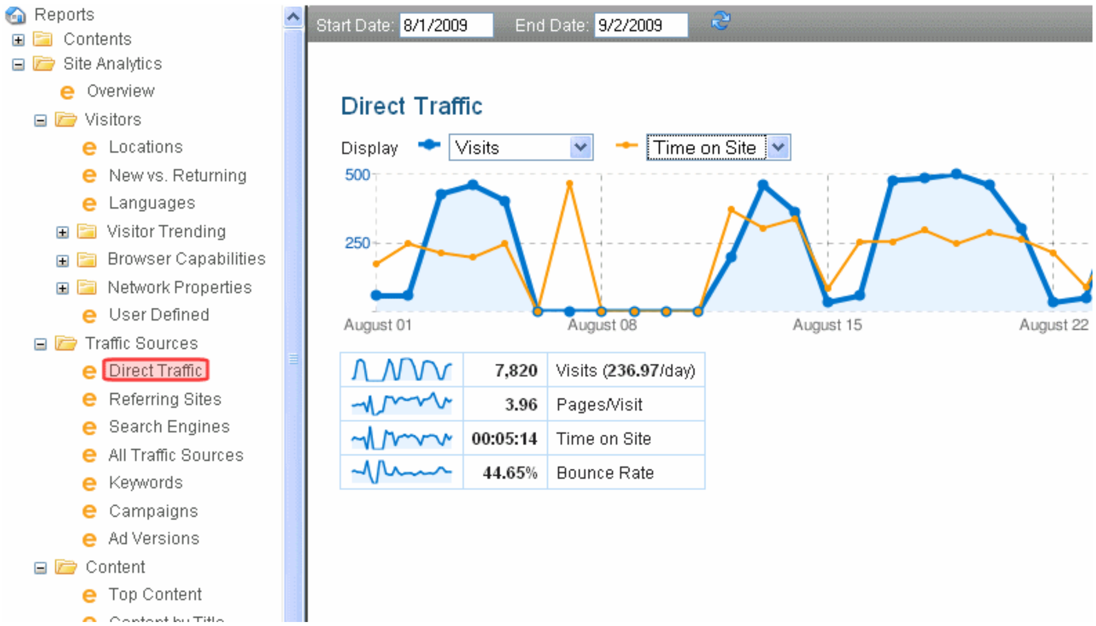
This information is essential to optimizing your site’s content. Its seamless integration into CMS400.NET lets you fully leverage the data.

Using Analytics Data within Ektron CMS400.NET

Ektron CMS400.NET’s Workarea provides customized reporting, reflecting exactly the information you care about. The data can be broken down in many ways, such as

- number of visits per day
- browser usage
- visitor location
- visitor language
- top content
- referring sites

Analytics data is available for your entire site as well as individual pages. A sample Analytics display is below.



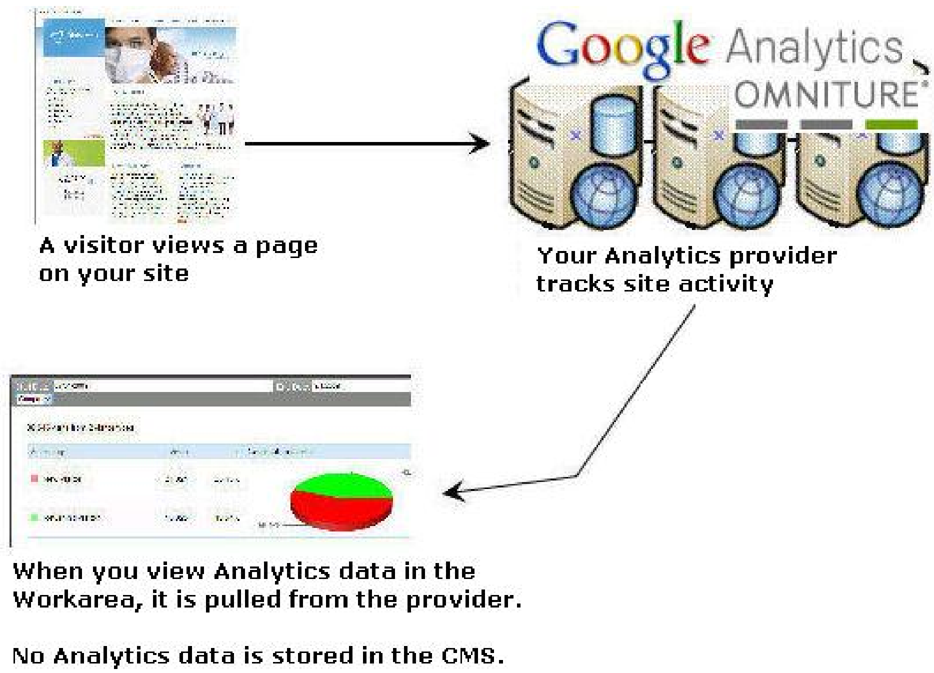
The Analytics widget can be placed on your dashboard, so that you have instant access. Also, the software is integrated into the content history. This makes your traffic analytics more relevant: you can see what modifications were made, when, and how they impacted traffic to that page. You can react immediately, restoring content that performed better or changing the current content to better reflect your goals.

This full integration makes your analysis more efficient; there is no reconfiguration of the analytics tool and no learning curve. Customer reporting, segmentation, and legacy data are easier to access, and Ektron CMS400.NET becomes the central hub for all of your Web site's information, bringing it together so that it is no longer siloed. Having all information in one place puts it in context, making it easier to draw the conclusions you need to optimize your Web presence.

This section explains the Analytics feature through the following topics.

- "The Flow of Analytics Data" on page 7-754
- "Google Analytics Provider" on page 7-754
- "Setting up Google Analytics" on page 7-755
- "Authorization to View Analytics Data" on page 7-758
- "Viewing Analytics Data" on page 7-758
  - "Page Level Analytics Data" on page 7-758
  - "Site Level Analytics Data" on page 7-764

The Flow of Analytics Data



As shown above, once you set up Analytics tracking, the Analytics Provider monitors every site visit. In the Workarea, you can view this data from many angles.

Warning! No data is stored in Ektron CMS400.NET -- the CMS retrieves it upon demand from your Analytics provider.

Google Analytics Provider

Google Analytics is an enterprise-class, Web Analytics solution that gives you rich insights into your Web site traffic and marketing effectiveness. Powerful, flexible and easy-to-use features let you see and analyze your traffic data in an entirely new way. With Google Analytics, you're more prepared to write better-targeted ads, strengthen your marketing initiatives, and create higher converting Web sites.

Its main features are:

- **Advertising ROI** - Measure the success of your display, search, new media and offline advertising efforts.

- **Cross Channel and Multimedia Tracking** - Compare your site usage metrics with industry averages and track Flash, video, and social networking sites and applications.
- **Visualizing Data** - Uncover trends, patterns, and key comparisons with funnel visualization, motion charts, mapping, and more.
- **Customized Reporting** - Create the reports, dashboards, and segments that make the most sense for your business.
- **Sharing and Communicating** - Administration controls and email reports allow you to share data across your organization.
- **Google Integration and Reliability** - Google Analytics complements a suite of related products, all running on the same world renowned infrastructure that powers Google.

For a product tour, see http://www.google.com/analytics/tour.html.

Setting up Google Analytics

Warning! No server control is needed to track Analytics. After you enable Analytics in the web.config file, the following JavaScript is automatically added to each PageBuilder page and any site page that contains an Ektron CMS400.NET server control.

```
<!-- Start Google Code -->
<script type="text/javascript">
var gaJsHost = (("https:" == document.location.protocol) ? "https://ssl." :
"http://www.");
document.write(unescape("%3Cscript src='" + gaJsHost + "google-analytics.com/ga.js'
type='text/javascript'%3E%3C/script%3E"));
</script>
<script type="text/javascript">
try {
var pageTracker = _gat._getTracker("[USER ACCOUNT STRING]");
pageTracker._trackPageview();
} catch(err) {}</script>
<!-- End Google Code -->
```

Note: Your User account string is provided by Google Analytics.

Setup Procedure for Google Analytics

Tracking Your Entire Web Site

The following steps explain how to set up the default Analytics provider, Google Analytics, to track your entire site.

See Also:

- "Setting up Analytics for Multiple Sites or Providers" on page 7-758

- "Tracking a Single Page" on page 7-757

To do so, follow these steps.

Warning! Enabling the tracking code may cause a significant increase in CPU usage.

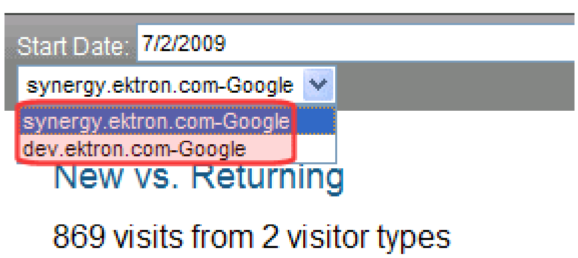
1. Create a Gmail account (http://mail.google.com).
2. Sign up for Google Analytics (www.google.com/analytics/).

   When you set up a Google Analytics profile for your site, you are assigned a profile ID and a User Account. You will need those to complete Step 7.
3. On the server that hosts Ektron CMS400.NET, go to C:\Program Files\Ektron\CMS400v80\Utilities\EncryptEmailPassword.exe.
4. Use that utility to encrypt the Gmail username and password that you obtained in Step 1.
5. Open your site's *siteroot*/web.config file.
6. Find the `AnalyticsDataProvider` tag, shown below.

```
<AnalyticsDataProvider defaultProvider="Google">
<providers>
<add name="Google" type="Ektron.Cms.Analytics.Providers.GoogleAnalyticsProvider,
Ektron.Cms.BusinessObjects" Username="" Password="" ProfileId="" SiteURL=""
UserAccount=""
GoogleAnalyticsTrackingCodePath="Analytics\template\googletrackingcode.ascx" />
</providers>
</AnalyticsDataProvider>
```

Note: If your web.config has several analytics providers and you want to turn off analytic tracking for one of them, delete the value of the `GoogleAnalyticsTrackingCodePath` property.

7. Use the following table to complete the tag's properties.

<table>
<tr><th>Element</th><th>Enter</th></tr>
<tr><td>name</td><td>The free text name of the site being tracked.
Ektron suggests the site name followed by the provider name. For example, www.ektron.com-Google.
Site-level displays of Analytics data within the Ektron CMS400.NET Workarea let you choose a site from a dropdown, as shown below.

</td></tr>
<tr><td>Username</td><td>The Gmail username you encrypted in Step 4.</td></tr>
</table>

Element	Enter
Password	The Gmail password you encrypted in Step 4.
ProfileID	The Google Analytics Profile ID you obtained in Step 2. **Note:** Tip! If you go to your Google Analytics dashboard at google.com, in the address bar, the `&id=` value in the URL is your `ProfileId` assigned by Google.
SiteURL	Your site root names. For example, you could set up one `<providers>` tag for the `dev.ektron.com` site, and another for the `synergy.ektron.com` site. Do not include a protocol, such as `http://`.
UserAccount	The Google Analytics SiteURL you obtained in Step 2. **Note:** Tip! When you visit your Google Analytics Settings page at google.com, the `UA-xxxxxx-x` string next to your site domain is the UserAccount assigned by Google.

8. Save web.config.

Tracking a Single Page

As an alternative to tracking your entire site, you can track any number of individual .aspx pages. To do that, follow these steps on every page you wish to track.

Prerequisite: You completed all steps in "Tracking Your Entire Web Site" on page 7-755

1. Open your site's *siteroot*/web.config file.
2. Find the `ek_AutoInsertBeaconScript` tag.
3. Change its `value` to `false`.
4. Save web.config.

Note: The above steps disable the tracking code on your Web site.

5. Open Visual Studio.
6. Open the .aspx page to which you want to apply the tracking code.
7. In the Solution Explorer tree, navigate to `Workarea/Analytics/template/googletrackingcode.ascx`.
8. Drag and drop that user control onto the page.
9. Assign `EktronAnalyticsTrackingCode` as the ID of the control.

Setting up Analytics for Multiple Sites or Providers

You can use more than one provider (such as Omniture), and you can track multiple sites. To track multiple providers or sites, copy the contents of the `<providers>` tag, paste it below the existing tag and above `</AnalyticsDataProvider>`, and modify the elements listed in Step 7 above.

Authorization to View Analytics Data

License Requirements

Ektron CMS400.NET Professional or Enterprise License

User Permissions

Only the following users can view Analytics data.

- Members of the Administrators Group
- Users assigned to the Analytics Viewer role. See Also: "Defining Roles" on page 15-32

Viewing Analytics Data

The Analytics feature provides two basic types of data:

- Page data - "Page Level Analytics Data" on page 7-758
- Site data - "Site Level Analytics Data" on page 7-764

Page Level Analytics Data

After you enable Analytics tracking, your provider retains data on every visited page (that is, a unique URL) such as `http://dev.ektron.com/articles.aspx` or `http://dev.ektron.com/template.aspx?id=6572`). Data is tracked when the quicklink is used, as well as any alias assigned to the content. See Also: "URL Aliasing" on page 10-1

You can view any page's Analytics data from the following locations.

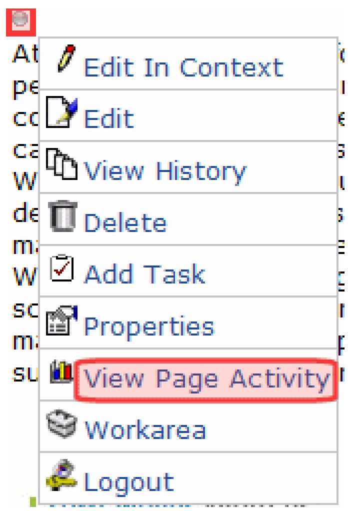
- "Viewing Page-Level Analytics from the Site" on page 7-759
- "Viewing Page-Level Analytics from a PageBuilder Page" on page 7-760

■ "Viewing Page-Level Analytics from the Workarea" on page 7-761

Viewing Page-Level Analytics from the Site

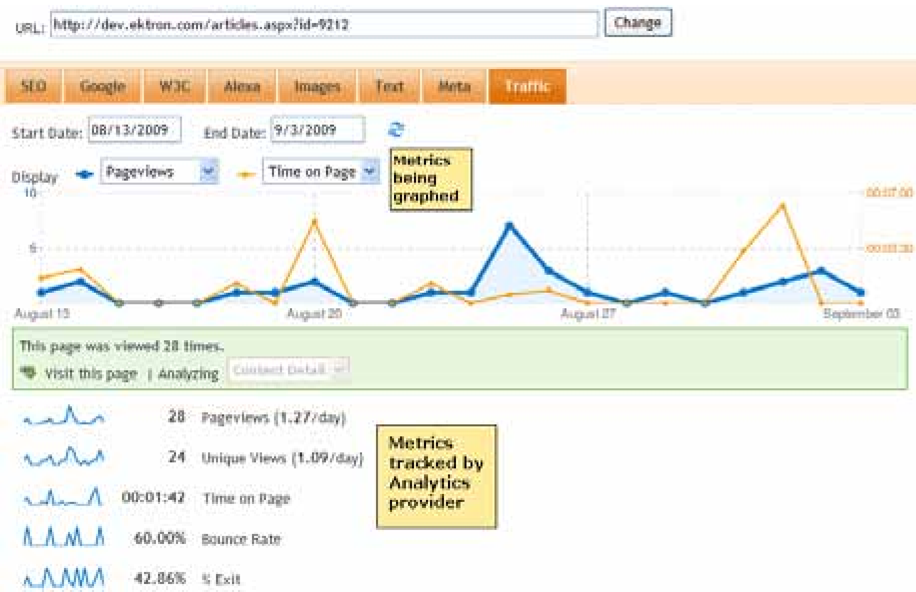
Any authorized user can view Analytics for a page on your Web site by following these steps.

1. Log in to the Web site.
2. Navigate to the page whose Analytics data you wish to view.
3. Hover the cursor over the Web Site Content menu. See Also: "The Web Site Content Menu" on page 7-4
4. Click **View Page Activity**, as shown below.



The SEO page's **Traffic** tab appears.

The SEO Page's Traffic Tab



The Traffic tab of the SEO control graphs the Analytics data of any two search criteria. Below the graph is data for the five visit criteria tracked by the Analytics provider.

Visit Data

- **Pageviews** - number of pageviews for this page over the selected date range
- **Unique pageviews** - number of unique visitors to this page over the selected date range
- **Average time on page** - how long a visitor spent on the page. It is calculated by subtracting the initial view time for this page from the initial view time of the subsequent page. So, this metric does not apply to exit pages.
- **Bounce rate** - the percentage of single-page visits (that is, visits in which the visitor exited your site from the entrance page)
- **% Exit** - the percentage of site exits that occurred from this page

Note that you can change the date range, as well as either search criterion (**Pageviews** and **Time on Page** in the example above).

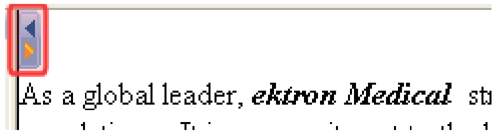
You can also replace the **URL** with a different one, and view the page being analyzed (by clicking **Visit this page** in the green bar).

Viewing Page-Level Analytics from a PageBuilder Page

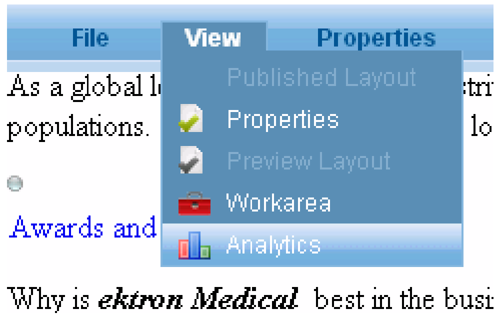
Any authorized user can view Analytics for a PageBuilder page by following these steps.

Note: You cannot drag and drop the Analytics widget onto a PageBuilder page.

1. Use the right arrow button (circled below) to open the PageBuilder menu. See Also: "Building PageBuilder Pages" on page 6-1



2. From the menu, select **View** > **Analytics**.



3. The SEO page's **Traffic** tab appears.

See Also: "The SEO Page's Traffic Tab" on page 7-760See Also:

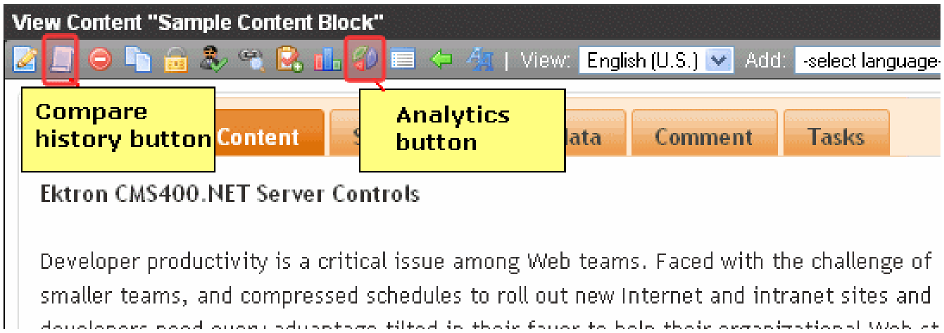
Viewing Page-Level Analytics from the Workarea

The Ektron CMS400.NET Workarea provides two page-level views of Analytics data.

- The View Content History screen - compares Analytics data for any two published versions
- The Analytics toolbar button - displays the SEO page's **Traffic** tab. See "The SEO Page's Traffic Tab" on page 7-760.

To view a content item's Analytics data from the Ektron CMS400.NET Workarea, follow these steps.

1. Navigate to the folder containing the content whose Analytics data you want to view.
2. Click the content item.



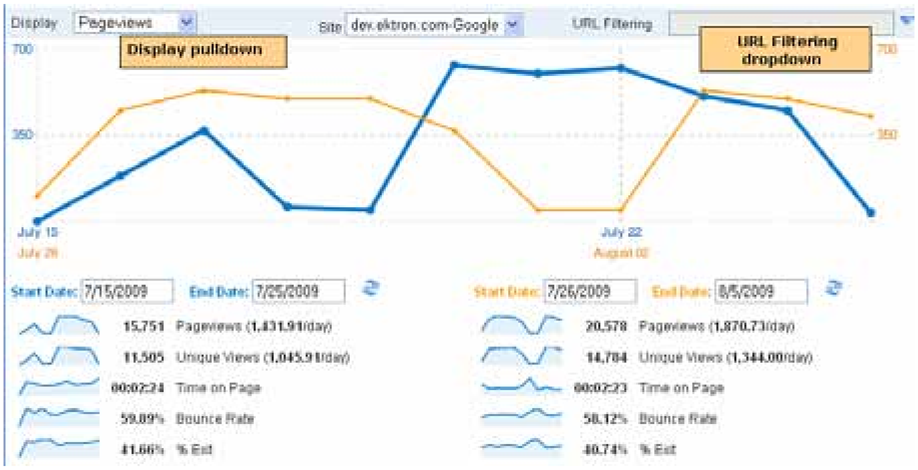
3. To compare Analytics data any two published versions, click the History button (). See Also: "Comparing Two Published Versions of Content" on page 7-762

   To view Analytics for the currently published version, click the Analytics button (). When you do, you see the Traffic tab of the SEO page. See Also: "The SEO Page's Traffic Tab" on page 7-760

Comparing Two Published Versions of Content

On the View Content History screen, blue and orange radio buttons appear next to each *published* version of content, as shown below.

To compare Analytics data, click the appropriately-colored radio button next to each version, then click the Compare button (). The Compare screen for the two versions appears, as shown below.



You can change the date range for each content version. You can also

- Use the Display pull-down to graph any visit data. See "Visit Data" on page 7-760
- Click the **URL Filtering** tab to select the URLs being displayed. See Also: "URL Filtering" on page 7-763

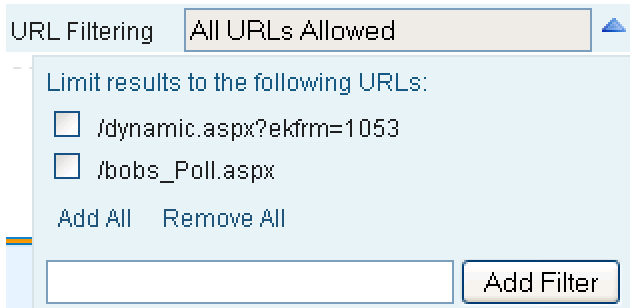
URL Filtering

Any content item can be viewed via several URLs, such as

- its *quicklink*. See Also: "A quicklink is a special kind of hyperlink that jumps to another content item on your Web site. (A regular hyperlink jumps to a Web page on the internet.)" on page 8-3
- manual alias
- automatic alias See Also: "URL Aliasing" on page 10-1

Note: While Regex-based aliases affect Analytics data, they do not appear on the URL Filtering tab.

The **URL Filtering** tab of the Compare Analytics screen lets you break down the data by each of these identifiers. So, for example, you can drill down to view only the data collected when site visitors accessed a page by typing its manual alias into the browser.

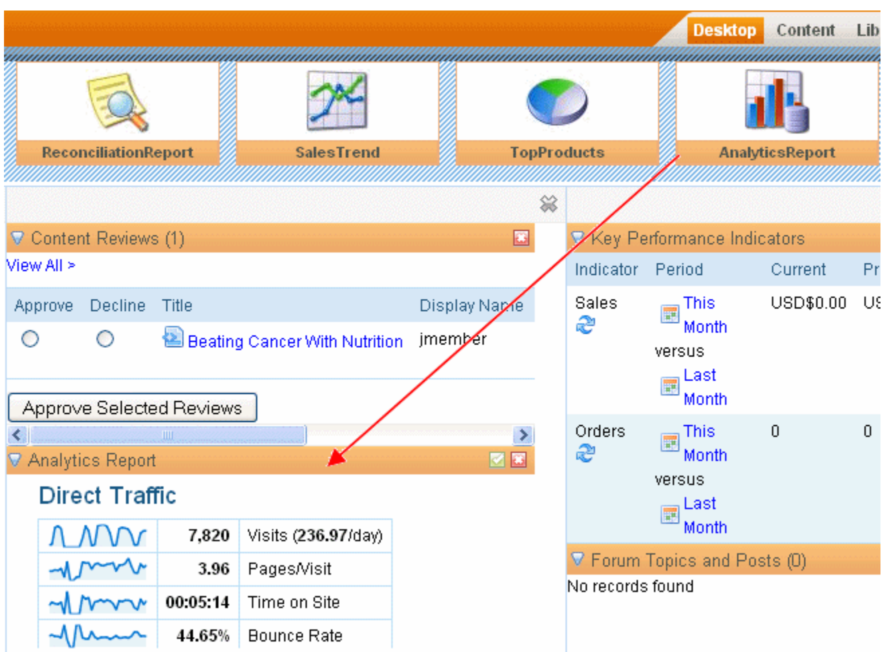


Site Level Analytics Data

You can view Analytics data for any site via the Analytics Report Widget and several reports. See Also: "Standard Widgets" on page 21-404

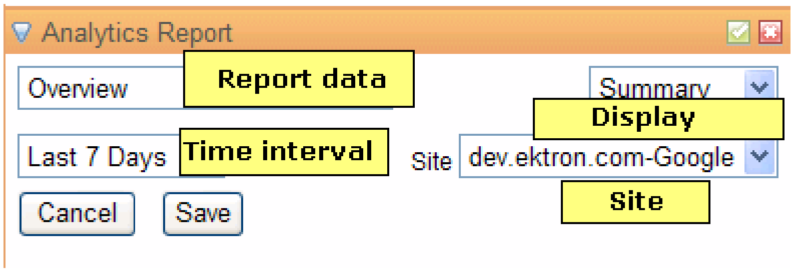
Analytics Report Widget

You can drag and drop the Analytics Report Widget onto the Smart Desktop.



When you do, you initially see the Direct Traffic report for the past seven days. (See Also: "Direct Traffic" on page 7-770)

You can click the Edit button ( ) to change the display using any of the options shown below.



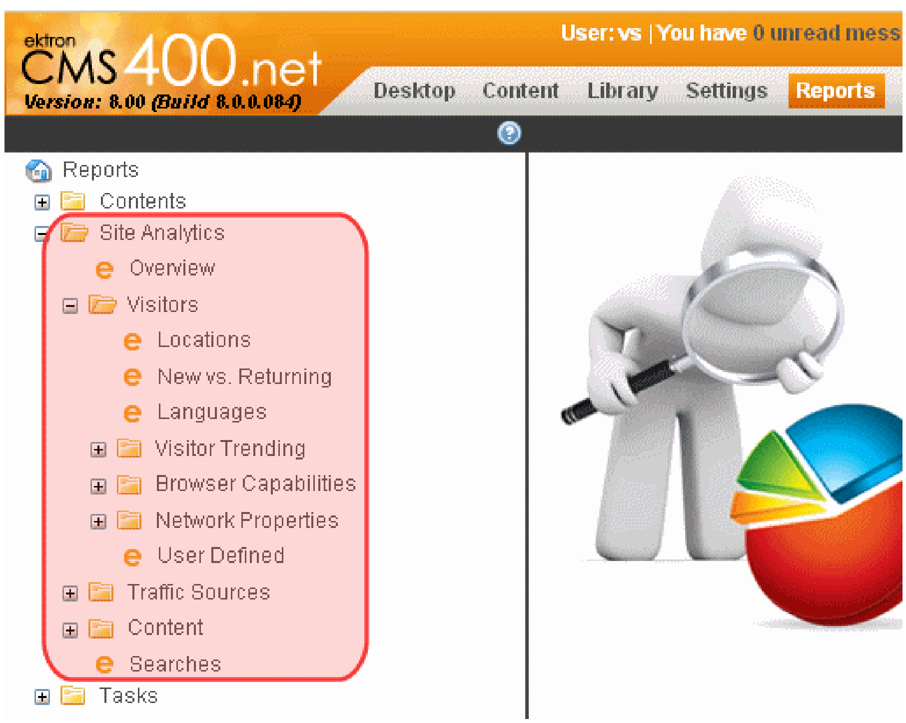
To learn about the report data options, see "Site Report Descriptions" on page 7-765.

Note that there are three time interval choices:

- last 7 days (the default)
- last 30 days
- last 90 days

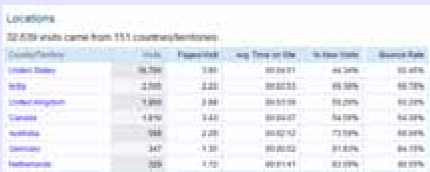
Site Report Descriptions

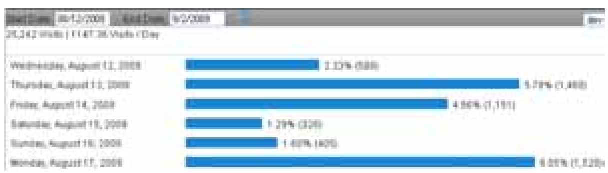
You can access site-level Analytics reports from within the Ektron CMS400.NET Workarea by selecting **Reports > Site Analytics**.



The site level reports are described below.

Note: The following text was adapted from Google Analytics Help Center (http://www.google.com/support/analytics/). Check that site for additional details on the reports.

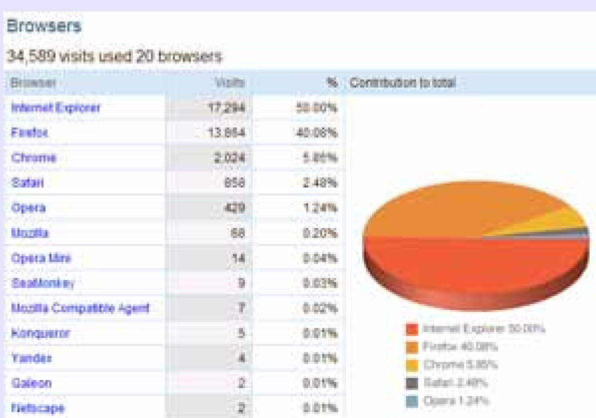
Report	Description
Overview	Direct traffic on left side, top content on the right. See Also: "Direct Traffic" on page 7-770, "Top Content" on page 7-771; "Analytics" on page 7-752
	
Searches	Search terms used by site visitors to find content on your site. Note that this data is not retrieved from Google Analytics. Instead, it is retrieved from Ektron CMS400.NET's site search.
Visitors The number of new and returning visitors who came to your site and how extensively they interacted with your content. This traffic overview allows you to view aspects of visit quality (i.e. average pageviews, time on site, bounce rate) and visit characteristics (i.e. first time visitors, returning visits). 	
Locations	Countries of your site visitors.
New vs. Returning	The number of visitors to your site who are new or returning. A high number of new visitors suggests that you are successful at driving traffic to your site, while a high number of return visitors suggests that the site content is engaging enough to keep visitors coming back. You can see how frequently visitors return and how many times they return in 'Recency' report and the 'Loyalty report', both under 'New vs. Returning' in the Visitors section.
Languages	Uses the language as provided by the HTTP Request for the browser to determine site visitors' language. Values are given in 2- or 4-character language code (for example, en-br for British English). This report captures the preferred language that visitors

Report	Description
	have configured on their computers. Understanding who your visitors are is crucial to developing the right content and optimizing your marketing spend. Many times, geo-location is not enough. Many countries have diverse populations speaking different languages which present important market targeting opportunities.
User defined	If you modified the tracking code to provide a user-defined segment, this field identifies that segment by the string you provide when setting up a user-defined segment.
Visitor Trending 	
Visits	The number of visits your site receives is the most basic measure of how effectively you promote your site. Starting and stopping ads, changing your keyword buys, viral marketing events, and search rank are some examples of factors that influence the number of visits your site receives.
Absolute Unique Visitors	The number of unduplicated (counted only once) visitors to your Web site over the specified time period. A Unique Visitor is determined using cookies.
Pageviews	The total number of pages viewed on your site. It is a general measure of how much your site is used. It is more useful as a basic indicator of the traffic load on your site and server than as a marketing measure.

Report	Description
Average Pageviews	Average pageviews is one way of measuring visit quality. A high Average Pageviews number suggests that visitors interact extensively with your site. A high Average Pageviews results from one or both of: ■ Appropriately targeted traffic (that is, visitors who are interested in what your site offers) ■ High quality content presented effectively Conversely, a low average pageviews indicates that the traffic coming to the site has not been appropriately targeted to what the site offers or that the site does not deliver what was promised to the visitor.
Time on Site	One way of measuring visit quality. If visitors spend a long time visiting your site, they may be interacting with it extensively. However, Time on site can be misleading because visitors often leave browser windows open when they are not actually viewing or using your site.
Bounce Rate	The percentage of single-page visits (that is, visits in which the person left your site from the entrance page). Bounce rate is a measure of visit quality, and a high bounce rate generally indicates that site entrance (landing) pages aren't relevant to your visitors. You can minimize Bounce Rates by tailoring landing pages to each keyword and ad that you run. Landing pages should provide the information and services that were promised in the ad copy.

Browser Capabilities

Optimizing your site for the appropriate technical capabilities helps make your site more engaging and usable and can result in higher conversion rates and more sales.


Browsers

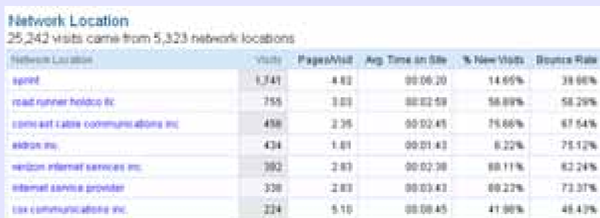
34,589 visits used 20 browsers

Browser	Visits	%	Contribution to total
Internet Explorer	17,294	50.00%	
Firefox	13,864	40.08%	
Chrome	2,024	5.85%	
Safari	858	2.48%	
Opera	429	1.24%	
Mozilla	68	0.20%	
Opera Mini	14	0.04%	
SeaMonkey	9	0.03%	
Mozilla Compatible Agent	7	0.02%	
Konqueror	5	0.01%	
Yandex	4	0.01%	
Galeon	2	0.01%	
Netscape	2	0.01%	

Report	Description
Browsers	The browsers that your visitors use.
Operating Systems	The operating systems that your visitors use.

Report	Description
Browsers and OS	The browser/operating system combinations that your visitors use.
Screen Colors	The number of screen colors your visitors use.
Screen Resolutions	The screen resolutions that your visitors use.
Flash Versions	The versions of Flash that your visitors have installed.
Java Support	Whether Java is supported on your visitors' platforms.

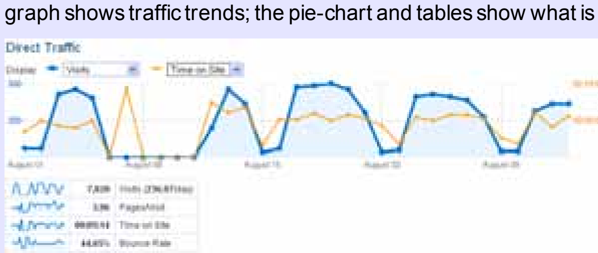
Network Properties



Report	Description
Network Location	The internet service providers that your visitors use. This report allows you to track the internet service provider (ISP) domains to which the user resolves. The domain is determined by the internet service that owns the user's internet _protocol (IP) identifier.
Hostnames	Hosts from which people are visiting your site. Hostnames sometimes provide insight into organizations that are interested in what you offer.
Connection Speeds	Connection speeds that your visitors are using. Optimizing your site so that it loads quickly for most visitors can result in higher conversion rates and more sales.

Traffic Sources

This section provides an overview of the different kinds of sources that send traffic to your site. The graph shows traffic trends; the pie-chart and tables show what is driving the trends.



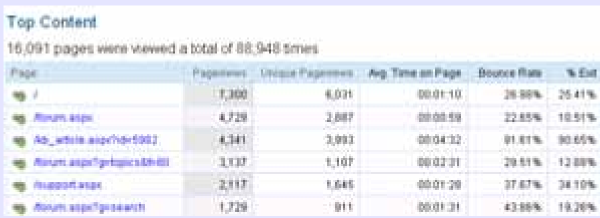
Report	Description
Direct Traffic	Visits from people who clicked a bookmark to come to your site or who typed your site URL directly into their browser. Direct traffic can include visitors recruited via offline (i.e. print, television) campaigns.
Referring Sites	Externals sites from which visitors linked to your site.
Search Engines	Visitors who clicked to your site from a search engine result page.
All Traffic Sources	Visitors referred from search engines, sites, and tagged links. The graph shows the overall trends while the table shows the specific sources (i.e. search engines, sites, and tagged links) driving the trends.
Keywords	Compares traffic from search keywords to overall traffic to your site.
Campaigns	How people referred from your configured campaigns compare to the “average” visitor to your site. The graph shows overall trends, while the table lists each configured campaign. Since all traffic in this report results from campaigns that you explicitly control, you can use this information to add or delete campaigns, or to determine the effectiveness of tests that you have set up using custom tags.
Ad Versions	Compares your AdWords ads (and configured campaigns in which you use the “content” tag) against each other. This report shows you which ad copy (in AdWords ads or in configured campaigns) is most effective. Ads with high clickthrough rates show that the copy is effective at getting the user to click, while high bounce rates, for example, indicate a need for landing pages that are consistent with what the ad promises.

Report	Description

Content

Provides an overview of pageview volume and lists the pages (Top Content) that were most responsible for driving pageviews. You can also reach some useful reports that reveal how users interact with your site and statistics related to how they found your site in the first place.

Note: Content reports include a link icon ( ) and a hyperlink. If you click the link icon, you go to the page. If you click the hyperlink, you see a more detailed Analytics report about that page.



Report	Description
Top Content	The most commonly viewed pages on your site, and how they are used. The table lists all pages which were viewed on your site. A high bounce rate indicates a landing page that should be redesigned or tailored to the specific ad which links to it. A high 'Time on Page' may indicate content that is particularly interesting to visitors. The significance of exits varies according to each page. For example, it may be common for visitors to exit your site from a receipt or “thank you” page because they have completed a conversion activity. In contrast, a high number of exits from a non-goal page (from a funnel page, for example) may indicate that the page is confusing or that it generates user errors.
Content by Title	The most commonly viewed groups of pages on your site (grouped by title), and how they are used. This report provides the same information in the “Top Content” report, but aggregated by title tag value.
Top Landing Pages	Data on how effectively your landing pages entice visitors to click further into your site. You can lower bounce rates by tailoring landing pages to their associated ads and referral links and placing a clear call-to-action on each landing page.
Top Exit Pages	Pages from which people exit your site. The significance of an exit rate varies according to each page. For example, it may be common for visitors to exit your site from a receipt or “thank you” page because they have completed a conversion activity. In contrast, a large number of exits from a non-goal page (from a funnel page, for example) may indicate that the page is confusing or that it generates user errors

Chapter 8

Library Folder

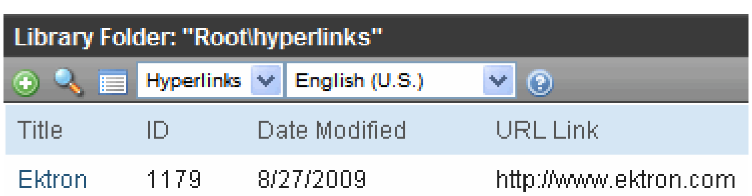
The library folder stores images, files, quicklinks, and hyperlinks that can be inserted into editor content. Before you can insert them into content, you must copy them from your computer to a larger, file server computer that everyone editing your site can access.

This chapter explains how to copy such files and insert them into Web content through the following topics.

Terms Used in this Chapter

- An *image* is any graphic file, which can include illustrations and photos. Common image file extensions are .gif., .jpg, .tiff, etc.
- A *file* is type of computer file that can be launched from a browser, such as Internet Explorer. Examples include a Microsoft Word document and a .PDF file.
- A *hyperlink* is a commonly used or hard to remember Web address (also known as a URL). After you add hyperlinks to the library, users can easily apply them to editor content.

So for example, if the editor content is “Contact Ektron,” the user can select the text, click the library button, select **hyperlinks** to find the Ektron hyperlink, and apply that hyperlink to the text.

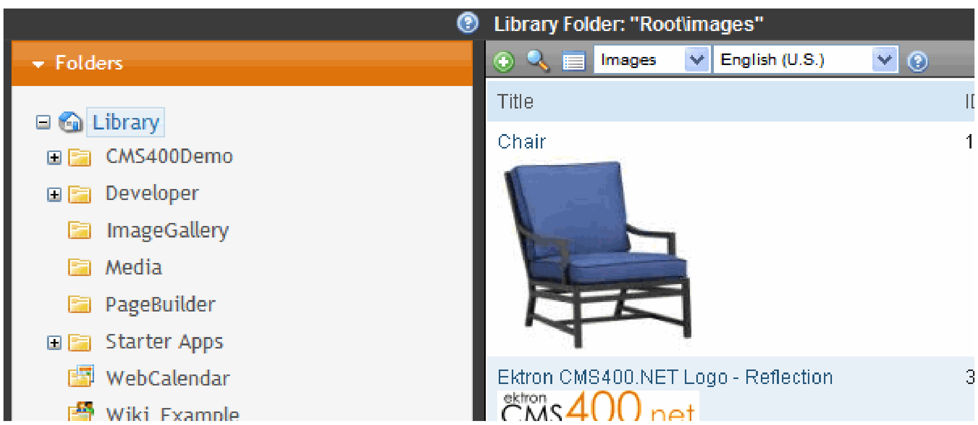


Once the page is published, a person reading it can click the text to “jump” to the Web address `www.ektron.com`.

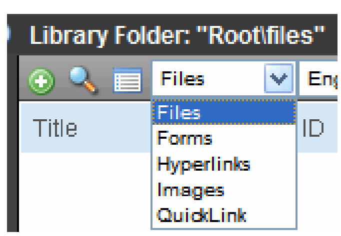
- A *quicklink* is a special kind of hyperlink that jumps to another content item on your Web site. (A regular hyperlink jumps to a Web page on the internet.)
- A *form* is a quicklink to HTML form content. Whenever content is created, a form link is automatically created for it.

Accessing The Library

1. Click the Workarea button (Workarea) or icon ( ).
2. Click the **Library** tab menu on top of the Workarea.
3. The **Library** folder appears.



4. The sub-folders appear in the left frame. Files in the root folder (library) appear in the right frame.



You can use the dropdown list (circled above) to change the type of library files that appear.

To work with any library file, click it. When you do, the View Library screen appears, providing additional information about the item. From here, you can

- edit its title, file name, or description
- overwrite it
- find content linked to it
- delete it

For more information, see .

The following table explains the toolbar buttons on the library screen.

Note: Your system administrator determines which library folders you can access, and which functions you can perform on library items within the folders.

Button	Description	For more information, see
	Search library	"Searching the Library" on page 8-8
	View the library's properties screen	"Library Folder Properties" on page 8-6
	Add an image, file, quicklink, or hyperlink to the library	"Copying Files to the Library" on page 8-12
Files Files Forms Hyperlinks Images QuickLink	Select the type of Library file to work with	

Library Folders and Permissions

Whenever a new content folder is created and permissions given to it, a corresponding library folder is created. The new folder inherits permissions from the content folder.

Items added to library folders are only accessible by users with permission to the corresponding content folder. If items are added to a library folders directly under the main library folder, all users with at least library Read-Only permissions can use those library items in their content.

Conversely, if a library item is uploaded to a folder to which only one person has permissions, that is the only user who can use that library asset.

Performing Actions on Library Items

The library is made up of images, files, form Quicklinks, hyperlinks, and regular Quicklinks that were added by Ektron CMS400.NET users. The following table displays the actions that can be performed for each library item type.

Action	Files	Images	Hyperlinks	Quicklinks	Form Quicklinks
Add	✓	✓	✓	✓	✓
Edit	✓	✓	✓	✓	✓
View	✓	✓	✓	✓	✓
Overwrite	✓	✓			
Delete	✓	✓	✓	✓	✓
Remove from server	✓	✓			
Check links	✓	✓	✓	✓	✓
Update URL			✓	✓	✓

Most actions can be performed by a user who is granted permission to do so.

Library Folder Properties

The library folder properties contains library-related information, including load balance settings, image and file types that are allowed to be uploaded, as well as other settings.

The following buttons indicate actions you can perform on a library folder.

Button	Description	For more information, see
	Folder properties	"Accessing the Library Properties Screen" on page 8-6
	Search	"Searching the Library" on page 8-8
	Back to previous screen	

Accessing the Library Properties Screen

Administrators have permission to change library properties. To view the properties of the library folder, follow these steps.

1. Access a library folder, as explained in "Accessing The Library" on page 8-3.
2. Click the Properties button ( ).
3. The Library Management window appears, displaying the following settings.

The Library Management Settings

Field	Description
Image Extensions	The types of image files that a content contributor can upload to the library. You can add as many image file extensions as you want, or have none. If no extensions appear, no one can upload image files to the specified folder.
Image Upload Directory	Specifies where the uploaded images are saved on the Web server. By default, the image upload directory is `Web root/ek_sitepath/ uploadedimages`. The `ek_sitepath` value is set in the Web.config file. See Also: "Managing the web.config File" on page 1-95
Make Directory Relative to this Web site	If you want to specify the image upload directory's location as relative to your Web site root, check this box. (Your Web site root's location appears to the right of **Make Directory Relative to this Web site**.)
File Extensions	Specify the types of non-image files that a content contributor can upload to the library. You can add as many non-image file extensions as you want, or have none. If no extensions appear, no one can upload non-image files to the specified folder.
File Upload Directory	Specifies where the uploaded files are saved on the Web server. By default, the file upload directory is `Web root/ek_sitepath/ uploadedfiles`. The `ek_sitepath` value is set in the Web.config file. Note: You must create the directory in your Web root manually, before adding it in CMS400.NET. See Also: "Managing the web.config File" on page 1-95"
Make Directory Relative to this Web site	If you want to specify the file upload directory's location as relative to your Web site root, check this box. (Your Web site root's location appears to the right of **Make Directory Relative to this Web site**.)

Editing Library Properties

To edit library properties, follow these steps.

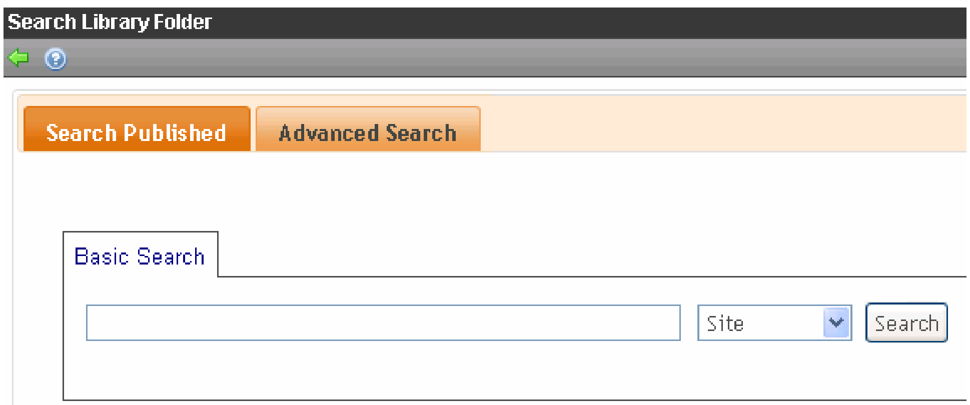
1. Go to the Library Properties screen, as explained in "Accessing the Library Properties Screen" on page 8-6.
2. Click the Edit button ( ).

Searching the Library

You can search the library to find items when you only know some information about them. For example, you know that an image's name includes **Ektron** but don't know its filename or folder.

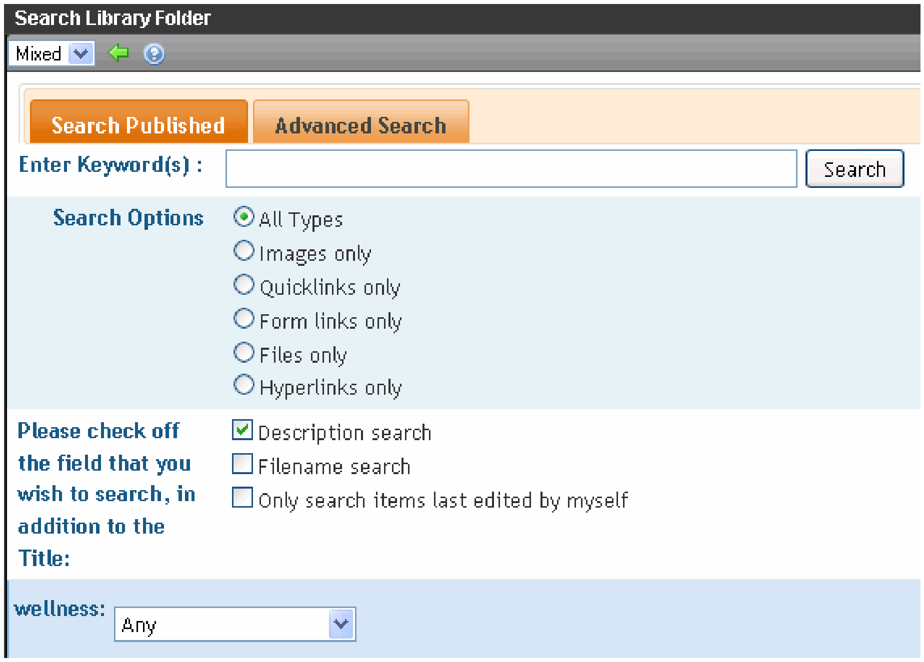
To search the library, first select the folder in which you want to begin the search. The search only considers files in that folder and its child folders. To search the entire library, begin by selecting the Library (root) folder.

Next, click the Search button ( ) from the library toolbar. When you do, a search screen appears with two tabs (shown below).



The left tab, **Search Published**, works the same as the regular search tab of that name. See "The Search Published Tab" on page 9-87.

The right tab, **Advanced Search**, provides several fields that let you narrow your search.



The fields are described below.

Field	Description
Enter Keyword(s)	Specify one or more keywords that the search will use. The search looks for keywords in the file's title. (The title is assigned by the user when the file is added to the library.) If a file's title matches the keywords, the file appears on the search results screen. The search also uses keywords to search through the file's - internal name (for example, airplane.gif) if the **Filename Search** check-box is checked - description if the **Description search** checkbox is checked A keyword can be a complete or partial word. But, you can only enter a partial term for one word. For example, you can enter **Adv** and have the search return the content titled "Adverse Drug Reactions." But if you enter **Adv Drug**, the search returns nothing. You can enter several complete search terms but they must be in the correct sequence. For example, to find the topic titled "Adverse Drug Reactions," you can enter **Adverse Reactions** but cannot enter **Reactions Adverse**. To find all files in a selected library folder, enter nothing in this field. Or, to find all files in a selected library folder of a type (for example, images), select the type and enter nothing in this field.
All Types	The search considers all library asset types.

Field	Description
Images only	The search only considers images.
Quicklinks Only	The search only considers quicklinks.
Forms Only	The search only considers forms.
Files Only	The search only considers files.
Hyperlinks Only	The search only considers hyperlinks.
Description Search	If you check this box, the search considers the library item's description when returning search results. Otherwise, the search ignores the description. For example, if you enter **Ektron** into the keyword field, the search returns all library files that include that string.
Filename Search	If you check this box, the search considers the file name when returning search results. Otherwise, the file name is not considered by the search. For example, if you enter **ppt** into the keyword field, the search returns all files that include that string (such as all Powerpoint presentations).
Only search items last edited by myself	The search only considers library assets that were last modified by you.
One or more of the search criteria set by your system administrator in the Metadata Definitions screen.	

Note: Some search field check boxes are circles while others are squares. If the box is a circle, you can only choose one option. If it is a square, you can choose as many as you want.

The search displays library items that meet the search criteria on the search results screen. You can click any item to view its properties (such as Library ID number, Last Edit Date and Description).

Displaying Search Results

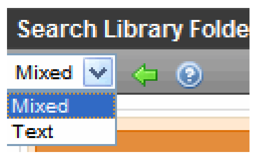
Search results appear in this order.

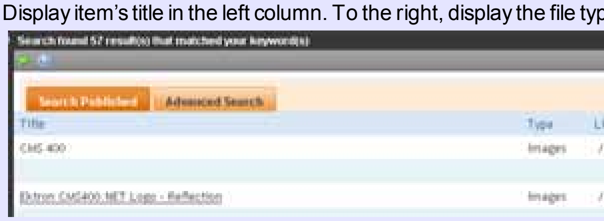
- images
- files
- hyperlinks

- quicklinks
- form links

Result Display Options

At the top of the library search screen, a pull-down list lets you choose the how to display the results.



View option	Description
Mixed	If the item is an image, display the image in the left column. If not, display its title. To the right, display the item's **Description**. Note: Mixed search results require the Internet Explorer browser, version 6 or greater. 
Text	Display item's title in the left column. To the right, display the file type and folder name. 

Files

This section explains how to work with library files through the following subtopics:

- "Copying Files to the Library" on page 8-12
- "Viewing Files" on page 8-13

- "Editing a File" on page 8-15
- "Overwriting Files" on page 8-16
- "Library Link Searching" on page 8-18
- "Adding a Library File to Content" on page 8-18

For a definition of the term “files,” see "Terms Used in this Chapter" on page 8-2.

Copying Files to the Library

Files must be copied to the Ektron CMS400.NET library before users can insert them into content. To copy a file to the library, follow these steps.

Warning! Ektron recommends using the Document Management system to add files. Unlike library files, DMS files can be part of an approval chain, maintain a history, are searchable, and can have a summary, schedule, meta-data, taxonomy categories, etc.

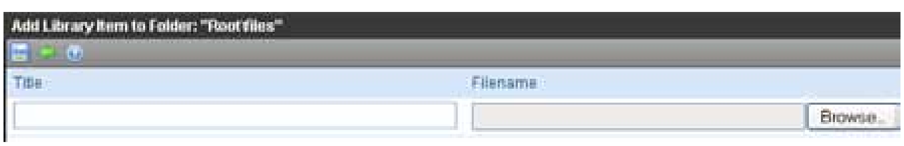
TECHNICAL NOTE

Note: Microsoft lets users upload files of any name. However, IIS security blocks files whose name contains an ampersand (&), colon (:), or percentage sign (%). *Source: http://support.microsoft.com/kb/826437/en-us*
To allow these characters, add the following registry key to your Web server then reset IIS.
Reg Key: `DWORD HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\ASP.NET VerificationCompatibility = 1.`

1. In the Workarea, browse the library folder and select a folder to which you want to copy a file.

Note: When you copy a file to a folder, only users with permissions to that folder can insert the file into content.

2. A list of files in that folder appears.
3. Click the Add Library button ( ).
4. The Add File screen appears.



5. Enter the necessary information according to the following table.

Field	Description
Title	Enter a title for the file to be copied.
Filename	Enter the path to the file to be copied. You can use the **Browse** button to find it.

Field	Description
Description	You can enter a full text description to help other users identify this file. The **Description** appears on the View File screen. It also accompanies the file on the Search Results screen if the user selects **Mixed** when viewing results. See Also: "Displaying Search Results" on page 8-10

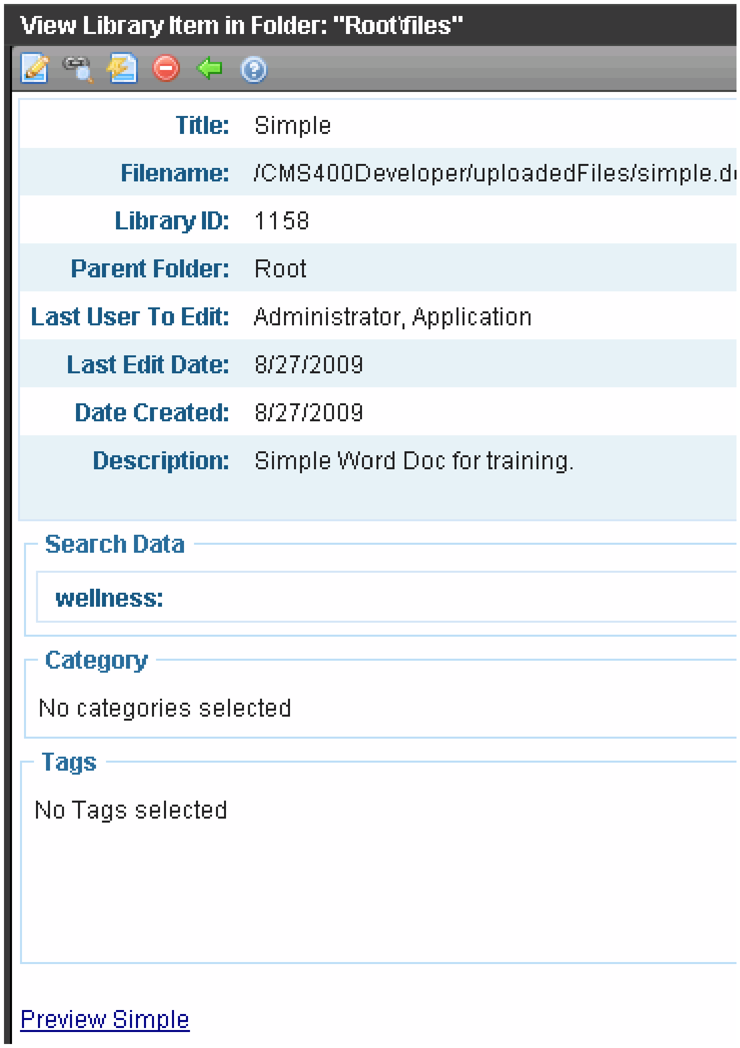
After you enter the necessary information and click the Save button, the file is copied. Now, users with permissions to the selected folder can insert the file into their content.

See Also: "Adding a Library File to Content" on page 8-18

Viewing Files

Once a file is copied to the library, you may preview it. To preview a copied file, follow these steps.

1. Navigate to the library folder to which the file was copied.
2. Click the file you want to preview.
3. The View File screen appears.



The table below describes each field on the screen.

Field	Description
Title	Title assigned by user who copied or edited it.
Filename	Filename and location on the server.
Library ID	ID number assigned by Ektron CMS400.NET when file was originally copied.
Parent Folder	File's parent folder. Users need permissions to this folder to insert the file into content.
Last User to Edit	Last user who changed file.

Field	Description
Last Edit Date	When file was last edited.
Date Created	When file was originally copied to library.
Description	Optional, full-text description of file.

If the file can be displayed in your browser, a preview of it appears at the bottom of the screen. If it cannot display in the browser, a link to preview it in its host application appears instead.

Note: You may need to download some files before you can be view them (for example, .mdb, .mp3, .zip, etc.).

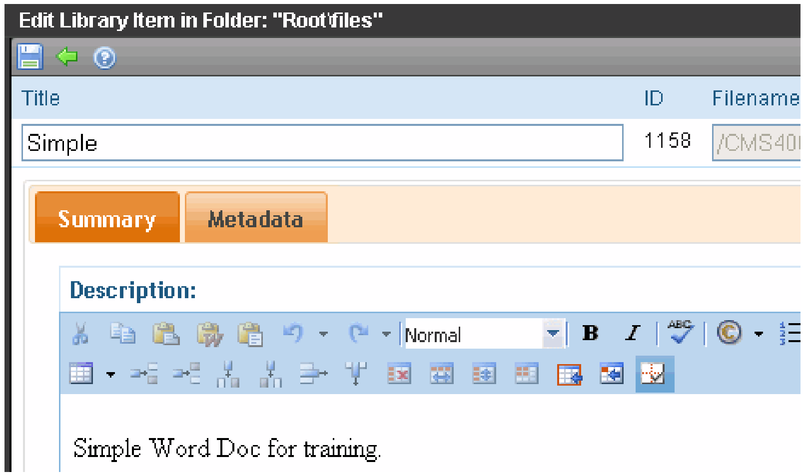
The following table describes the buttons on the View Library Item screen.

Button	Description	For more information, see
	Edit the items title and description	"Editing a File" on page 8-15
	Overwrite the library item	"Overwriting Files" on page 8-16
	Find content linked to the library item	"Library Link Searching" on page 8-18
	Delete library item	"Deleting Library Items" on page 8-18
	Return to previous screen	

Editing a File

You can edit the title, filename and description of any file that was copied to the library. To do so, follow these steps.

1. Access the View File screen, as described in "Viewing Files" on page 8-13.
2. Click the Edit button ().
3. The Edit File screen appears.



4. Change the title, file name, and/or description of the file.
5. Click the Update button ().

Overwriting Files

If a library file becomes out of date or the wrong version was copied, you may replace it with a new version. Overwriting files lets you minimize disk space and the number of library files.

Note: The ability to overwrite a library file is a privilege granted by the system administrator. If you do not see an Overwrite button () on the View Library Item in Folder screen, you do not have permission to overwrite.

Note: You can only overwrite images and files. The new image or file must have the same file extension as the file being replaced.

Before You Overwrite an Image

When overwriting an image, the new image uses the same size dimensions and file extension as the older image. Be sure that the two images have the same file extension and size or make the adjustments at each occurrence of the image.

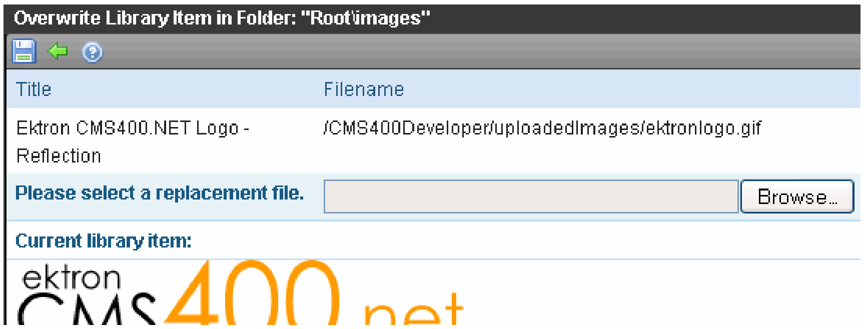
Before You Overwrite a File

Remember, all links that point to the overwritten file now point to the new file.

Overwriting Library Assets

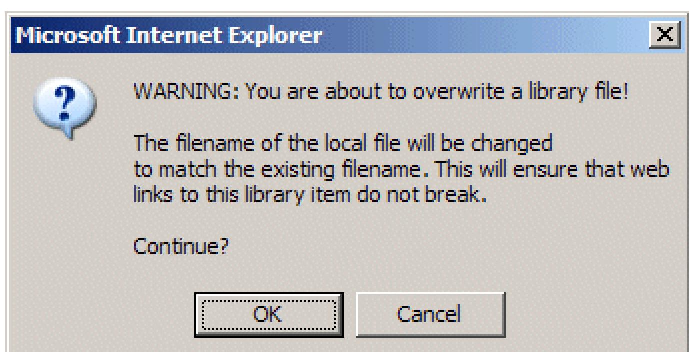
To overwrite a library file, follow these steps.

1. Navigate to the View File screen for the file you want to overwrite, as described in "Viewing Files" on page 8-13.
2. Click the Overwrite button ( ).
3. The Overwrite File screen appears.



4. Click the **Browse** button.
5. A window lets you navigate to the new file.
6. Click the file, then click the **Open** button.
7. You return to the Overwrite File screen with the path to the new file in the **Filename** field.

8. If desired, enter a **Description** for the new file.
9. To overwrite the current version of the file with this version, click the Update button ( ).
10. The following message appears.



11. To overwrite the file, click **OK**.

Library Link Searching

Link searching indicates all content that includes a library link. It is useful when you want to delete a library item. With the click of a button, you see all content that you need to update to reflect the change you are making.

Performing a Library Item Link Search

To perform a library item link search, follow these steps.

1. Access the View Library Item for any type of library item, as described in "Viewing Files" on page 8-13.
2. Click the Link Search button ( ).
3. A list of all content that references the library item is displayed.

You should edit that content before deleting the item.

Deleting Library Items

You can delete obsolete items from the library. By deleting an item, you prevent users from adding it to their content. A deleted hyperlink, quicklink or form quicklink remains on your Web server, so any existing links to them are not broken.

On the other hand, if an item is a file or image, the delete window displays an additional prompt, **Remove from the server,** that lets you remove the item from the server. This feature is available to help reduce disk space taken up by these files. Before removing an image or file from your server, you should review all content with links to it and remove or update the link. See Also: "Library Link Searching" on page 8-18

To delete an item from the library, follow these steps.

1. Access the View Library Item for any type of library item, as described in "Viewing Files" on page 8-13.
2. Click the Delete button ( ).
3. The Delete Library Item screen is displayed.
4. If appropriate, check the box next to **Remove from the server** (see above).
5. Click the Delete button ( ).

Adding a Library File to Content

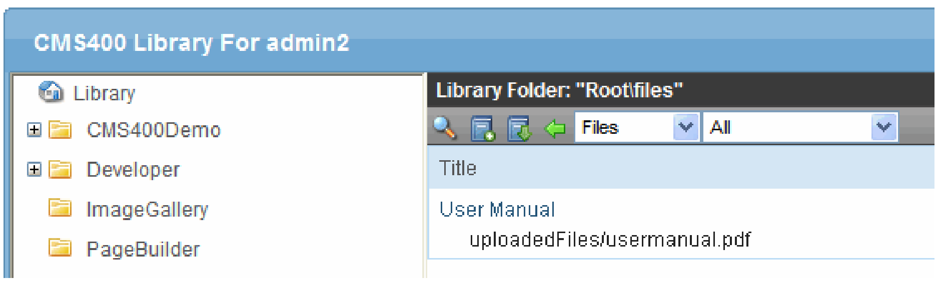
After a file is copied to the library, users can add it to content. (See "Adding a Library File to Content" on page 8-19)

You can also insert an item into the library while adding it to content. (See "Adding a File to the Library and Inserting it into Content" on page 8-20)

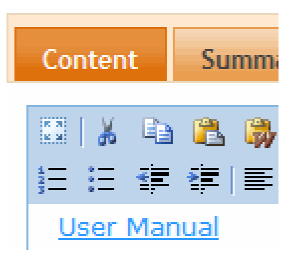
If you insert an image file, it appears within the content. If you add any other type of file, the file name appears as a hyperlink within the content. When a site visitor viewing that page clicks the hyperlink, the inserted file is launched.

Adding a Library File to Content

1. Invoke the editor by adding or editing content in Ektron CMS400.NET.
2. Place the cursor within the content where you want the library file to appear.
3. Click the library button ( ).
4. The library opens.
5. Navigate to the folder that contains the file you want to insert.



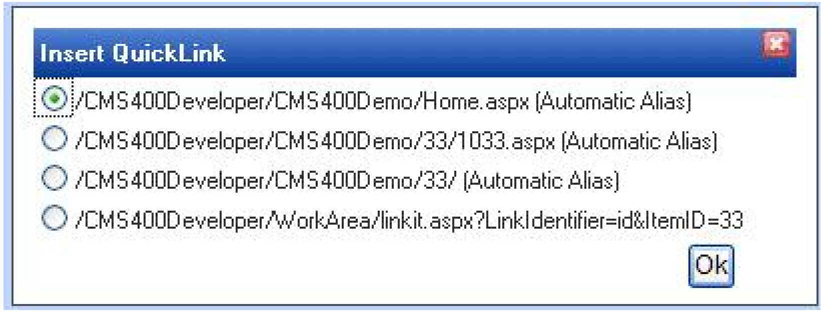
6. From the file types dropdown list, select the kind of file you want to insert.
7. All library files of that type in the selected folder appear on the screen.
8. Click the file you want to insert.
9. Click the insert button ( ) to insert the file.
10. A hyperlink to the file appears in your content.



You can click the link to open the file.

The Insert QuickLink Dialog

If you select **Files** from the file types list, and Aliasing is enabled for your web site, the following screen appears.



For guidance on these choices, see http://dev.ektron.com/kb_article.aspx?id=26950.

Adding a File to the Library and Inserting it into Content

Use this procedure to insert an image into content that has not yet been copied to the library. This procedure inserts the item into the library then into the content.

1. Invoke the editor by adding or editing content in Ektron CMS400.NET.
2. Place the cursor where you want the library item to appear.
3. Click the library button ( ).
4. The library opens.
5. Navigate to the folder that will contain the file after you insert it.
6. From the File types dropdown, select the type of file you want to insert. See Also: "Terms Used in this Chapter" on page 8-2
7. Click the Add Library button ().
8. A new screen appears. Browse to the file you want to insert.

   Or you can click the search button ( ) to search for a file to insert.
9. Enter a **Title** for the file.
10. If metadata is required for the library item, you must complete it. Metadata fields may appear in the lower section of the screen.
11. Click the Add Library button ().
12. The file is inserted into the selected library folder and the content.

Hyperlinks

For a definition of the term *hyperlinks*, see "Terms Used in this Chapter" on page 8-2.

Adding Hyperlinks

You must copy hyperlinks to the library before content creators can insert them into content. To copy a hyperlink to the library, follow the procedure described in "Copying Files to the Library" on page 8-12. The only difference is that you insert a hyperlink instead of a file.

Viewing Hyperlinks

To view a hyperlink, follow the procedure described in "Viewing Files" on page 8-13. The only difference is that you view a hyperlink instead of a file.

Editing Hyperlinks

To edit a hyperlink, follow the procedure described in "Editing a File" on page 8-15. The only difference is that you edit a hyperlink title instead of a file title. You can also edit the URL.

Adding Hyperlinks to Your Content

Once a hyperlink is added to the library, users can add the hyperlink to their content.

To add a hyperlink to content, follow the procedure described in "Adding a Library File to Content" on page 8-18. The only difference is that you add a hyperlink instead of a file.

Images

For a definition of the term *images*, see "Terms Used in this Chapter" on page 8-2.

Uploading Images

You must copy images to the library before content creators can insert them into content. To copy an image to the library, follow the procedure described in . The only difference is that you add an image instead of a file.

Note: When an image is uploaded to the Media tab for a product in the eCommerce feature, the original image and any thumbnails associated with it are added to the Library. For example, if you add an image named “TestImage” (actual file name: “case.jpg”) with a 150px and 50px thumbnails, you will see the following entries in your library (*File Name - Path*):
TestImage - /~siteroot~/uploadedImages/case.jpg

case[filename]150 - /~siteroot~/uploadedImages/case[filename]150.jpg
case[filename]50 - /~siteroot~/uploadedImages/case[filename]50.jpg

Viewing Images

To view an image, follow the procedure described in "Viewing Files" on page 8-13. The only difference is that you view an image instead of a file.

Editing Image Titles

To edit an image's title, follow the procedure described in "Editing a File" on page 8-15. The only difference is that you edit an image's title instead of a file title.

Overwriting Images

When an image in the library becomes out of date, or if the wrong version of an image was copied, you may overwrite that image with a new or correct version. Overwriting images minimizes disk space and the number of copied library images.

Note: Overwriting images is a permission that your system administrator may or may not assign to you.

To overwrite an image, follow the procedure described in "Overwriting Files" on page 8-16. The only difference is that you overwrite an image instead of a file.

Note: You can only overwrite an image with another image of the same extension. (that is, .gif > .gif, not .jpg > .gif)

Adding Images to Your Content

Once an image is added to the library, users can add it to content.

To add an image to content, follow the procedure described in "Adding a Library File to Content" on page 8-18. The only difference is that you add an image instead of a file.

The image is placed into the picture properties dialog box, where you can change it before inserting it.

Quicklinks and Forms

For a definition of the terms *quicklinks* and *forms*, see "Terms Used in this Chapter" on page 8-2.

Adding a Quicklink or Form to Content

Users can insert a quicklink to it within any content. To do so, follow the procedure described in "Adding a Library File to Content" on page 8-18. The only difference is that you add a quicklink or form instead of a file.

You can apply a quicklink to text or an image within the content. If you do, and a site visitor moves the cursor over the text or image, the cursor indicates that a hyperlink is available. If he clicks the link, he “jumps” to the source content or image.

If you do not select text or an image before inserting a quicklink, place the cursor where you want it to appear. The title of the “jumped to” content appears in the content.

To test a quicklink or form, select hyperlinked text or image and double click it.

When the page is published, a reader can click the link to jump to the quicklink or form page.

Viewing Quicklinks or Forms

To view a quicklink or form, follow the procedure described in "Viewing Files" on page 8-13. The only difference is that you view a quicklink or form instead of a file.

The table below describes each field on the quicklinks display.

Field	Description
Title	Title given to the hyperlink or form by the user who added it, or last edited it.
URL Link	URL link for the quicklink or form.
Library ID	ID number assigned automatically by Ektron CMS400.NET when the quicklink or form was originally added.
Parent Folder	Parent folder that the quicklink or form belongs to. Users need permissions to this folder to be able to access the quicklink or form.

Field	Description
Last User to Edit	Last user that made changes to the quicklink or form.
Last Edit Date	The date the quicklink or form was last edited.
Date Created	The date and time the quicklink or form was originally added to the Ektron CMS400.NET library.

To preview a quicklink or form, click the link at the bottom of the page.

Updating Default Template for Multiple Quicklinks

Warning! This procedure is only necessary if Link Management is set to `false` in your web. config file. If if Link Management is set to `true`, Ektron CMS400.NET automatically updates the template within the quicklink when content is moved. See your system administrator for help with the web.config file.

Note: This action can only be performed on quicklinks.

When content is moved in Ektron CMS400.NET, its quicklink does not get changed. After it is moved, you need to update the default template called in the content's quicklink.

To update the default template for one or more quicklinks, follow these steps.

1. In the library, access the quicklinks folder containing quicklinks you want to update.
2. Click the Update Quicklinks button ( ).
3. The Update URL Link Template Quicklinks screen is displayed.
4. Check the quicklinks you want to update.

Note: Check the box in the table header to select or deselect all.

5. In the **To:** text field, enter the name of the template you want to apply to the selected quicklinks.
6. Click the Update Quicklinks button ( ) to update the changes.
   A confirmation message is displayed.
7. Click **OK** to continue.

The selected quicklinks are updated to use the specified template.

Library Load Balancing

See "Load Balancing Library Images and Files" on page 19-33.

Chapter 9

Web Site Navigation Aids

This chapter describes several tools that Ektron CMS400.NET provides to let site visitors navigate around your site. Below is link to each feature.

Comparison of Collections, Menus, Taxonomy, and the List Summary Features

A menu, a collection, a taxonomy, and the ListSummary function are similar in that they let you add a list of links to a Web page. The following table compares these features to help you understand which one is best suited to your needs.

Note: To implement these features, the assistance of a developer is required.

	Collection	Menu	List Summary	Taxonomy
Display *all* content in a folder. As folder's content changes, display changes.		✓ (folder items appear on a menu)	✓	✓
Can display all content in a folder's subfolders			✓	
Display *selected* content	✓	✓		✓

	Collection	Menu	List Summary	Taxonomy
Display external hyperlinks & library assets		✓		
Display content summary (optional)	✓		✓	✓
Display additional content information: - comment - last modified date - start date - end date - user who last edited it - ID number - path relative to your site's root	✓			
Can be multi-leveled		✓		✓
Main purpose is navigation	✓	✓	✓	
Main purpose is classification				✓

For a detailed guide to Ektron CMS400.NET navigation, see the "Best Practice – Navigation for your Web site pamphlet," available from http://dev.ektron.com/uploadedFiles/Resources/navigation%20best%20practice.pdf.

Searching Your Web Site

Note: This chapter only describes searching HTML content. To learn about searching XML Smart Form content, see .

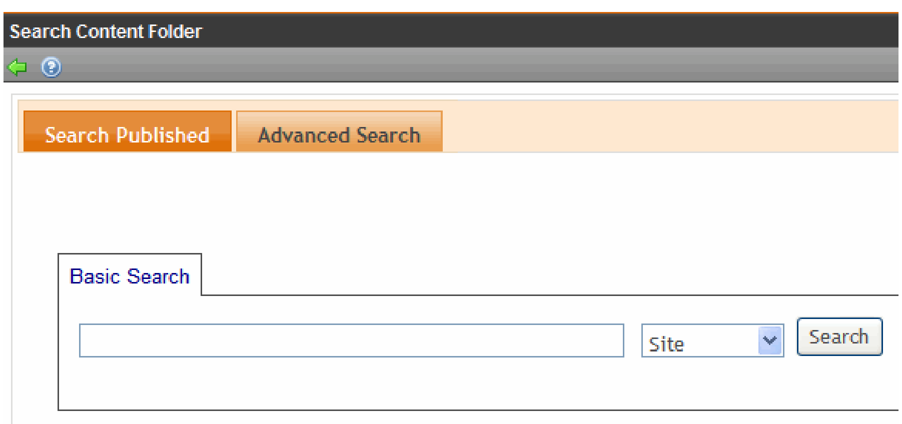
Ektron CMS400.NET provides two kinds of searches:

- the *Web site search* helps site visitors find published content on your Web site.

Your Web developer determines where to place the Web site search. The Ektron CMS400.NET sample site provides a link to it from every page. When a site visitor clicks the link, he sees the search screen.

For more information, see "Web Site Search" on page 9-5.

- the *Workarea search* helps anyone signed into Ektron CMS400.NET to find content. To access the Workarea search, go to the folder whose content you want to search and click **Action** > **Search**. The following screen appears.



The left tab lets you access the default version of the Web site search, while the right tab lets you search content by properties (title, comments, creation date, status, etc.).

To learn more about the Workarea search, see "Searching the Workarea" on page 9-87.

Web Site Search

Ektron CMS400.NET's Web site search provides extremely fast results without impacting the load on your database. To accomplish these goals, Ektron CMS400.NET stores a separate copy of all published content in local index files (also known as a catalog). The Microsoft Windows Indexing service constantly indexes the catalog so that search results are returned with lightning speed.

Note: Actually, two catalogs are created: one for public content, and another for private content.

Another advantage of the indexing service is its robust query language. Site visitors can use it to find Web site content by combining a rich collection of search criteria, including

- boolean and proximity operators
- wildcards
- free text queries
- vector space queries
- property value queries

These are explained in "Query Language" on page 9-52.

A third benefit of this architecture is scalability. If the amount of content or number of hits begins to affect performance, you can move the catalog to a separate server to handle the increased workload.

The Web site search is more fully explained through the following topics.

The Catalog and Index Files

Note: Be sure that your Web server is running Indexing Service 3.0. Earlier versions of the service do not work properly.

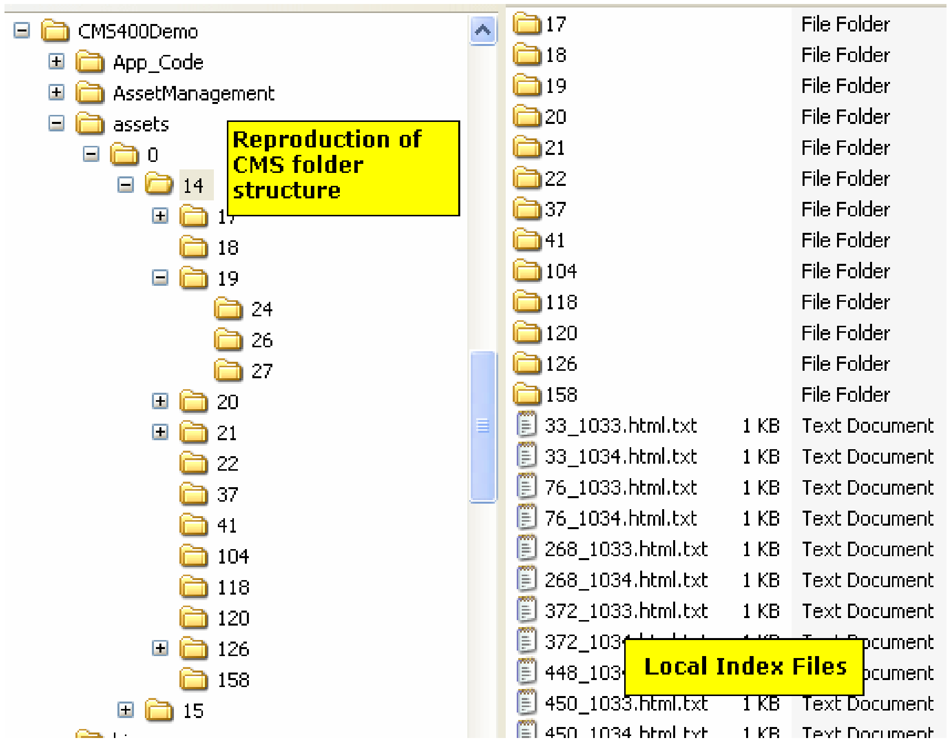
The Microsoft Windows Indexing Service uses catalogs to index Ektron CMS400.NET content. The catalogs read copies of content that are saved to the local file system whenever they are published.

This section explains the following topics about working with the Indexing Service and catalogs.

- "Local Index Files" on page 9-6
- "The Catalogs" on page 9-7
- "Recreating a Catalog" on page 9-9
- "Restarting the Indexing Service" on page 9-15

Local Index Files

A separate copy of all published content is maintained in local index files (whose extension is .txt), which are stored in the `siteroot/assets` folder. Within that folder is a reproduction of the CMS folder structure. However, it uses the folder ID number, not name, to represent folders. The following graphic illustrates this structure.



Notice that each content item is saved as a .txt file for indexing. The file name is derived from the content item's

- ID number
- underscore (_)
- language ID
- file extension (content items have an .html extension)
- .txt file extension

The Catalogs

Ektron CMS400.NET stores a copy of all published content in two catalogs that can be queried. Their default names are below.

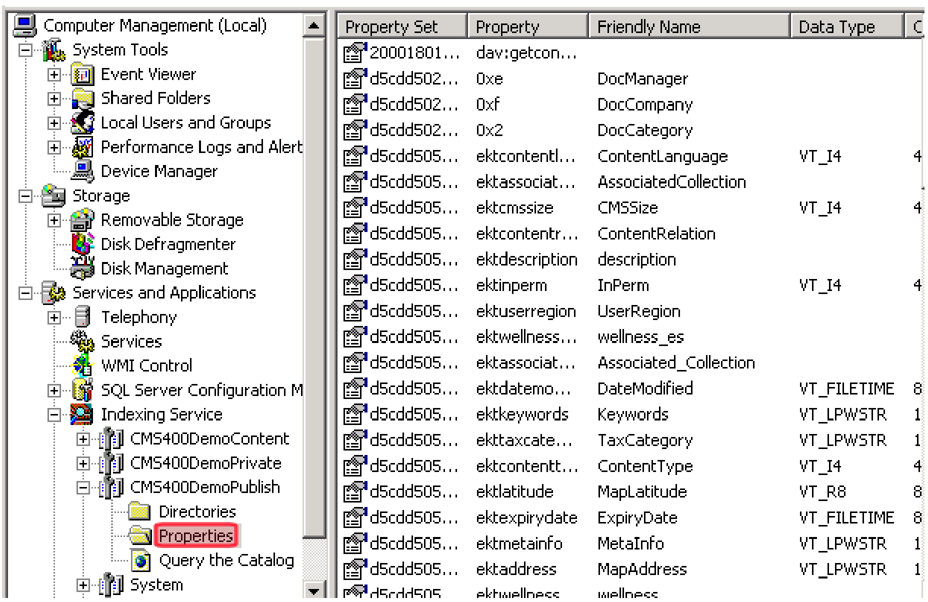
- *siteroot uniqueID* Publish
- *siteroot uniqueID* Private

As indicated, the second catalog stores private assets. See Also:

To access these catalogs within the indexing service, go to **Computer Management** > **Services and Applications** > **Indexing Service**.

Within the file system, these catalogs reside in the `c:\program Files\Ektron\Catalogs\siteroot unique identifier` folder. For example, `C:\Program Files\Ektron\Catalogs\CMS400Min312007131255`.

View a catalog's properties to see the fields you can use in queries. See Also: "Property Value Queries" on page 9-57



Changing a Catalog's Name

To change a catalog's name, open the siteroot/web.config file with an editor such as Notepad. Then, update the `catalogName` element for the published catalog name, and the `privateCatalogName` element for the private catalog name.

```
<webSearch defaultProvider="MSIndexDialectServer">
<providers>
<add name="MSIndexDialectServer"
type="Ektron.Cms.WebSearch.SearchProviders.MSIndexDialectProvider, Ektron.Cms.WebSearch"
catalogName="localhostPublished" privateCatalogName="localhostPrivate" pageSize="10"
description="MS Index Server Dialect2 Provider"/>

<add name="MSIndexServer" type="Ektron.Cms.WebSearch.SearchProviders.MSIndexProvider,
Ektron.Cms.WebSearch" catalogName="localhostPublished"
privateCatalogName="localhostPrivate" pageSize="10" description="MS Index Server SQL
Provider"/>
</providers>
```

</webSearch>

Recreating a Catalog

If a catalog is accidentally deleted or becomes corrupted, follow these steps to recreate one. There are two ways to do this.

- "Manually Recreating a Catalog" on page 9-9
- "Automatically Recreating a Catalog" on page 9-10

Manually Recreating a Catalog

Part 1: Create a New Catalog and Copy Metaconfig.doc File to it

1. Open the `C:\Program Files\Ektron\Catalogs` folder.
2. Create a folder for the new catalog.
3. From the Computer Management screen, select **Services and Applications** > **Indexing Service**.
4. If the indexing service is running, right click **Indexing Service** and click **Stop**.
5. Right click the mouse and select **New** > **Catalog**.
6. Assign the catalog a name. At the **Location** field, browse to the folder you created in Step 2.
7. Navigate to the `C:\Program Files\Ektron\CMS400`*`releasenumber`*`\Utilities` directory and find the metaconfig.doc file.
8. If you are creating a public catalog, copy that file to the *site root*/Assets folder.

   If you are creating a private catalog, copy metaconfig.doc to the *site root*/PrivateAssets folder.
9. From the Computer Management screen, click the new catalog you created in step 5. Underneath it, a Directories folder appears.
10. Select the Directories folder and click **New** > **Directory**.
11. The Add Directory Screen appears. If you are creating a public catalog, browse to the *site root*/Assets folder. If you are creating a private catalog, browse to the *site root*/PrivateAssets folder.
12. Right click **Indexing Service** and click **Start**.
13. From the Computer Management screen, view the new indexing service. Make sure a number appears in new catalog's **Total Docs** column, and the **Docs to Index** number is zero (0) before proceeding.

Part 2: Update Metaconfig.reg

1. Navigate to the `C:\Program Files\Ektron\CMS400`*`releasenumber`*`\Utilities` directory
2. Open the metaconfig.reg file with an editor like Notepad.

3. Update the first line of that file with the location of the new catalog relative to the `C:\Program Files\Ektron\Catalogs` folder. For example, if the new folder within the catalog folder is named `mytest`, the first line of the metaconfig.reg file looks like this.

[HKEY_LOCAL_
MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndex\Catalogs\mytest\Properties]

4. Save the file.
5. Double click the file. This action updates your Windows Registry with the new information.
6. Stop and restart Windows Indexing Service. Both commands are available from the menu that appears when you hover over the Indexing Service and right click the mouse.
7. View the new Indexing Service to verify that all properties exist as in the original service.

Part 3: Update web.config

Follow the directions in "Changing a Catalog's Name" on page 9-8 to update the catalogs that are updated as content is updated.

Automatically Recreating a Catalog

If you don't want to perform the manual steps listed above, Ektron CMS400.NET provides a utility that automatically creates a new catalog. You would typically use this if a catalog were corrupted or accidentally deleted.

Warning! Before running the Search Data Configuration utility, if your server has Visio documents, install the Visio IFilter. See "Query Language" on page 9-52. Also, if your server has Office 2007 documents, install the Microsoft Office SharePoint Server 2007 IFilters. See http://technet2.microsoft.com/Office/en-us/library/c6c029bd-64ea-4617-b2da-c269f13599e21033.mspx?mfr=true.

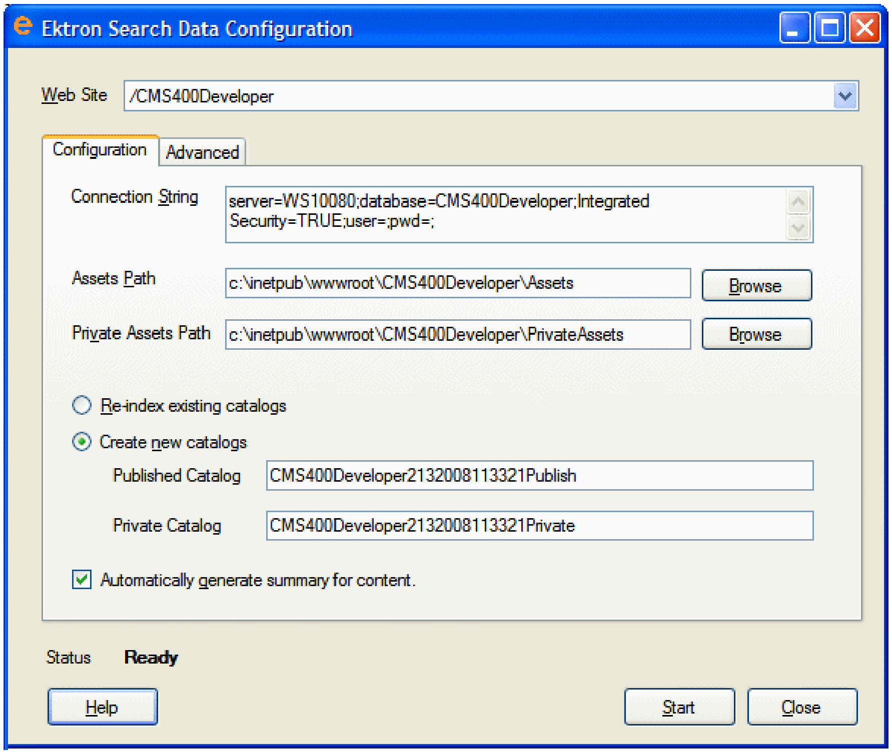
Warning! Make sure all Ektron CMS400.NET users are signed off before you begin this utility. If they are not, the utility logs them off.

To launch the utility, follow this path from the Windows Start button:

Start > Programs > Ektron > CMS400 *version* > Utilities > SearchConfigUI

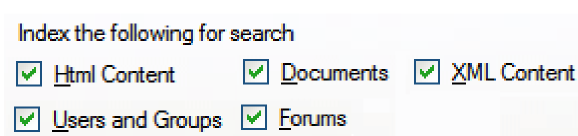
Alternatively, click the following file: `C:\Program Files\Ektron\CMS400v`*`versionnumber`*`\Utilities\SOFTWARE\SearchConfig\searchconfigUI.exe`

When you do, the following screen appears.



To create a new published asset catalog, follow these steps.

1. In the **Published Catalog** field, enter the name of a new catalog. Or, leave the current catalog name, and the utility will overwrite the catalog.
2. Do the same to create a new or replace the **Private Catalog**.
3. Check the **Create New Catalogs** box.
4. If you want to automatically generate a summary for all content in the new catalog, click the **Automatically generate summary for content** checkbox. See Also:
5. Click the **Advanced** tab.
6. Check each type of content that you want to index for the search.



7. By default, new catalogs are created in the `web site root/ catalogs` folder. If you want to create these in another folder, use the **Specify directory for catalogs** field to enter or browse to that folder.
8. Press **Start**.
9. Ektron CMS400.NET creates a new catalog and index files for your content.

After you run this utility, the old catalog remains but no new content is written to it. All subsequent changes are written to the new catalog.

See Also: "SearchConfigUI.exe crashes while building search indexes and catalogs" on page 9-65

The SearchConfig Log

All activity generated by the Search Data Configuration screen is tracked by a log. You can view the log top obtain a history of these changes.

The log is located in the `C:\Program Files\Ektron\CMS400v`*`versionnumber`*`\Utilities\SOFTWARE\SearchConfig` folder. Its name is *date time*.LOG. The log is also available on the Search Data Configuration Screen's Log output tab.

Search Data Configuration Screens

Use these screens to perform the following actions.

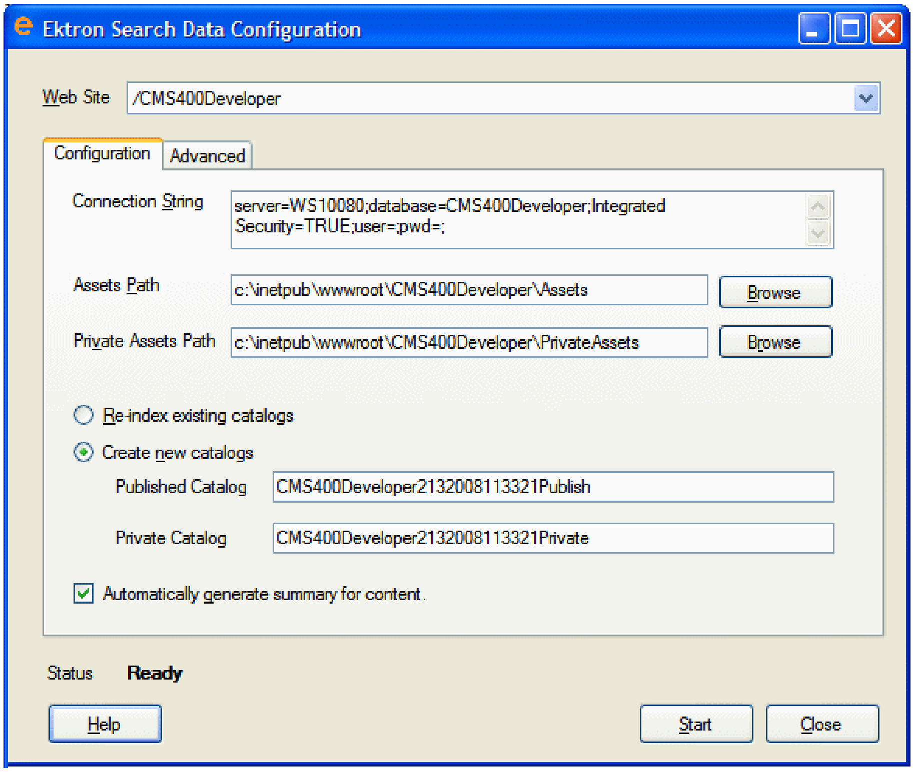
- make all Ektron CMS400.NET content searchable (do this if you recently switched to a new database)
- make any of the following kinds of content searchable (do this if the search cannot find this content)
  - HTML
  - assets
  - XML Smart Forms
  - users and groups
  - forums
- reindex the catalogs
- create a new catalog and index it (do this if a catalog was corrupted or accidentally deleted)

The following table explains the fields on the screens.

See Also: "The SearchConfig Log" on page 9-12

The Configuration Tab

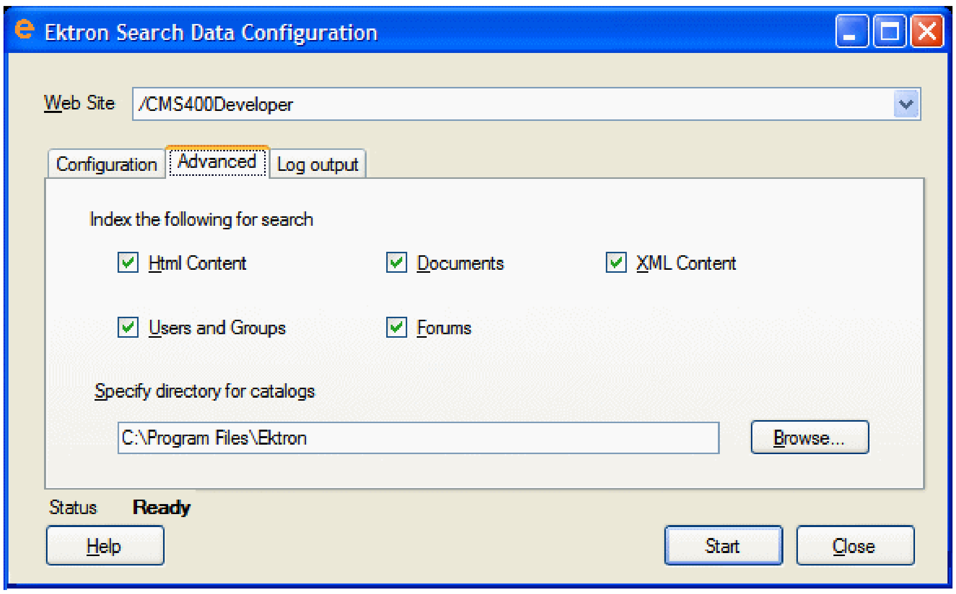
See Screen Sample



Field	Description
Web Site	Select the Ektron CMS400.NET site that you want to work with
Connection String	Review the connection string to your Ektron CMS400.NET database. Update if needed.
Assets Path	Review the path to your site's `Assets` folder. Update if needed.
Private Assets Path	Review the path to your site's `Private Assets` folder. Update if needed.
Re-index existing catalogs	Check this box if you want to reindex the existing catalogs.
Create New Catalogs	Check this box if you want to create a new catalog.
Published Catalog	Review the name of your published catalog. Update if needed. See Also: "The Catalogs" on page 9-7
Private Catalog	Review the name of your private catalog. Update if needed. See Also: "The Catalogs" on page 9-7
Automatically Generate Summary for Content	If you want to automatically generate a summary for all content in the new catalog, click this checkbox. See Also:

Field	Description
Status	After you click the **Start** button, this area indicates the status of the new catalog creation.

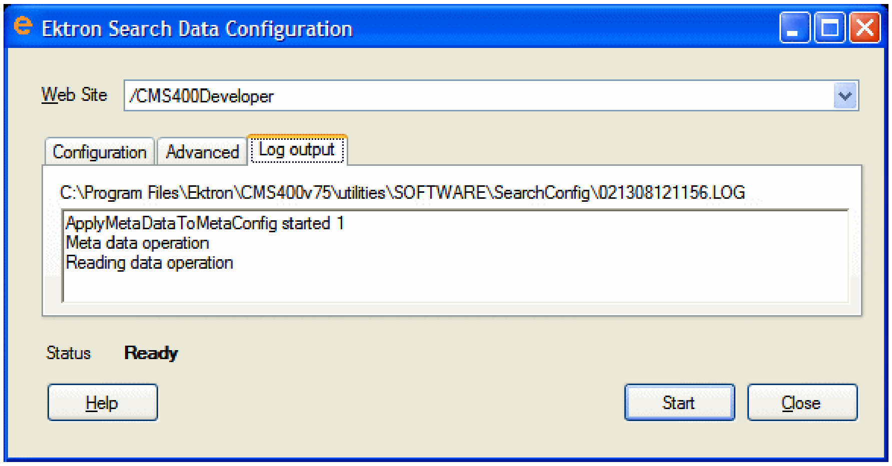
The Advanced Tab



Field	Description
Index the following for Search ▪ Html Content ▪ Users and Groups ▪ Documents ▪ Forums ▪ XML Content	Check each type of content that the search can find.
Specify directory for catalogs	Use this field to change the location of the published and private catalogs, if desired. By default, they reside in the *your web site*/`catalogs` directory.

The Log Output Tab

All activity generated by the Search Data Configuration screen is tracked by a log. The Log Output Tab displays a history of these changes.

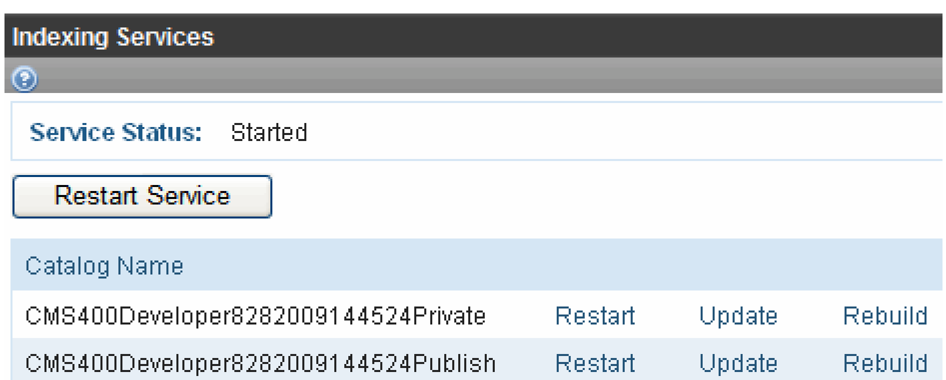


A permanent copy of the log is saved in the `C:\Program Files\Ektron\CMS400v`*`versionnumber`*`\Utilities\SOFTWARE\SearchConfig` folder. Its name is *date time*.LOG.

Restarting the Indexing Service

Use the Indexing Service screen to restart Windows' Indexing Service. You can also use the screen to rescan the catalogs.

To access the Indexing Service screen, go to Workarea > Settings > Configuration > Indexing Service.

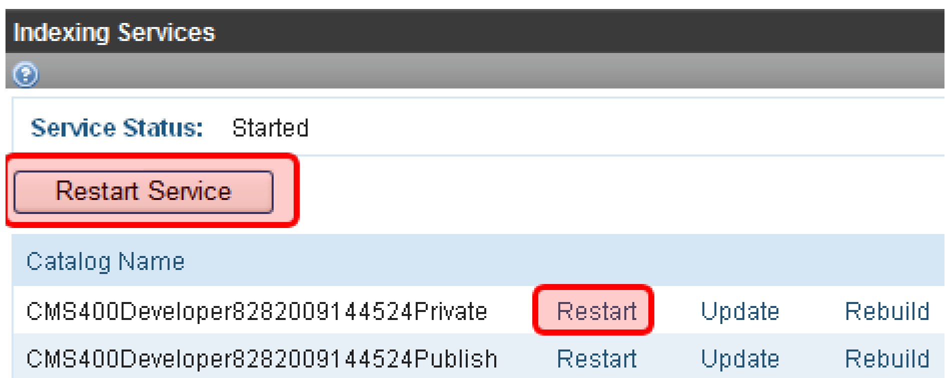


From this screen, you can

- "Restart the Indexing Service" on page 9-16
- "Run a Full Scan of a Catalog" on page 9-17
- "Run an Incremental Scan of a Catalog" on page 9-18

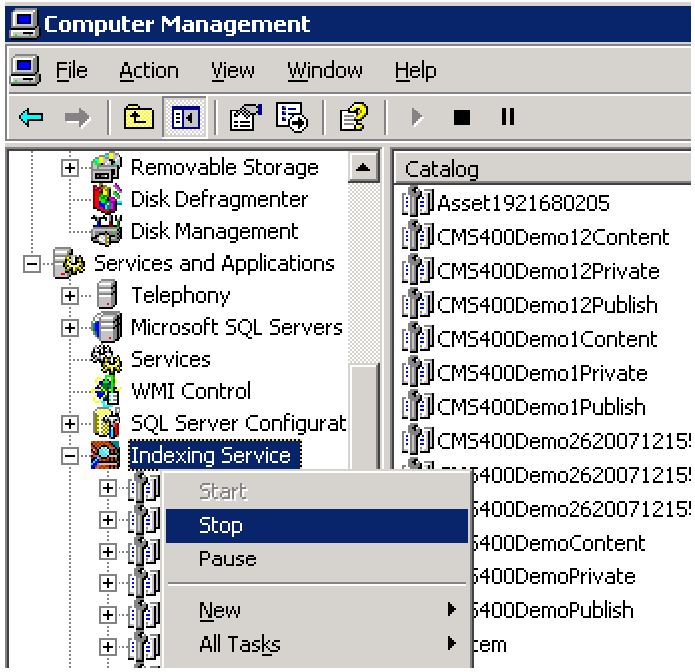
Restart the Indexing Service

Sometimes, when resolving issues with your search, you must stop and restart the indexing service. To restart it via the Indexing Service screen, click the **Restart Service** button.



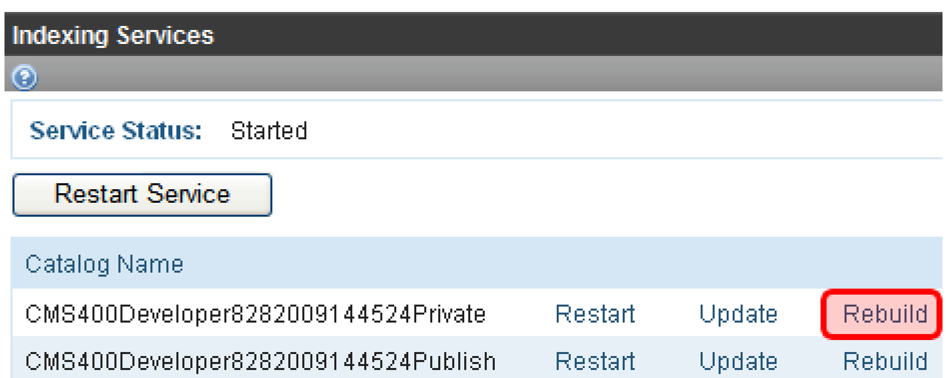
To restart the indexing service for a particular catalog only, click **Restart** to the right of the catalog name.

Alternatively, you can stop and restart the Indexing service from the Computer Management screen, as shown below.



Run a Full Scan of a Catalog

Sometimes, when resolving issues with your search, you need to run a full scan of a catalog. To do this, access the **Settings** > **Configuration** > **Indexing Service** screen. Then, click **Rebuild** next to the affected catalog.



The following text explains the full scan. *(Copied from Microsoft Management Console help)*

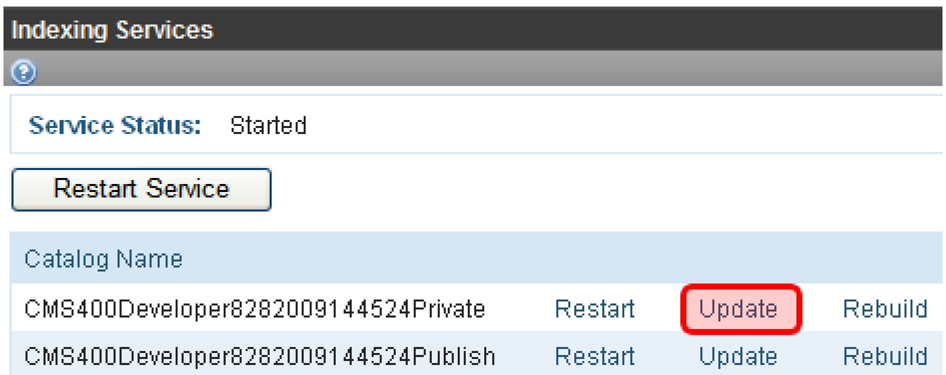
A full scan takes a complete inventory of all documents in the cataloged folders and adds them to the list of documents to be indexed. The Indexing Service does a full scan of disk drives attached to your computer (except for removable devices) in the following situations:

- When it is run for the first time after installation

- When a folder is added to the catalog
- As part of recovery if a serious error occurs

Run an Incremental Scan of a Catalog

Sometimes, when resolving issues with your search, you need to run an incremental scan of a catalog. To do this, access the **Settings > Configuration > Indexing Service** screen. Then, click **Update** next to the affected catalog.



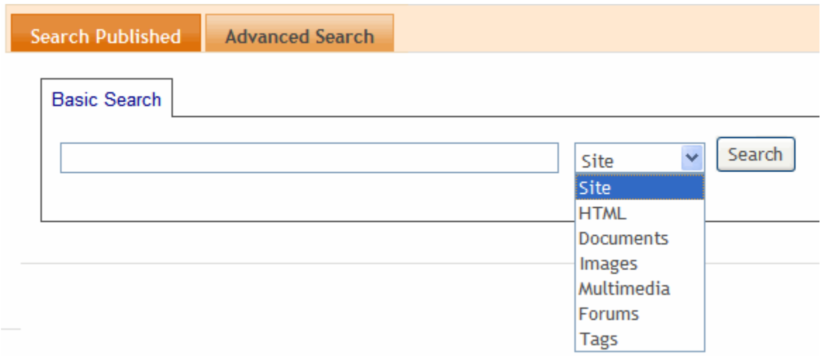
The following text explains the incremental scan. *(Copied from Microsoft Management Console help)*

Microsoft Windows Indexing Service cannot track changes to documents when it is shut down. When Indexing Service restarts, it does an *incremental scan* to detect all documents that were modified while it was inactive so it can update its index.

An incremental scan may also be performed if Indexing Service loses change notifications. This can happen if the update rate of documents is very high and the buffer used to get change notifications from Windows XP overflows.

Basic versus Advanced Web Site Search

When your developer places a Web Search server control on any page, and a site visitor browses to it, he sees the following.



This section now divides into two sections:

- Basic Search (shown above)
- Advanced Search (access this by clicking the **Advanced Search** tab)

This section also explains the search-related topics "The Content Searchable Field" on page 9-23.

See Also: "The Advanced Search" on page 9-21

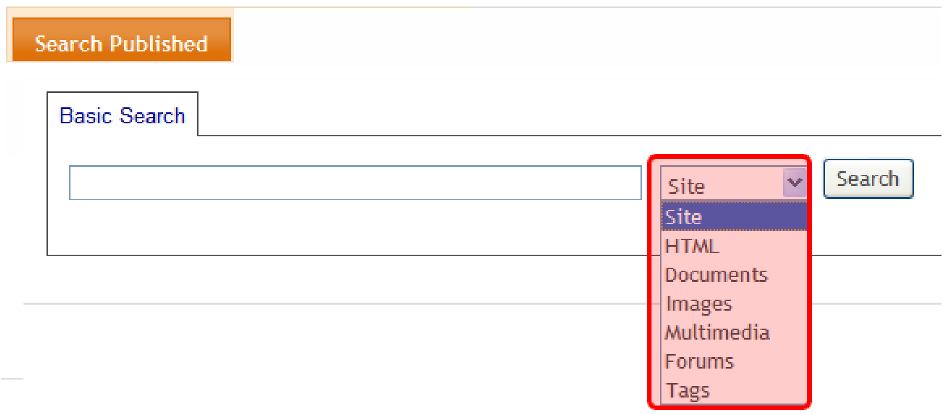
The Basic Search

Note: You can also create a folder with content outside of Ektron CMS400.NET that is searched. For more information, see "Using the Integrated Search" on page 9-42.

The Basic Search finds content that satisfies these criteria.

- published
- active (archived content is ignored)
- its **Searchable** check box is checked (see "The Content Searchable Field" on page 9-23)
- public. However, private content is available to those with permission to view it, such as membership users after logging in. See Also: .
- resides in the CMS folder specified in the Web search server control, or in one of that folder's subfolders if the control's `recursive` property is set to `true`
- is *not* a non-image file added to the library. Images are searchable, while other files added to the library are not. So, to make files searchable, add them as assets, not library files.
- matches selected language, if site is multilingual
- satisfies text and/or query entered in the search box (no value returns nothing) See Also: "Query Language" on page 9-52
  - The text inserted in the search field can appear in the content or metadata (See Also: "Searching for Metadata" on page 9-52)

- satisfies content type criterion selected on screen, if chosen (see below)



Note: The search does not find documents inside compressed files, such as *.zip, *.cab, etc.

Search Results by Content Type

Search Screen Option	Finds submitted text in these content types
Site	Content from all options below (except Tags) plus Forums
HTML	- HTML - Smart Form (XML) Note: Finds XML field values but not field labels. This has not changed since prior releases. - HTML Form - Blog entries (not comments)
Documents	- MS Office document (includes Powerpoint, Excel) Note: The search finds text within Visio documents if the Visio IFilter has been installed. See "Query Language" on page 9-52. - PDF file - .txt file
Images added as assets and through the library	.gif, .jpeg, etc.

Search Screen Option	Finds submitted text in these content types
Multi Media	Flash, .mp3, etc.
Tags	Tags applied to content and library items. See Also:

Note: The search cannot find calendar events.

Searching Multiple Terms

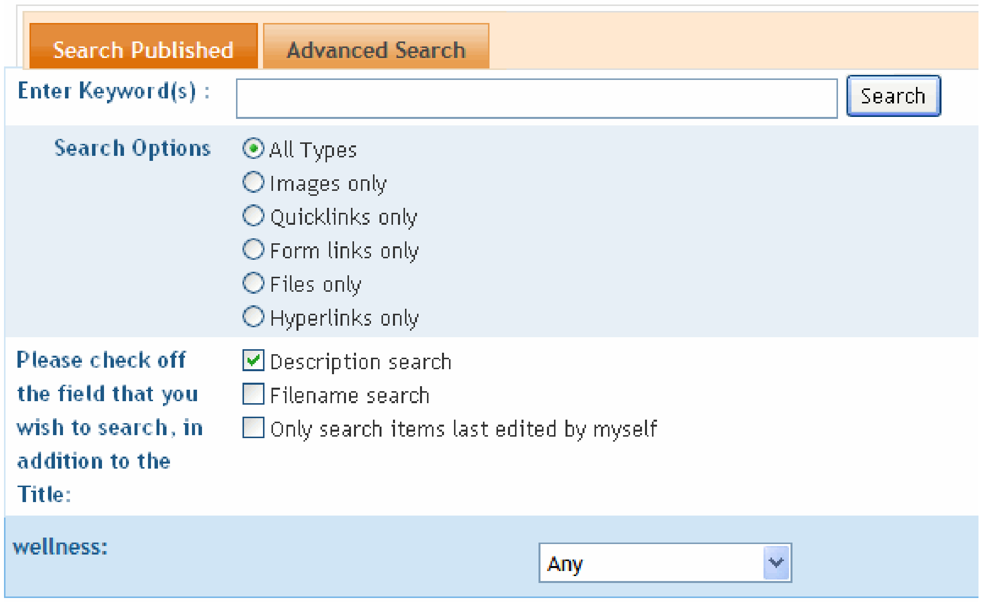
If a site visitor enters several terms, the search only returns pages that include all terms. This is known as an 'and' relationship. For example, if the user enters **cancer** and **cure** in the Search box, only content that includes both terms (and satisfies the other criteria) appears.

Ektron uses an 'and' relationship because we believe it's what a site visitor expects. Consider a simple Google search – the more you enter into the Google Search text box, the fewer results you get, since your phrase is more precise.

The advanced search screen, on the other hand, lets the site visitor determine if he wants an *and*, *or*, *not*, or *exact phrase* relationship. See Also: "The Advanced Search" on page 9-21

The Advanced Search

The Advanced Search uses nearly all the same search criteria as the Basic Search. (See "The Basic Search" on page 9-19). The differences are additional options and filters (explained below) and the fact that you cannot use queries.



Advanced Search Options

Search Option	Finds these pages
with all of the words	Web page must include all submitted terms; their position on the page does not matter. You cannot enter queries into this field.
with the exact phrase	Web page must include the exact phrase. For example, if you enter **Ektron healthcare**, a page with the term **Ektron provides healthcare** is not found because it is not an exact match.
at least one of the words	Web page can include any one of the submitted terms
without the word	Web page does not contain the submitted word. Only use this option if you also reply to one of the three fields above.

Advanced Result Filters

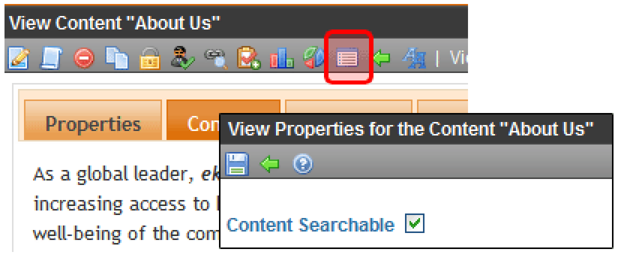
Below the Advanced Search Options is a list of additional fields you can use to refine the search. These are titled **Advanced Result Filters**.

Result Filter	Prompts site visitor to enter
Author	Enter firstname<space>last name. Can abbreviate by entering part of either name surrounded by asterisks (*). For example, ***Jo*** finds any author whose first or last name contains those letters.
Created Before	All content created before date entered by user. Date format is YYYY/MM/DD.
Created After	All content created after date entered by user. Date format is YYYY/MM/DD.
Modified Before	All content updated before date entered by user. Date format is YYYY/MM/DD.
Modified After	All content updated after date entered by user. Date format is YYYY/MM/DD.
File Size	Enter file size in kilobytes. You can use greater and less than operators (>, <) to find content greater or less than a value. For example, > 10000.

To add a filter, click **Add Filter**. To remove a filter, click **Remove** to the right of the filter.

The Content Searchable Field

Each content item includes a **Content Searchable** field. The search only considers content whose field is checked. See illustration below.

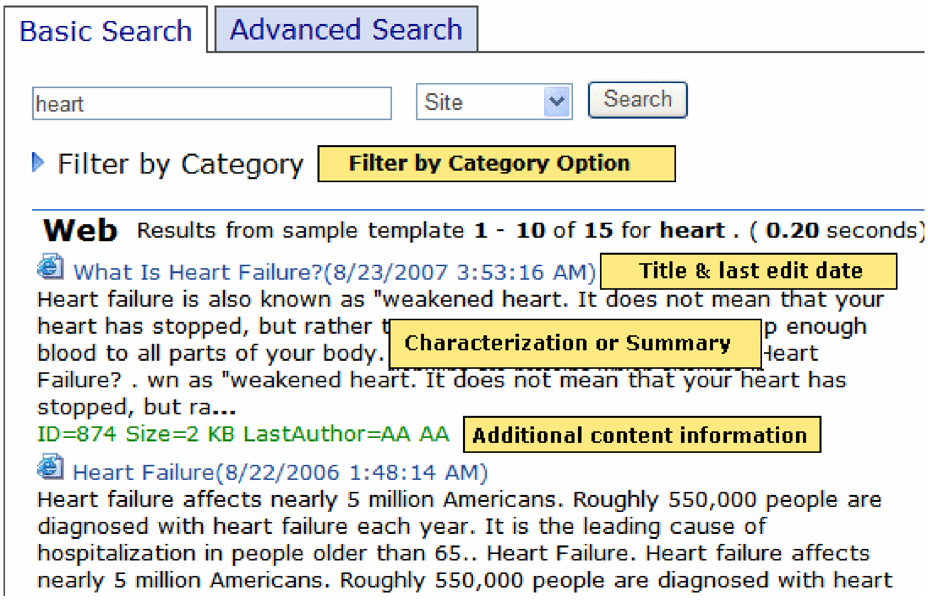


By default, this field is checked when content is created.

Warning! Despite the value of this checkbox, if an Ektron CMS400.NET user places this content item in a Suggested Results list, it will appear in the **Suggested Results** area of the Search Results screen. See Also: "Suggested Results" on page 9-31. Also, this content can still be found by the Advanced Workarea search.

Display of Search Results

Below is an example of the Web Site Search and Search Published results screen. Your developer can customize it using the Web Search server control.



Below the search box is an optional **Filter by Category** link. If your developer enables the link in the WebSearch server control, a site visitor can click it to see a folder structure of taxonomy categories. He can then select categories of interest. When he does, only content that includes the search term and which is assigned to the selected categories appears. For more information, see"Filtering Search Results by Category" on page 9-81

The actual results begin with the title and last edited date. Following them is either

- an abstract of the content, which is automatically generated by the Windows Indexing Service, or
- the content summary See Also: "Working with Content Summary" on page 7-142

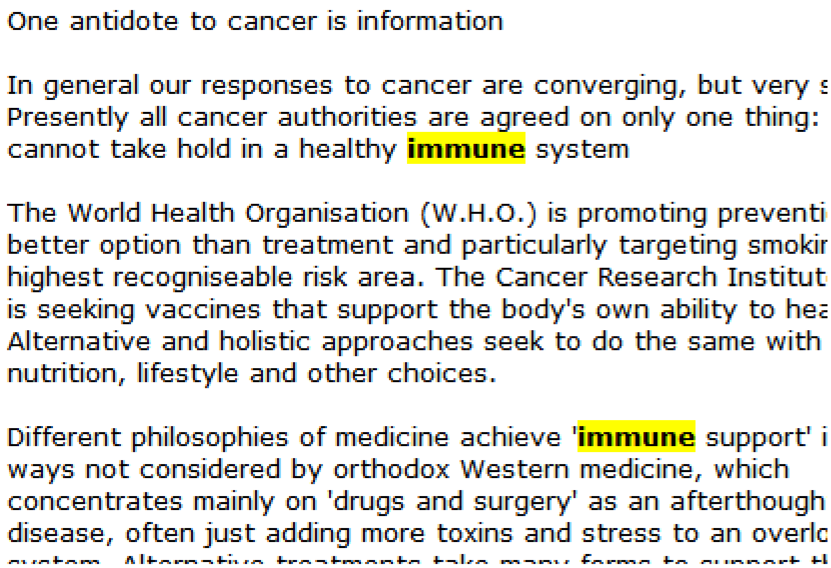
Your developer makes this decision in the WebSearch server control.

Following the abstract or summary is additional information, such as content ID number, size, last author, number of occurrences of the search term, and rank. Your developer determines which criterion is used to order the results.

TECHNICAL NOTE

Note: The Adobe IFilter, which is used to generate the abstract, is only supported in Tier 1 languages (English, French, German, and Japanese). If your Web site uses other languages, the abstract may not be legible. In such a case, your developer should suppress the abstract from the search results. This procedure is documented in "Determining the Display of Search Results" on page 9-80.

When you click the title of any content item, it appears. The search term is highlighted (see example below) if the following web.config property is set to `true`: `<add key="ek_termHighlight" value="true"/>`. To remove highlighting, set the value to `false`.


One antidote to cancer is information

In general our responses to cancer are converging, but very s
Presently all cancer authorities are agreed on only one thing:
cannot take hold in a healthy **immune** system

The World Health Organisation (W.H.O.) is promoting preventi
better option than treatment and particularly targeting smokir
highest recogniseable risk area. The Cancer Research Institut
is seeking vaccines that support the body's own ability to hea
Alternative and holistic approaches seek to do the same with
nutrition, lifestyle and other choices.

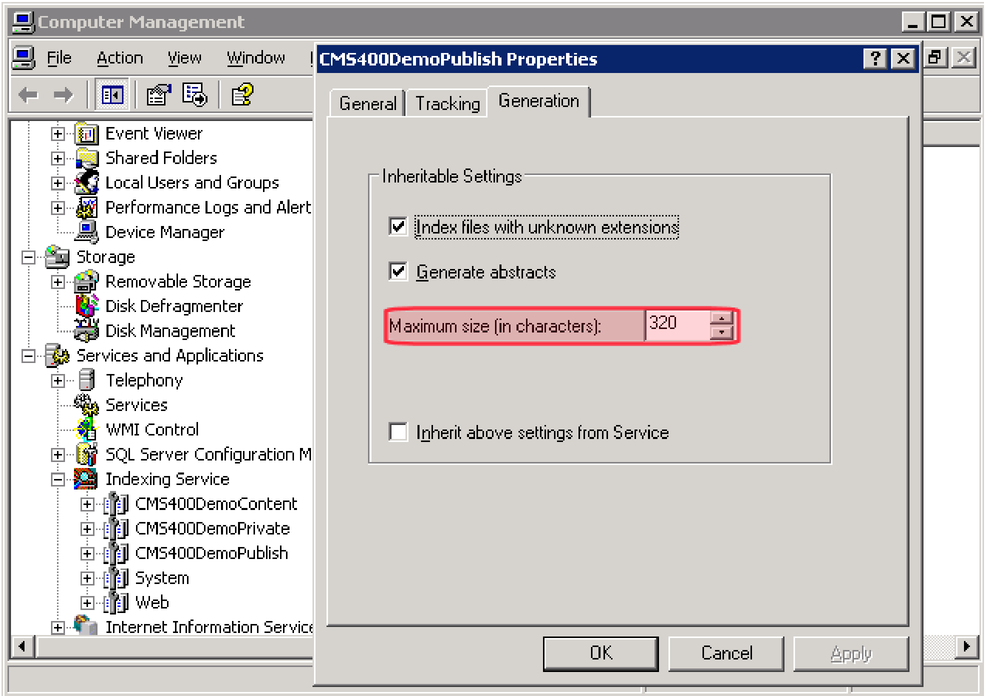
Different philosophies of medicine achieve '**immune** support' i
ways not considered by orthodox Western medicine, which
concentrates mainly on 'drugs and surgery' as an afterthough
disease, often just adding more toxins and stress to an overlc

See Also:

- "Adjusting the Length of the Search Result Abstract" on page 9-26
- "Search Result Ranking" on page 9-27

Adjusting the Length of the Search Result Abstract

To adjust the length of the abstract, update the Indexing Service's Properties window > **Generation** tab > **Maximum Size** field (see below).



The abstract's text is taken from the content. (It ignores text in tables.) If the content text has fewer characters than the **Maximum Size**, Ektron CMS400.NET tries to complete the abstract by retrieving the title, summary, metadata, comments, and additional information stored in the content item's tabs.

Search Result Ranking

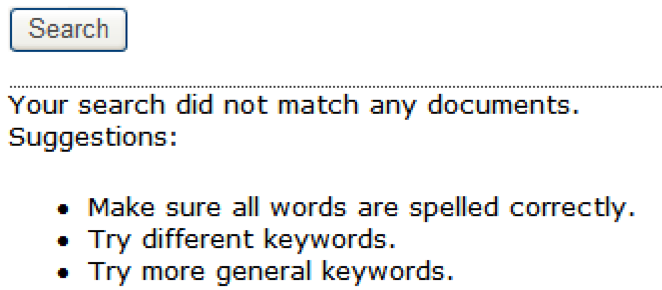
Each content item found by a catalog search is given a numerical rank between 0 and 1000. Search results can be sorted by rank.

Criteria used to calculate rank include the

- number of occurrences of the search term
- proximity of search term to beginning of file
- proximity of search term to other occurrences of the term
- whether the term is in the title

Customizing the Postback Message

By default, if a search term yields no results, the following message appears on the screen.



If you want to customize this message, follow these steps.

1. In your site root folder, find the `workarea/resources` folder.
2. Open the resource file that corresponds to your site's language. For example, if your site is in American English, open `EkResource.en-US.resources`.

Note: If your site supports multiple languages, follow these steps for each corresponding resource file. See Also:

3. Within the resource file, find the key `lbl search no results`.
4. The default text (shown above) follows this key. Modify the text as needed.
5. Save the file.

Synonym Sets and Suggested Results

This section describes two search enhancements that can be used independently but are more powerful when used together.

- "Synonym Sets" on page 9-28
- "Suggested Results" on page 9-31

Synonym Sets

You can create sets of synonyms to work with the search. If a site visitor enters any term in a synonym set into the Search box, Ektron CMS400.NET's search looks for that term plus all other terms in the set.

For example

Synonym Set: Tuition

Terms: tuition, bill, payment, pay, fee, charge, price, amount, cost, money, balance

If a site visitor inserts **bill** into the search field, Ektron CMS400.NET uses **bill** or **tuition** or **payment** or **pay** or **fee** or **charge**, etc. to gather search results.

The Synonym Set feature will typically produce more "hits." So, while the user does no more work, his chances of finding the right information on your Web site are greatly increased.

If a term exists in more than one Synonym Set, the search encompasses all terms in all sets.

The following sections explain how to work with Synonym Sets in more detail.

- "Synonym Set Best Practices" on page 9-29
- "Creating a Synonym Set" on page 9-29
- "Editing a Synonym Set" on page 9-30
- "Deleting a Synonym Set" on page 9-31

TECHNICAL NOTE

Note: The Web Search server control has a `SearchSynonyms` property. This must be set to `true` for a Synonym Set's terms to be included in the search logic.

Synonym Set Best Practices

- Synonyms are searched across all HTML content and documents indexed by Ektron CMS400.NET (for example, Word documents).
- Ektron CMS400.NET's search does not include plurals or verb forms. So, if you think a site visitor might enter either **ticket** or **tickets**, enter both into the Synonym Set. Same with **bill**, **billing**, etc.
- **A search term can consist of several words as long as the term is entered the same way in the Synonym Set. For example, love seat is part of a Synonym Set that includes sofa.**

As long as both love and seat are in a content item, the search finds it even if the words are separated. But, entering a single term, like **love**, will not find that Synonym Set.

So, if you think people may search using **loveseat** or **love seat**, enter both terms into the Synonym Set.

- The metadata search does not use or support Synonyms Sets.

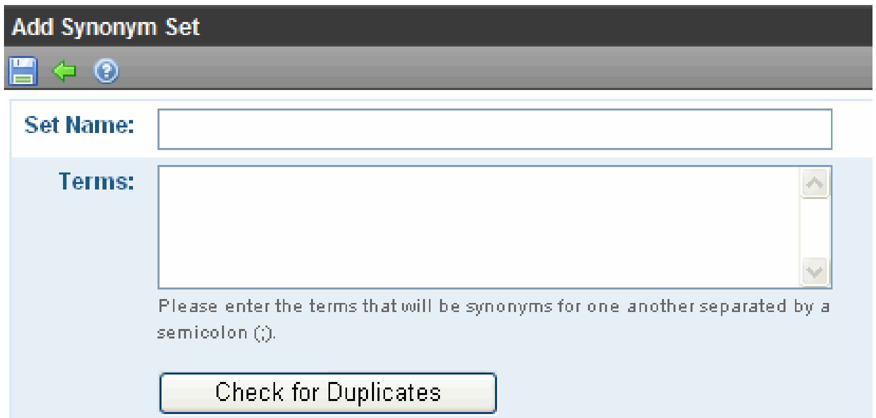
Creating a Synonym Set

Follow these steps to create a Synonym Set.

See Also: "Synonym Sets" on page 9-28; "Editing a Synonym Set" on page 9-30

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Synonyms**.

2. From the language dropdown, select a language for the Synonym Set. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only synonyms sets in that language are considered.)
3. Click the Add button ( ).
4. The following screen appears.



5. Enter a name for the set. Ektron CMS400.NET users will use this name to identify the Synonym Set.
6. Enter all terms that make up the set. Separate each with a semicolon (;). You cannot enter a comma (,) or a parenthesis character (() into the **Terms** field.
7. After entering all terms, click the **Check for Duplicates** button. Ektron CMS400.NET compares terms in this set against the other Synonym Sets in this language. If the same term is found in another set, you are notified.

   It is not necessarily a problem for a term to exist in more than one Synonym Set. So, review each Synonym Set that contains the duplicate and decide what to do.
8. Click Save ( ).

Editing a Synonym Set

Follow these steps to edit a Synonym Set.

See Also: "Synonym Sets" on page 9-28

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Synonyms**.
2. From the language dropdown, select the Synonym Set’s language.
3. Click the Synonym Set that you want to edit.
4. Click the Edit button ( ).
5. The Edit Synonym Set screen appears.

6. Add or remove terms. Be sure to separate each term with a semicolon (;).
7. Click the **Check for Duplicates** button. Ektron CMS400.NET compares terms in this set against the other Synonym Sets in this language. If the same term is found in another set, you are notified.
8. Click Save ( ).

Deleting a Synonym Set

Note: Deleting a Synonym Set also deletes any Suggested Results associated with the Synonym Set. The user is warned about this when deleting.

Follow these steps to delete a Synonym Set.

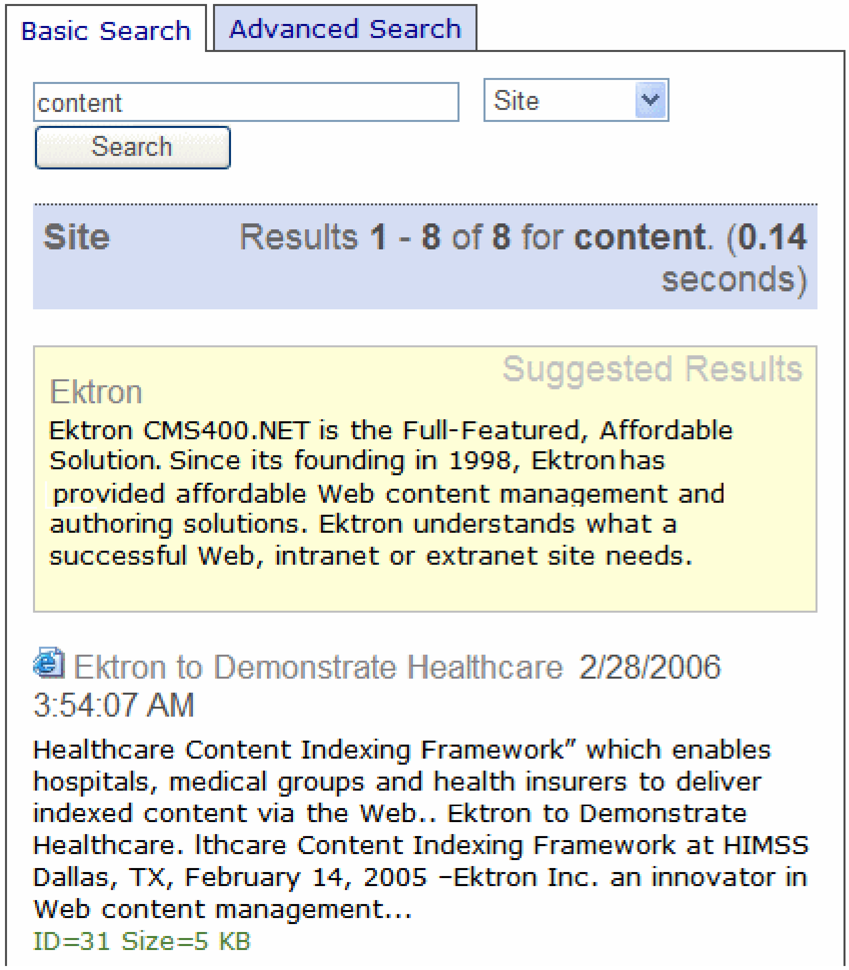
See Also: "Synonym Sets" on page 9-28

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Synonyms**.
2. From the language dropdown, select the Synonym Set's language.
3. Click the Synonym Set that you want to delete.
4. Click the Delete button ( ).
5. You are asked to confirm your action.
6. The Synonym Set is deleted.
7. Perform an IIS reset on your server. This utility clears the cache, so that the synonym set is no longer available to Ektron CMS400.NET.

See Also: http://technet.microsoft.com/en-us/library/cc781553(WS.10).aspx

Suggested Results

For any term or Synonym Set, you can create a list of *Suggested Result* links. That is, links that appear in a special area of the Search Results page whenever someone searches for a selected term. These links can jump to your Web site or an external Web site.



The Suggested Results feature is explained through the following topics.

- "Using Suggested Results to Direct Site Visitors" on page 9-32
- "Determining the Display of Suggested Results " on page 9-35
- "Creating a Set of Suggested Results" on page 9-36
- "Editing a Suggested Result Set" on page 9-38
- "Deleting a Suggested Results Set" on page 9-42

TECHNICAL NOTE

Note: The Web Search server control has a `ShowSuggestedResults` property. This must be set to `true` for suggested results to appear on the page that hosts that control.

Using Suggested Results to Direct Site Visitors

Use this feature to direct site visitors to pages that do not appear at the top of natural search results. For example, you manage a university's Web site. When a site visitor wants to know where to mail a tuition payment, he enters **bill** into the search field and gets these results.

Faculty member Bill McDermott

The Student Bill of Rights

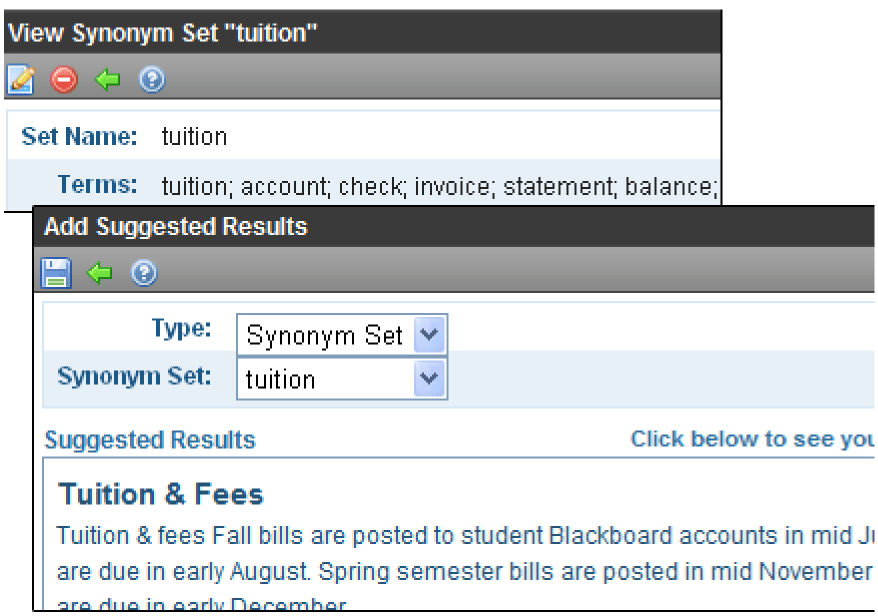
How a Bill Becomes Law

Frustrated, many people call the business office to get information that exists on the Web site but is difficult to find.

Using Ektron CMS400.NET, you can combine a Synonym Set with Suggested Results to direct site visitors to the correct Web pages. To continue this example, you could create

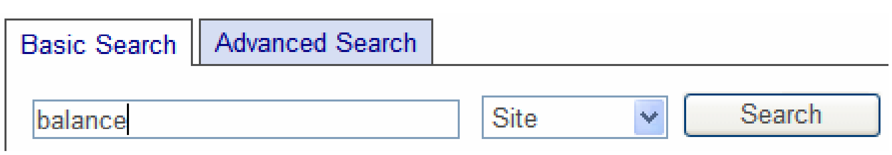
- a Synonym Set (named tuition) that includes all terms people might enter when searching for the tuition page on your Web site. See Also: "Synonym Sets" on page 9-28
- a Suggested Results list in which you assign the “Tuition & Fees” Web page to the **Tuition** Synonym Set

These sets are illustrated below.

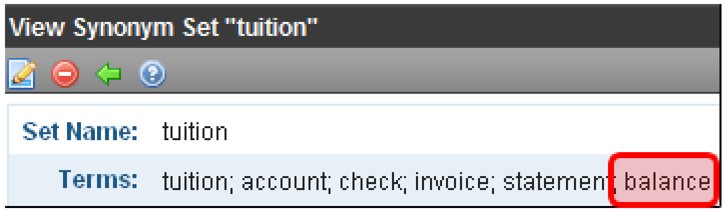


After you set up the Synonym Set and Suggested Results, here is a typical sequence of events.

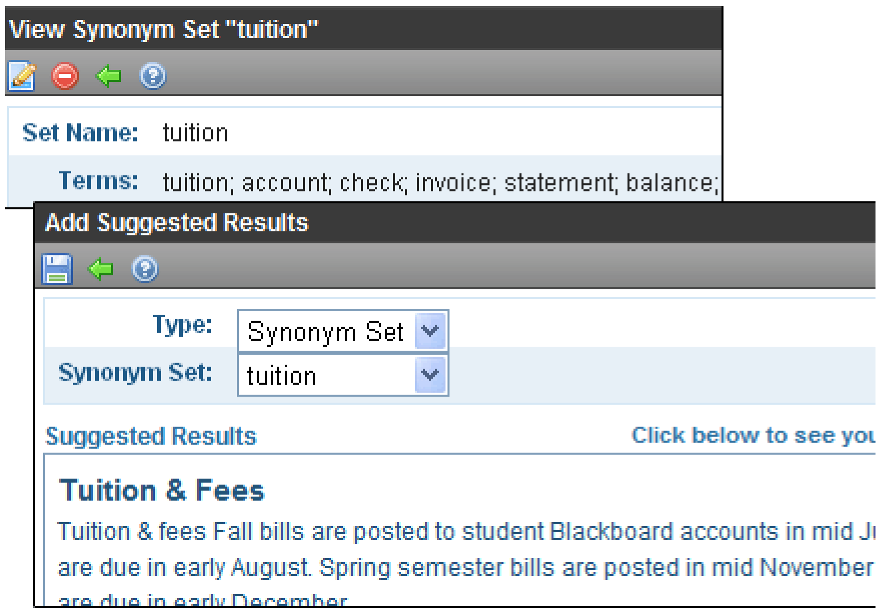
1. A site visitor enters a phrase on your site's **Search** page.



2. The phrase matches a term in a Synonym Set that has Suggested Results.



3. Suggested Result hyperlinks assigned to the set appear in a special area of the results page. They appear in the order you defined when setting up links.



4. The search term’s normal results can also appear. Your developer determines their location on the results page.

Using Suggested Results to Enhance Business Opportunities

You can also use Suggested Results to direct site visitors to business partners' Web sites. One example is a stop smoking clinic near your hospital that has been successful with your patients. When someone visits your Web site and searches for smoking, you can set the clinic to be the top Suggested Result.

As another example, your organization creates widgets but does not implement or customize them. Over time, several agencies develop experience at deploying and customizing your widgets. Therefore, you want to promote these supporting businesses on your site. To do so, create a Synonym Set (for example: deploy, install, implement, customize, modify, adapt) and assign the Web sites of approved agencies to the Suggested Results list. Then, when a site visitor searches for the word *implement* or *customize*, he gets links to those agencies' Web sites.

Suggested Results can also be used to advertise products, as used in the sponsored results section of popular search engines like Google® search and Yahoo!® .

Determining the Display of Suggested Results

Suggested Results can appear on any page that contains a Websearch server control. They can appear wherever you want: at the top of the search results page, in the right column, etc. You can also choose if and where to display the search term's regular results.

In the Web Search server control, your Web developer determines where search results appear, using either a style sheet or an XSLT. For more information, see "Web Search Server Control" on page 9-68.

Note: The WebSearch server control has a `ResultsPageSize` property. If your developer sets it to less than the number of suggested results applied to a term or synonym set, the `ResultsPageSize` property's number of results appears. For example, if you assign five links to a Suggested Result set but a developer sets `ResultsPageSize` to three, only the first three results appear.

What Happens when a Term Appears in More than One Synonym Set

If more than one Synonym Set contains the same word, and each set has suggested search results, the results appear in chronological order by Synonym Set creation date. Here is an example.

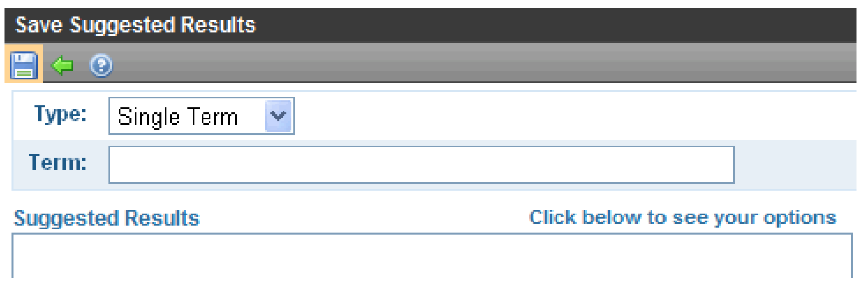
Synonym Set	Terms	Creation Date
Milk production	Cow; Milk; Dairy	January 1, 2007
Animals	Horse; Sheep; Cow	April 16, 2007

When a site visitor searches for Cow, the **Milk production** set's links appear above **Animals** links because it was created first.

Creating a Set of Suggested Results

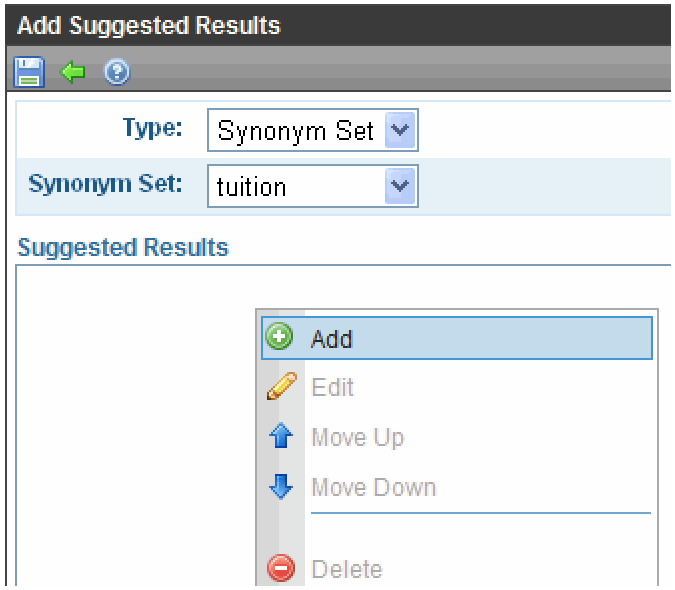
Follow these steps to create a set of Suggested Results. You cannot enter more than 10 links into any Suggested Results set.

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only Suggested Results in that language are considered.)
3. Click the Add button ( ).
4. The following screen appears.

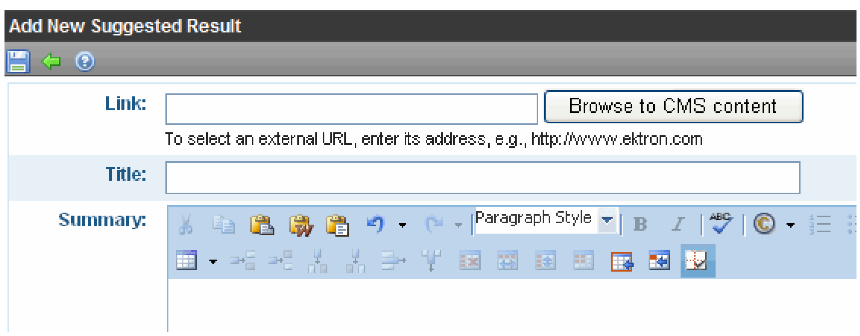


5. Use the following table to complete the fields.

Field	Description
Type	To apply this Suggested Results set to a single term, proceed to the next field, **Term**. To apply this set to a Synonym Set, change this value to **Synonym Set**. (If you do, the next field's name changes to **Synonym Set**.)
Term/ Synonym Set	If the above value is **Single Term**, enter a search phrase that will trigger the Suggested Results you will create below. Note: You cannot enter a comma(,) or a parenthesis character (() into the **Terms** field. If the above value is **Synonym Set**, select from the dropdown the Synonym Set that will trigger the Suggested Results you will create below. That is, if a user enter a search phrase that matches any term in the Synonym Set, the Suggested Results appear.
Suggested Results	Place the cursor in this field. When you click, a menu appears (see illustration below).

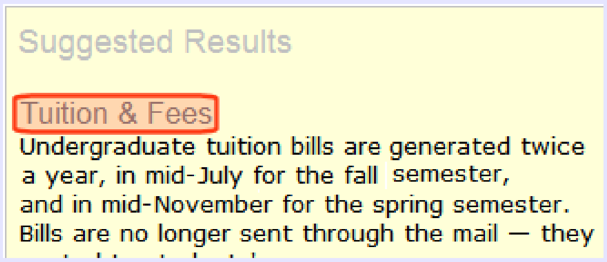
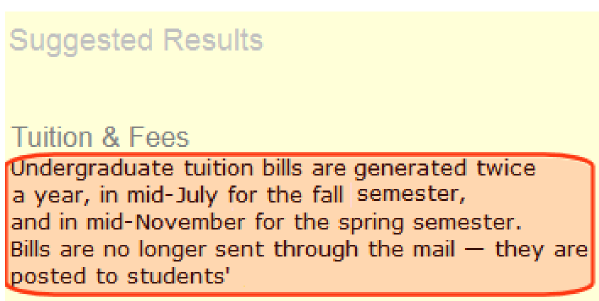


6. Click **Add.**
7. The following screen appears. Here, you add the URL, text, and summary for each Suggested Result.



8. Use the following table to complete the fields.

Field	Description
Link	To create a link to ▪ *content on your Web site*, click the **Browse to CMS content** button. Then, navigate to the folder that contains the content you want to link to. Select the content and click **Save**. ▪ *an external Web site*, enter its full address, starting with `http://`.

Field	Description
Title	If you created a link to - *content on your Web site*, its title is retrieved and displayed here. You may edit it as needed. - *an external Web site*, enter the text of the link that will appear on the Suggested Results display. Site visitors use this text to select the linked Web page. The title is circled in the example below. 
Summary	If you created a link to - *content on your Web site*, its summary appears here. You may edit it as needed. The summary cannot exceed 320 characters (including HTML tags). - *an external Web Site*, nothing appears. Enter up to 320 characters (including HTML tags) to further describe this link on the search results page. The summary is circled in the example below. 

9. Click Save ( ).
10. The Add Suggested Results screen reappears. You can add more links, edit existing ones, etc. When done, click Save ( ).

Editing a Suggested Result Set

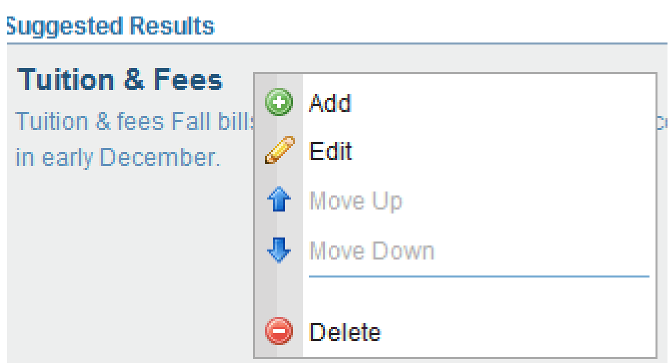
The following sections explain how to perform the following edits on a Suggested Result Set.

- "Adding a Link to a Suggested Result Set" on page 9-39

- "Editing a Link in a Suggested Result Set" on page 9-39
- "Removing a Link from a Suggested Result Set" on page 9-40
- "Rearranging the Sequence of Links in a Suggested Results Set" on page 9-41
- "Deleting a Suggested Results Set" on page 9-42

Adding a Link to a Suggested Result Set

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only Suggested Results in that language are considered.)
3. Select the Suggested Results set to which you want to add a link.
4. Click the Edit button ( ).
5. Place the cursor over the first result in the Suggested Results area of the screen.
6. Click once and a menu appears.

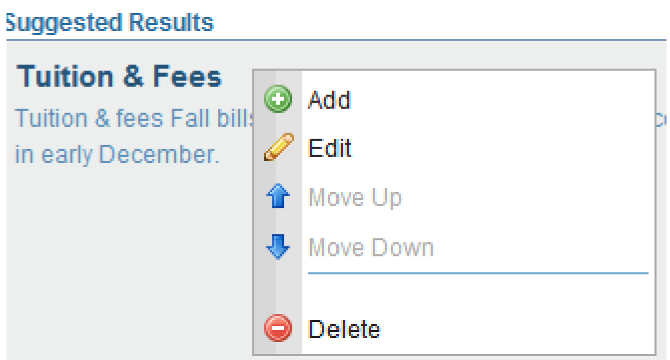


7. Click **Add**.
8. The Add New Suggested Results screen appears.
9. See "Use the following table to complete the fields." on page 9-37.
10. Click Save ( ).
11. Click Save ( ) again.

Editing a Link in a Suggested Result Set

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Suggested Results**.

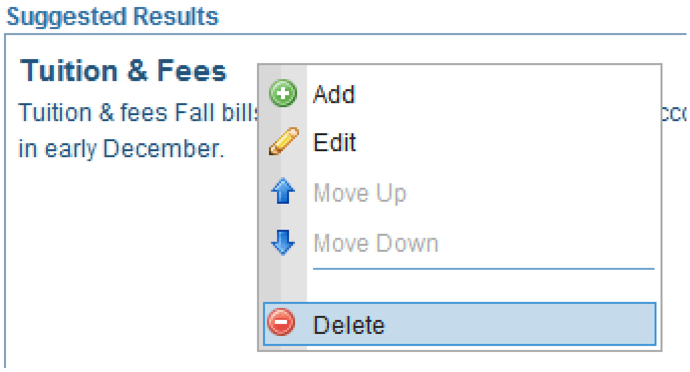
2. From the language dropdown, select a language for the Suggested Results. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only Suggested Results in that language are considered.)
3. Select the Suggested Results set that you want to edit.
4. Click the Edit button ( ).
5. Place the cursor in the Suggested Results area of the screen.
6. Place the cursor on the result that you want to edit.
7. Click once and a menu appears.



8. Click **Edit**.
9. See "Use the following table to complete the fields." on page 9-37.
10. Click Save ( ).
11. Click Save ( ) again.

Removing a Link from a Suggested Result Set

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results.
3. Select the Suggested Results set from which you want to remove a link.
4. Click the Edit button ( ).
5. Place the cursor in the Suggested Results area of the screen.
6. Place the cursor over the result that you want to delete.
7. Click once and a menu appears.

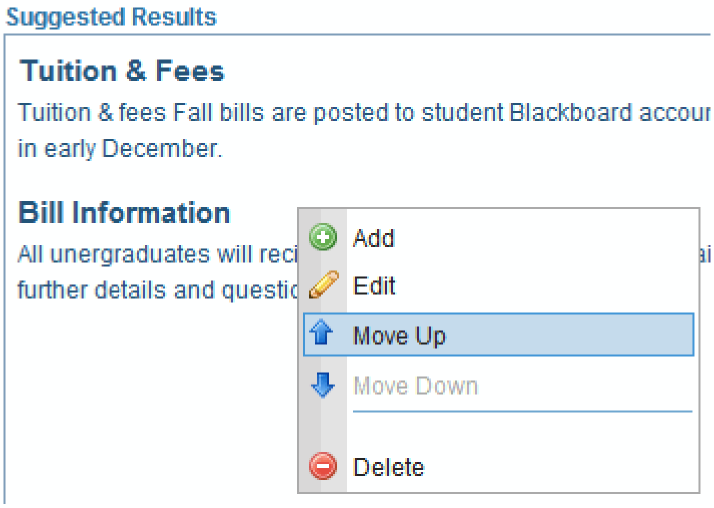


8. Click **Delete**.
9. A confirmation message appears. Click **OK**.
10. Click Save ().

Rearranging the Sequence of Links in a Suggested Results Set

Use this procedure to move Suggested Results up or down within a list.

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results.
3. Select the Suggested Results set from which you want to remove a link.
4. Click the Edit button ().
5. Place the cursor in the Suggested Results area of the screen.
6. Place the cursor over the result that you want to move up or down.
7. Click once and a menu appears.
8. Click **Move Up** or **Move Down**.



9. Click Save ( ).

Deleting a Suggested Results Set

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Search** > **Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results.
3. Select the Suggested Results set from which you want to remove a link.
4. Click the Delete button ( ).
5. Click **OK** to the confirmation message.

Using the Integrated Search

You can expand the Web search to any Web-accessible files on your server, even if they are not part of Ektron CMS400.NET. This feature is called *Integrated Web Search*.

Note: The Integrated Search only works with a Web Search server control that is placed on a Web page. It does not work with the Workarea search or any other search server control.

Use an Integrated Search if your site's search should include non-Ektron CMS400.NET files which, nevertheless, need to be searchable by site visitors. For example, a folder of personnel policy documents should be searchable on your intranet but you do not want to add them to Ektron CMS400.NET.

As another example, you have a Web site of static HTML pages, and are now deploying Ektron CMS400.NET for certain parts of the site, such as job listings or a discussion forum. You can create a page with an Integrated Search that encompasses your entire site.

The following topics explain the Integrated Search in more detail.

Integrated Search Overview

To set up an Integrated Search, create one or more Windows folders underneath the site root folder. Place files to be searched within them or their subfolders.

Alternatively, Integrated Search can find content in any Web- accessible folder on the server's file system. In this case, create one or more *virtual directories* that point to the site root folder. Then, identify the Integrated Search folder and, if desired, file types to include or exclude when searching. The procedure for doing this is explained in "Setting up a Virtual Directory" on page 9-43.

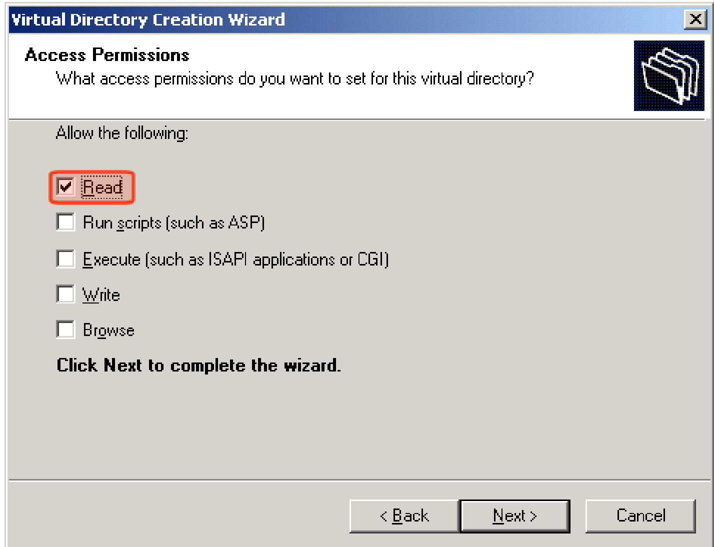
Setting up a Virtual Directory

The Integrated Search's starting folders can reside anywhere on your server's file system. If you want a folder to reside somewhere other than under the site root folder, follow these steps to set up a virtual directory. A virtual directory resides in the site root folder, but contains no content -- instead, it points to a Web-accessible folder anywhere in the file system.

Warning! Although a virtual directory is not on the same server as your site, it must be on the same domain as your site's server.

Since creating a virtual folder is a Windows procedure, the procedure is explained in http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/5adfcce1-030d-45b8-997c-bdbfa08ea459.mspx?mfr=true.

On the Access Permissions screen that appears during the setup, only check **Read** (see below).



Setting up an Integrated Search

There are three parts to setting up an Integrated Search.

- "Creating an Integrated Search Folder Structure" on page 9-44
- "Assign the Integrated Search folder to the WebSearch Server Control " on page 9-45
- "Identifying Integrated Search Folder Information in the Workarea" on page 9-45

After setting up an Integrated Search, you might want to do these things:

- "Viewing All Integrated Search Folders" on page 9-47
- "Viewing an Integrated Search Folder" on page 9-47
- "Editing an Integrated Search Folder" on page 9-48

Creating an Integrated Search Folder Structure

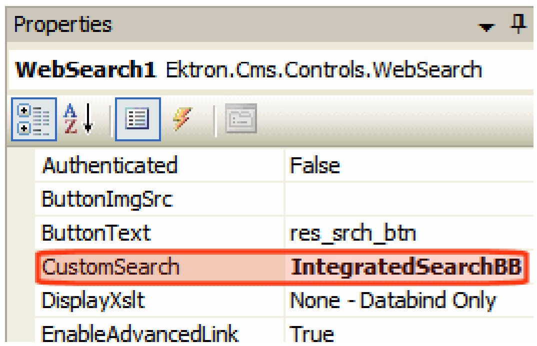
1. In the site root folder, create one or more folders for non-Ektron CMS400.NET files to be searched. You can create child folders in as many levels as needed underneath these folders.

   Alternatively, create a virtual folder that points to any folder in your file system. See Also: "Setting up a Virtual Directory" on page 9-43

2. Place all files to be searched in the parent or child folders.

Assign the Integrated Search folder to the WebSearch Server Control

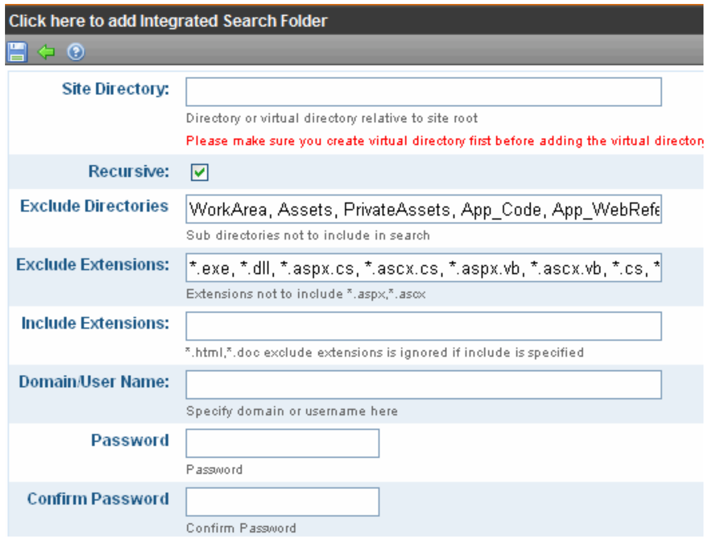
To find Integrated Search content, users must access a Web page that contains a WebSearch server control. Further, you must assign to that control's **CustomSearch** property the names of all top-level Integrated Search folders (see illustration below). Any child folders under the top-level folders are included in the search.



Identifying Integrated Search Folder Information in the Workarea

Follow this procedure for every folder that contains Integrated Search content.

1. In the CMS Workarea, go to **Settings** > **Configuration** > **Integrated Search Folders**.
2. Click the Add button ( ).
3. The Add Integrated Search Folder screen appears.



4. Complete the fields as described in the table below.

   To include *all* files in the folder (except those that would typically not be searched, such as .exe and .dll files), do not modify the **Include Extensions** and **Exclude Extensions** fields.

Field	Description
Site Directory	Enter the name of the parent folder (or virtual folder) that contains the searchable, non-Ektron CMS400.NET content. This folder must reside in the site root folder. If you are using a virtual folder, enter its name, not the folder that contains the content. See Also: "Creating an Integrated Search Folder Structure" on page 9-44
Recursive	Check this box if you want the search to include all child folders under the folder in the **Site Directory** field.
Exclude Directories	If you want to exclude files in any directory underneath the directory listed in the **Site Directory** field, enter the names of the directories to exclude. You do not need to enter the path to the directory -- only the name. If you enter more than one directory, use a comma to separate them. By default, Ektron CMS400.NET places several directories that a search would typically ignore. Edit as needed.
Exclude Extensions	If you want the search to ignore certain file types, enter those extensions in this format: ***.filetype**. For example ***.xml**. If you enter more than one, separate them with a comma (,). By default, Ektron CMS400.NET inserts several file types that a search would typically ignore. Edit as needed. **Warning!** - If you enter any value into the **Include Extensions** field, this field is ignored.

Field	Description
Include Extensions	If you want the search to include only certain file types, enter those extensions in this format: ***.filetype**. For example ***.xml**. If you enter more than one, separate them with a comma (,). **Warning!** - If you enter any value into this field, the **Exclude Extensions** field is ignored.
Domain/User Name, Password and Confirm Password	If the parent folder is a virtual folder that points to another server, enter the domain\user name and password needed to access that server. The parent folder is identified at the **Site Directory** field.

Warning! Ektron's Windows service runs hourly to index these files. So, you will not see search results for at least an hour after you set up this feature.

See Also: "Using the Integrated Search" on page 9-42

Viewing All Integrated Search Folders

To view all integrated search folders, go to **Settings** > **Configuration** > **Integrated Search Folders**. The screen displays every folder that will be included in the Integrated Search. See Also: "Using the Integrated Search" on page 9-42

Click any folder to edit its properties or delete it.

If you want to create a new Integrated Search folder, click the Add button ( ). See Also: "Creating an Integrated Search Folder Structure" on page 9-44

Viewing an Integrated Search Folder

This screen displays all information about one Integrated Search folder. See Also: "Using the Integrated Search" on page 9-42

To see documentation for any field on the screen, go to "Complete the fields as described in the table below." on page 9-46.

To edit information assigned to this Integrated Search folder, click the Edit button ( ).

To delete this Integrated Search, click the Delete button ( ).

Editing an Integrated Search Folder

To edit an integrated search folder, select if from the View Integrated Search Folders screen. Then, click the Edit button ( ).

Edit the fields as needed. To see documentation for any field, go to "Complete the fields as described in the table below." on page 9-46.

Searching for non-Ektron CMS400.NET Content

You can search for all non-Ektron CMS400.NET content by file title. For example, you can find the file Ektron.gif by inserting **Ektron** into the search field.

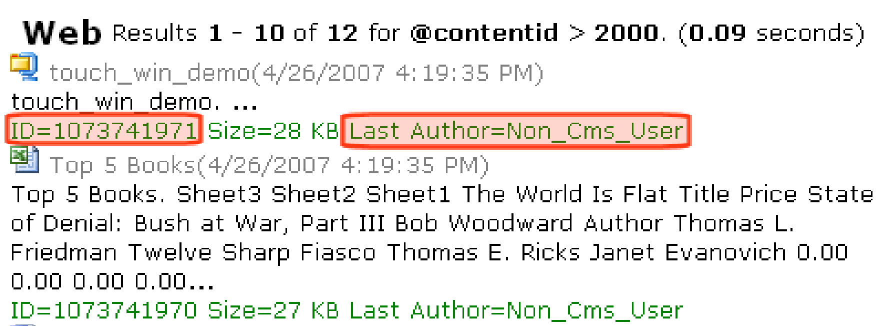
You can search text files (.doc, .pdf, .txt, etc.) by either file name or text within them.

Finally, you can use the following syntax to find files by extension: `#filename *.extension`. For example, to find all .gif files, use `#filename *.gif`. Be sure to click the **Images** button.

Note: Because Ektron CMS400.NET stores all content in .txt files, you cannot use this syntax to find files with a .txt extension.

Integrated Search Content in Search Results

To distinguish Integrated Search content from regular content, the ID number of IS content begins with 1,000,000,000. Also, the last author name is **Non_Cms_User**. See illustration below.

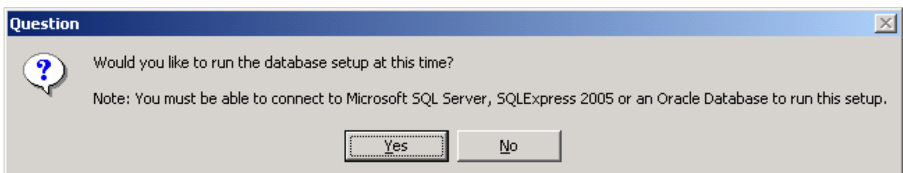


Setting up a Multiple Site Search Using Virtual Directories

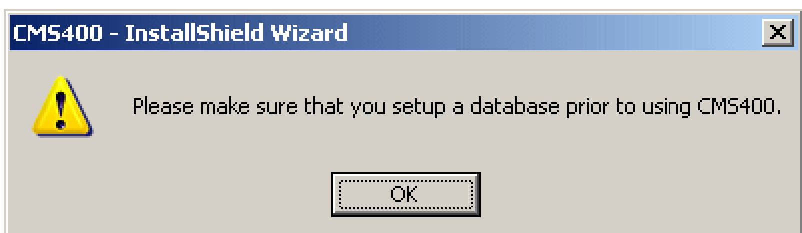
Use the following procedure if you want to set up two sites but use a single database. The steps below allow you to search from either site to find the same content.

In this example, the first site contains the database, while the second site uses virtual directories to point to content in the first site.

1. Set up the first site and create a database for it in the normal manner.
2. Set up the second site, but when you are prompted to set up the database, click **No**.



3. The following message appears. Press **OK**.



4. In the first site, open the web.config file.
5. Copy the database connection information for your database, as indicated below.

```
<connectionStrings>
<!--FOR SQLSERVER-->
<add name="Ektron.DbConnection" providerName="System.Data.SqlClient"
connectionString="server=(local);database=CMS400Min;Integrated
Security=TRUE;user=;pwd=;" />
```

Note: Your information may be different from the sample above.

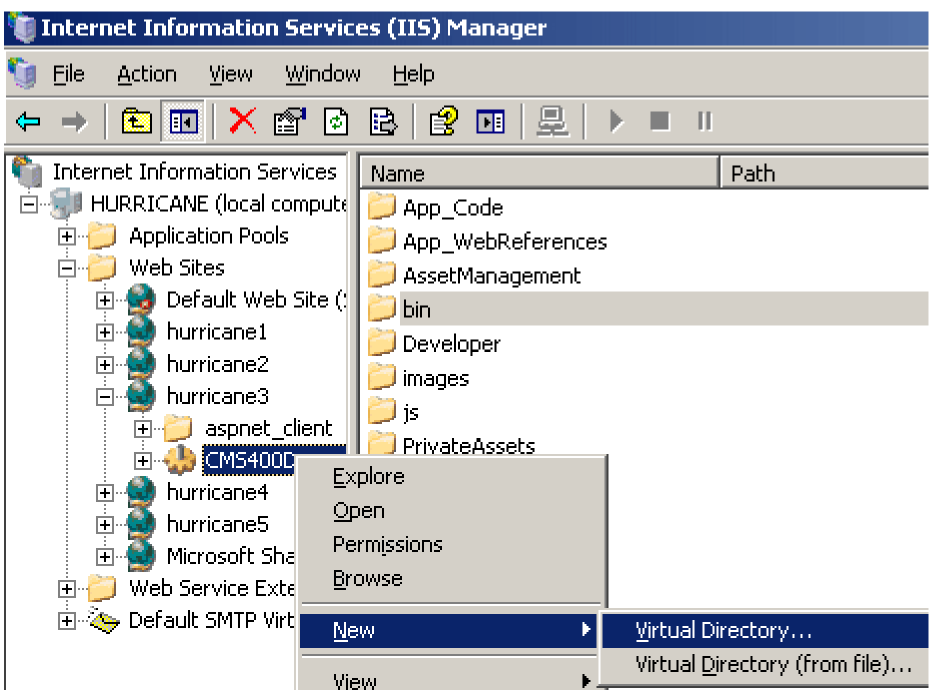
In the second site, open the web.config file. Then, overwrite the database information with the text you copied in Step 5.

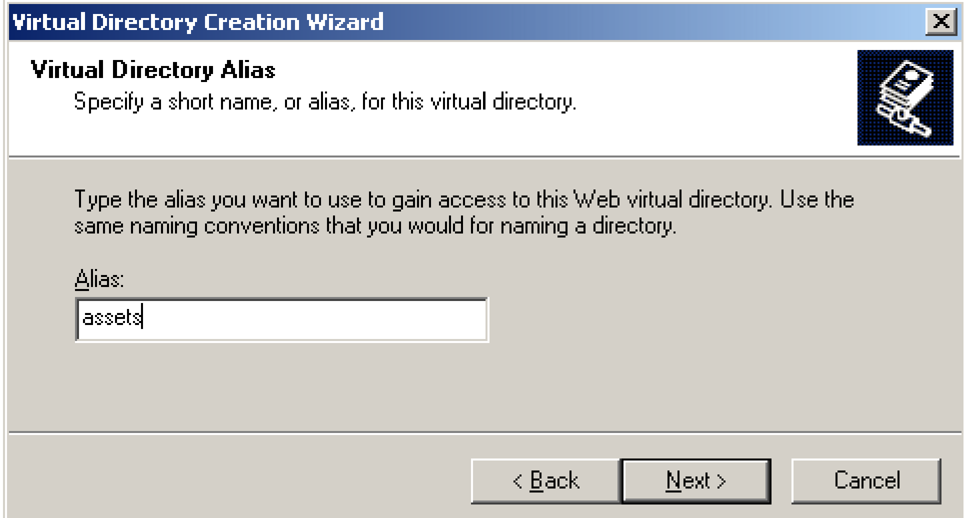
6. Copy the catalog information from the first site to the second. To do this, open the first site's web.config file, and copy the contents of the `<providers>` element (illustrated below).

```
<providers>
<add name="MSIndexServer" type="Ektron.Cms.WebSearch.SearchProviders.MSIndexProvider,
Ektron.Cms.WebSearch" catalogName="CMS400Min3152007121250Publish"
privateCatalogName="CMS400Min3152007121250Private" pageSize="10" description="MS Index
Server Provider"/>
<add name="MSIndexDialectServer"
type="Ektron.Cms.WebSearch.SearchProviders.MSIndexDialectProvider, Ektron.Cms.WebSearch"
catalogName="CMS400Min3152007121250Publish"
privateCatalogName="CMS400Min3152007121250Private" pageSize="10" description="MS Index
Server Dialect2 Provider"/>
</providers>
```

Note: The catalog names are examples. You catalog names may be different.

7. In the second site, open the web.config file. Then, overwrite the `<providers>` information with the text you copied in Step 7.
8. Open the folder that contains the first site. Copy the AssetManagement.config file.
9. Open the folder that contains the second site. Overwrite the AssetManagement.config file in that folder with the file you copied in Step 9.
10. Set up the virtual directories. To do that, follow these steps.
    - In IIS, open the second Web site you created in Steps 2 and 3
    - Delete the Assets folder
    - Create a new virtual directory named Assets



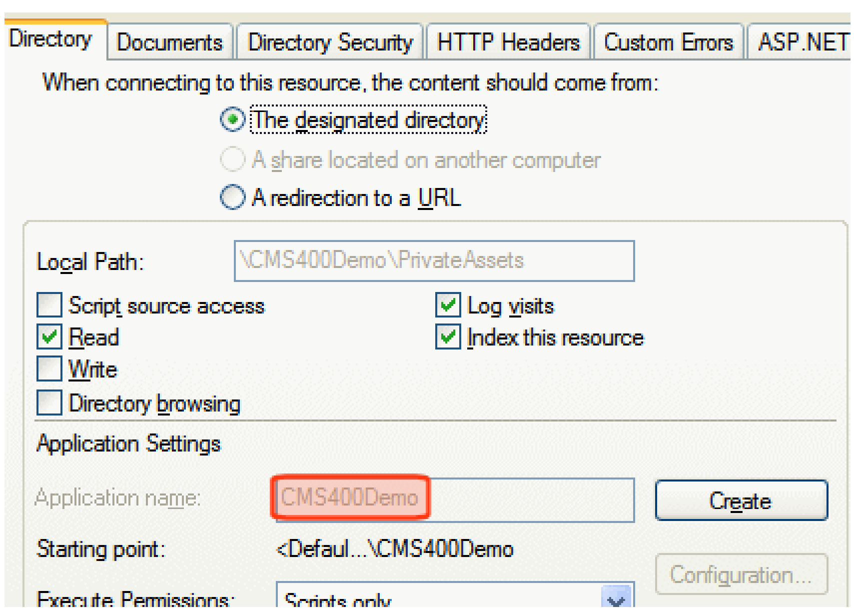


– When prompted to specify a path to the new Assets folder, navigate to the first site's Assets folder

– When you finish setting up the virtual folder to Assets directory, set up virtual directories in the same manner for the following directories: PrivateAssets, uploaded files, and uploaded images. Remember to delete the folder in the second site before creating the virtual directory.

– Make sure that none of the folders is set up as an application. To do that, open IIS, right click each folder and select **properties**. On the **Directory** tab, the **Application name** field should be grayed out, as shown below.

:



Searching for Metadata

Note: You can use the SEO Control to identify how search engines evaluate your Web pages' metadata tags, and other search tools. See Also: "Using the Search Engine Optimization (SEO) Control" on page 21-515

- Searchable type metadata values are returned like regular content. See Also:
- It can take up to 30 minutes for newly-added metadata to be available to the search.
- Searchable metadata field names must not include a space. If they do, the search cannot find the metadata.
- To find content with searchable metadata whose style is **yes or no**, enter `true` or `false`.

Installing the Visio IFilter

The search finds text within Visio documents if the Visio IFilter has been installed to the Ektron CMS400.NET server. Use the following links to download the Visio IFilter.

Visio Version	Link
2003	http://www.microsoft.com/downloads/details.aspx?FamilyID=dcee9e09-448b-4386-b901-efea29cac808&DisplayLang=en
2002	http://www.microsoft.com/technet/prodtechnol/Visio/visio2002/deploy/ifilter.mspx

Query Language

Note: Following text collected from Microsoft Web site.

To search for any word or phrase on a Web site, enter the word or phrase into the Search field and click the button to begin the search.

This section covers the following topics.

- "Rules for Formulating Queries" on page 9-53
- "Boolean and Proximity Operators" on page 9-54 - increase accuracy of searches by inserting Boolean and proximity operators
- "Localized Symbols and Keywords" on page 9-56 - explains which keywords are supported in foreign languages
- "Wildcards" on page 9-56 - find pages with words similar to your search term
- "Free-Text Queries" on page 9-56 - create a query based on a phrase's meaning as opposed to exact wording
- "Vector Space Queries" on page 9-57 - find pages that match a list of words and phrases
- "Property Value Queries" on page 9-57 - query a file's properties
- "Query Examples" on page 9-62 - examples of various queries

Rules for Formulating Queries

When a search is executed, it returns a list of Web pages that contain the word or phrase that a user entered, regardless of where it appears in text.

Follow these rules when formulating queries.

- Multiple words are treated as individual search terms. So, the term **calendar server** returns pages that have both words.

To find pages that have calendar and server in that exact order, use quotes. "**calendar server**" returns pages that include both terms in that exact order with no intervening words.

- Queries are case-insensitive. You can type a query in upper or lower case.
- The search ignores words in the *noise file*s. Ektron CMS400.NET's noise files screen from the search every single letter of the alphabet as well as many common words, such as about, after, all, and also. Avoid entering such words into the Search Text field, because the search ignores them.

The list of noise words (noise.enu) is installed to your `siteroot/Workarea` and `Windows/System 32` folders. You can open a noise file with a simple word processor program, such as Notepad, to view the noise words. You can also edit the files. For example, you can remove words that users should be able to search on.

To make a word in the noise files searchable, remove it from both files then restart both catalogs. See Also:

Exceptions:

- In the Ektron CMS400.NET Workarea, the Advanced Search disregards the noise file.
- You cannot make the indexing service operators (**and**, **or**, **but**) searchable.

- Words in the noise file are treated as placeholders in phrase and proximity queries. For example, if you search for “Word for Windows”, the results could return “Word for Windows” and “Word and Windows”, because “for” is in the exception list.
- Punctuation marks, such as period (.) and comma (,), are ignored by a search.
- To use special characters, such as &, |, ^, #, @, $, (,), in a query, enclose the query in quotation marks (“).
- To search for a word or phrase containing quotation marks, surround the entire phrase with quotation marks and double the quotation marks around the word to be surrounded with quotes. For example, “World-Wide Web or ““Web””” searches for World-Wide Web or “Web”.
- Use Boolean operators (AND, OR) and the proximity operator (NEAR) to specify additional search criteria. See Also: "Boolean and Proximity Operators" on page 9-54
- Use the wildcard character (*) to find words with a given prefix. For example, the query **esc*** finds Web pages with “ESC,” “escape,” and so on. See Also: "Wildcards" on page 9-56
- You can specify free-text queries without regard to query syntax. See Also: "Free-Text Queries" on page 9-56
- Vector space queries can be specified. See Also: "Vector Space Queries" on page 9-57
- You can search on ActiveX™ (OLE) and file attribute property values. See Also: "Property Value Queries" on page 9-57

Boolean and Proximity Operators

Use boolean and proximity operators to create a more precise query.

To Search for	Example	Results
Both terms on a page	healthcare insurance	Pages with words “healthcare” and “insurance”

To Search for	Example	Results
Either term on a page	kidney or renal —Or— kidney | renal#	Pages with “kidney” or “renal”
All pages that match a property value	@CMSsize > 1000	Pages greater than 1000 kilobytes
Both terms on a page, close together	treatment near immunoglobulin —Or— treatment ~ immunoglobulin	Pages with the word “treatment” near the word “immunoglobulin” See Also: "The NEAR operator is like the AND operator because it finds pages that include both search words." on page 9-55

Tips

- To nest expressions within a query, add parentheses. Expressions within parentheses are evaluated before the rest of the query.
- Use double quotes (“) to ignore a Boolean or NEAR operator keyword. For example, “Abbott and Costello” finds pages with the entire phrase, not pages that match the Boolean expression. In addition to being an operator, the word “and” is a *noise word* in English.
- The NEAR operator is like the AND operator because it finds pages that include both search words.

However, the rank assigned by NEAR depends on the proximity of the search words. A page with the searched-for words closer together has a higher rank than a page where they are farther apart. If the search words are more than 50 words apart, the page is assigned a rank of zero.

Note: The NEAR operator can be applied only to words or phrases.

- The AND operator has a higher precedence than OR. For example, the first three queries are equal, but the fourth is not:
  - a AND b OR c
  - c OR a AND b
  - c OR (a AND b)
  - (c OR a) AND b

Localized Symbols and Keywords

The symbols (&, |,!, ~) and the English keywords AND, OR, and NEAR work the same in all languages supported by Ektron CMS400.NET. Localized keywords are also available when the browser locale is set to one of the following languages.

Language	Keywords
German	UND, ODER, NICHT, NAH
French	ET, OU, SANS, PRES
Spanish	Y, O, NO, CERCA
Dutch	EN, OF, NIET, NABIJ
Swedish	OCH, ELLER, INTE, NÄRA
Italian	E, O, NO, VICINO

Wildcards

Wildcard operators find pages that contain words similar to a given word.

To Search For	Example	Results
Words with the same beginning letters	pharm*	Pages with words that have the prefix **pharm**, such as **pharmaceutical, pharmacist**, and **pharmacology**.
Words based on any form of a verb	fly**	Pages with any form of a verb. For example, if you enter **fly**, the search returns pages that contain **flying**, **flown**, **flies**, and **flew**.

Free-Text Queries

A free-text query finds pages that match the meaning, not the exact wording, of submitted words and phrases. Begin free-text queries with `$contents`.

You cannot use boolean, proximity, or wildcard operators in a free-text query.

To Search For	Example	Results
Files that match free-text	$contents how do I print in Microsoft Excel?	Pages that mention printing and Microsoft Excel

Vector Space Queries

The search supports *vector space* queries, which return pages that include a list of words and phrases. Each page is ranked according to how well it matches the query.

To Search for	Example	Results
Pages that contain specific words	light, bulb	Files with words that best match the search words
Pages that contain weighted prefixes, words, and phrases	invent*, light[50], bulb[10], "light bulb"[400]	Files that contain words prefixed by "invent," the words "light," "bulb," and the phrase "light bulb" (the terms are weighted)

Tips

- Separate terms in a vector query with commas (,)
- You can weight terms in vector queries by using the `[weight]` syntax (see example above)
- Pages found by vector queries do not necessarily match all words submitted in the query
- Vector queries work best when results are sorted by rank

Property Value Queries

Use a property value query to find files whose property values match a given criteria. Properties you can query include file information (like file name and size), and ActiveX properties, including the document summary stored in files created by ActiveX-aware applications.

There are two types of property queries.

- **Relational property queries** - consist of an "at" character (@), a property name, a relational operator, and a property value. For example, to find all files larger than one million kilobytes, use `@CMSsize > 1000000`. See Also: "Relational Operators" on page 9-59

- **Regular expression property queries** - consist of a number sign (#), a property name, and a regular expression for the property value. For example, to find all .avi files, use `#filename *.avi`. See Also: "Regular Expressions" on page 9-61

Regular expressions do not match the contents (`#contents`) and all (`#all`) properties.

In regular expression property queries, you can only use properties that are retrievable at query time. Properties that are not retrievable include HTML META properties not stored in the property cache.

Property Names

Property names are preceded by the "at" sign (@) for relational queries, and the pound sign (#) for regular expression queries.

If no property name is specified, `@contents` is assumed.

Properties available for all files are listed below.

Property Name	Description
All	Matches words, phrases, and any property
Contents	Words and phrases in the file Note: The contents property does not support relational operators. If a relational operator is specified, no results are found. For example, `@contents Ektron` finds documents containing Ektron, but `@contents=Ektron` finds none.
Filename	Name of the file
CMSsize	File size
Write	Date file was created or last modified (whichever is later)

You can also use ActiveX property values in queries. You can search for files created by most ActiveX-aware applications by querying for the following properties.

Property Name	Description
DocTitle	Title of the document

Property Name	Description
DocSubject	Subject of the document
DocAuthor	The document's author
DocKeywords	Keywords for the document
DocComments	Comments about the document

Relational Operators

Use relational operators to create relational property queries.

To Search for	Example	Results

Property values in relation to a fixed value	`@CMSsize < 100`
	`@CMSsize <= 100`
	`@CMSsize = 100`
	`@CMSsize != 100`
	`@CMSsize >= 100`
	`@CMSsize > 100`
		Files whose size matches the query

Property values with all of a set of bits on	`@attrib ^a 0x820`	Compressed files with the archive bit on
Property values with some of a set of bits on	`@attrib ^s 0x20`	Files with the archive bit on

Property Values

To Search for	Example	Results
A specific value	`@DocAuthor = "Bill Bailey"`	Files authored by Bill Bailey

To Search for	Example	Results
Values beginning with a prefix	`#DocAuthor George*`	Files whose author property begins with George
Files of any extension	`#filename *.gif`	Files with a .gif extension Note: Because Ektron CMS400.NET stores all content in .txt files, you cannot use this syntax to find files with a .txt extension.
Files modified after a certain date	`@write > 2006/02/14` Note: You cannot use the equal operator (=) with @ write. Only greater than (>) and less than (<) operators work.	Files modified after February 14, 2006
Vectors matching a vector	`@vectorprop = { 10, 15, 20 }`	ActiveX documents with a vectorprop value of {10, 15, 20}
Vectors where each value matches a criterion	`@vectorprop >^a 15`	ActiveX documents with a vectorprop value in which all values in the vector are greater than 15
Vectors where at least one value matches a criterion	`@vectorprop =^s 15`	ActiveX documents with a vectorprop value in which at least one value is 15

Tips for Using Property Queries

- Use the pound (#) character before the property name when using a regular expression in a property value.

Use the "at" (@) character otherwise. The equal (=) relational operator is assumed for regular-expression queries.

- File name (#filename) is the only property that efficiently supports regular expressions with wildcards to the left of text.
- Dates use the format yyyy/mm/dd.

You can omit the first two characters of the year. If you do, 29 or less is interpreted as the year 2000, and 30 or greater is interpreted as the year 1900. All dates are in Greenwich Mean Time (GMT).

- Currency values use the format x.y, where x is the whole value amount and y is the fractional amount. There is no assumption about units.
- Boolean values are (t) or (true) for TRUE and (f) or (false) for FALSE.
- Vectors (VT_VECTOR) are expressed as an opening brace ({), a comma-separated list of values, and a closing brace (}).
- Single-value expressions that are compared against vectors are expressed as a relational operator, then a (^a) for all of or a (^s) for some of. See Also: "Relational Operators" on page 9-59
- Numeric values can be expressed in decimal or hexadecimal (preceded by 0x).

Regular Expressions

Regular expressions in property queries are defined as follows.

- Any character except asterisk (*), period (.), question mark (?), and vertical bar (|) defaults to matching itself.
- A regular expression can be enclosed in matching quotes (“). It *must* be enclosed in quotes if it contains a space () or closing parenthesis ()).
- The characters *, ., and ? behave as in Windows. They match any number of characters, match (.) or end of string, and match any one character, respectively.
- The character | is an escape character. After |, the following characters have special meaning:
  - (opens a group. Must be followed by a matching).
  -) closes a group. Must be preceded by a matching (.
  - [opens a character class. Must be followed by a matching (un-escaped)].
  - {opens a counted match. Must be followed by a matching}.
  - } closes a counted match. Must be preceded by a matching {.
  - , separates OR clauses.
  - * matches zero or more occurrences of the preceding expression.
  - ? matches zero or one occurrences of the preceding expression.
  - + matches one or more occurrences of the preceding expression.

Anything else, including |, matches itself.

- Between square brackets ([]), the following characters have special meaning.
  - ^ matches everything but following classes. Must be the first character.
  -] matches]. May only be preceded by ^. Otherwise, it closes the class.
  - - range operator. Preceded and followed by normal characters.

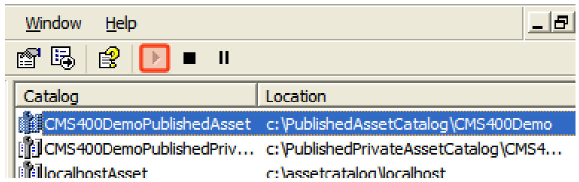
Anything else matches itself (or begins or ends a range at itself).

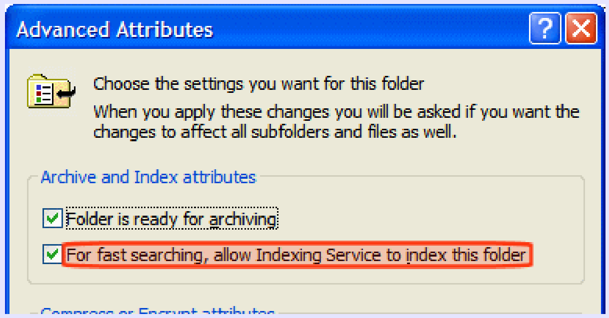
- Between curly braces ({}), the following syntax applies.
  - |{m|} matches exactly m occurrences of the preceding expression. (0 < m < 256).
  - |{m,|} matches at least m occurrences of the preceding expression. (1 < m < 256).
  - |{m,n|} matches between m and n occurrences of the preceding expression, inclusive. (0 < m < 256, 0 < n < 256).
- To match *, ., and?, enclose them in brackets (for example, |[*]sample matches "*sample").

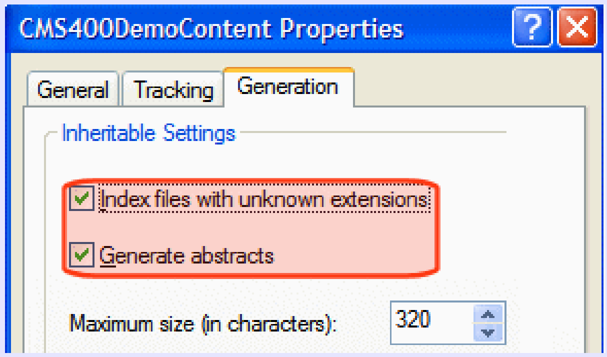
Query Examples

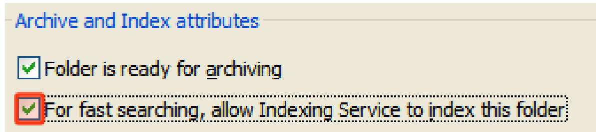
Example	Results
@CMSsize > 10000	Pages larger than 10 MB
@write > 2003/05/12 Note: You cannot use the equal operator (=) with @ write. Only greater than (>) and less than (<) operators work.	Pages modified after the date
pear tree	Pages with the phrase "pear tree"
"pear tree"	Same as above
@contents pear tree	Same as above
Ektron and @CMSsize > 10000	Pages with the word "Ektron" that are larger than 10 thousand kilobytes
"Ektron and @CMSsize > 10000"	Pages with the phrase specified (not the same as above)
#filename *.avi	Video files (the # prefix is used because the query contains a regular expression)
@attrib ^s 32	Pages with the archive attribute bit on
@docauthor = "John Stanton"	Pages with the given author
$contents why is the sky blue?	Pages that match the query

Search Troubleshooting

Problem	Solutions
You publish content but cannot find it using the search	1. Wait 5 or 10 minutes (depends on the load on the server). 2. Make sure the Microsoft indexing service is running (**Computer Management > Services and Applications > Indexing Service**). Verify that the Run button is grayed out. If the service is not running, start it.  3. Query the catalog using the new content's ID. See "Querying the Catalog for the Content" on page 9-66. 4. Make sure the Ektron Windows service is running (**Computer Management > Services and Applications > Services > Ektron Windows Services 2.0**). Verify that the Run button is grayed out.  If the service is not running, start it. If you do, it may take a while for the service to prepare the content for indexing. *(Continued below)*
You publish content but cannot find it using the search *(continued)*	1. Make sure the `siteroot/Assets` folder's Advanced Attributes screen's **For fast searching, allow Indexing Service to index this folder** checkbox is checked. To access this screen, click the **Advanced** button on the `siteroot/Assets` folder properties screen.

Problem	Solutions
	 2. Check the priority of the database table. See "Checking the Priority of the Database Table" on page 9-67
Indexing service uses too much memory or resources. Or, too many instances of cidaemon.exe are running.	Check the number of catalogs being serviced. To do so, follow these steps. 1. Go to **Computer Management > Services and Applications > Indexing Service**. 2. You should see three Ektron CMS400.NET catalogs (Public, Private, and Content), plus System and Web. Ektron CMS400.NET does not use the system and Web catalogs, so unless your server uses them for another purpose, delete them. 3. Delete any other unused catalogs. 4. Restart the Microsoft Indexing Service.
The catalog size is growing too quickly, or is really huge	The indexing service generates an abstract for each content item. See . By default, the abstract length is 320 characters. To reduce the catalog size, reduce the abstract length. See
Catalog is mistakenly deleted or corrupted	Recreate it. See

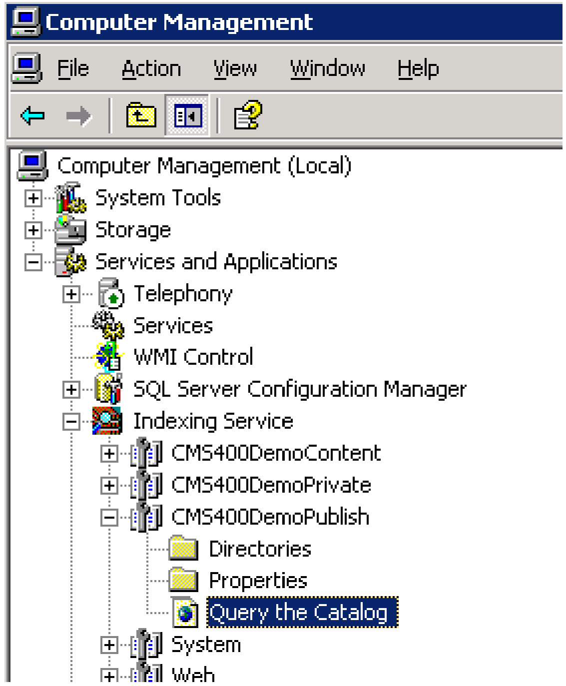
<table>
<tr><th>Problem</th><th>Solutions</th></tr>
<tr><td>The Inheritable Settings checkboxes are not checked</td><td>Make sure the Inheritable Settings checkboxes on the Generation tab of the Properties dialog are checked.
1. Go to Computer Management > Services and Applications > Indexing Service.
2. Select the first of the three Ektron CMS400.NET catalogs (Public, Private, and Content).
3. Right click the mouse and select Properties.
4. Click the Generation tab.
5. Make sure the two checkboxes are checked (illustrated below).

6. Repeat for the other two catalogs.</td></tr>
<tr><td>Verify that Windows can find files on your server</td><td>1. Open Windows Explorer.
2. Right click your C drive and select Search.
3. In the All or part of the file name field, enter *.*.
4. The search should find all files on your computer.
If it does not, ask your system or network administrator to help you determine why your Windows search is not working. For example, he should verify that you have permission to search for files.</td></tr>
<tr><td>SearchConfigUI.exe crashes while building search indexes and catalogs</td><td>1. Make sure the metaconfig.doc file exists in the siteroot/uploadedfiles directory.
If it does not, ask Ektron Technical Support to send you a new file.
2. If anyone uploaded Visio documents to your server, make sure the iFilter is installed. See "Query Language" on page 9-52.</td></tr>
</table>

Problem	Solutions
MS Indexing Service cannot find files in the `siteroot/assets` folder.	1. Open Windows Explorer. 2. Navigate to the `siteroot/assets` folder. 3. Select the folder and right click the mouse. 4. Select **Properties**. 5. Click the **Advanced** button. 6. Check the box next to **For faster searching, allow Indexing Service to index this folder**.  7. Press **OK**.
Get error message. **An unhandled exception has occurred: The type initializer for Ektron.CMS. WebSearch.Manager threw an exception.0**	During installation, the user might have canceled the database setup. Check the following. 1. Check the site root folder for the following folders. If they do not exist, create them. - PrivateAssets - Assets - UploadedFiles - UploadedImages 2. Make sure MetaConfig.doc exists in the `[sitepath]\UploadedFiles` folder. If it does not, ask Ektron Technical Support for a copy of that file from the same Ektron CMS400.NET version. 3. Make sure noise.enu file exists in the `[sitepath]` folder. If it does not, look in the `[sitepath]\workarea` folder. If noise.enu is there, copy it to the `[sitepath]` folder. If you cannot find noise.enu, ask Ektron Technical Support for a copy of that file from the same Ektron CMS400.NET version. 4. Check the following registry key: `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndexCommon`. For that key, make sure **DefaultColumnFile** has the value `C:\WINDOWS\system32\FriendlyNamesDefinitionFile.txt`. If the entry does not exist, create it and set the value as listed above.

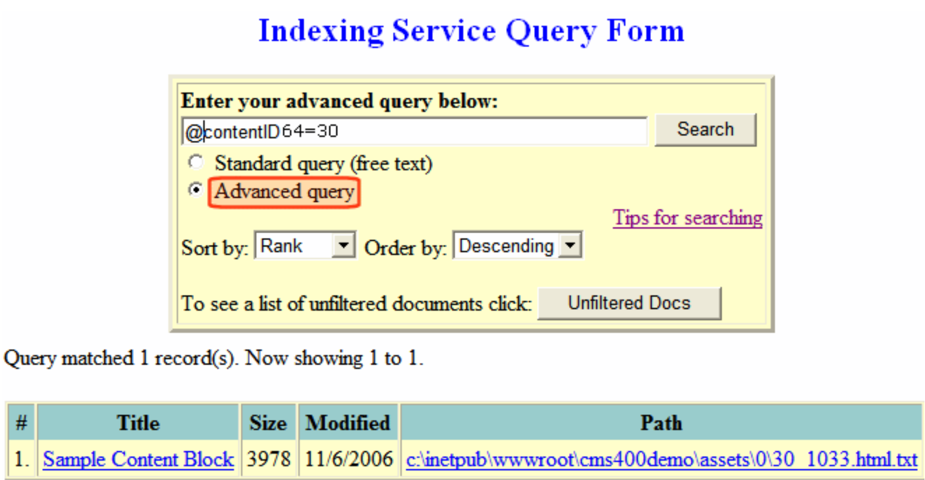
Querying the Catalog for the Content

To query the catalog for a content item, follow these steps

1. Go to **Computer Management > Services and Applications > Indexing Service > sitenamePublishedAsset > Query the Catalog**.



2. Choose **Advanced Query**.
3. Use the syntax `@contentID64=`*`IDnumber`*. For example, if the content ID is 30, enter `@contentID64=30`.



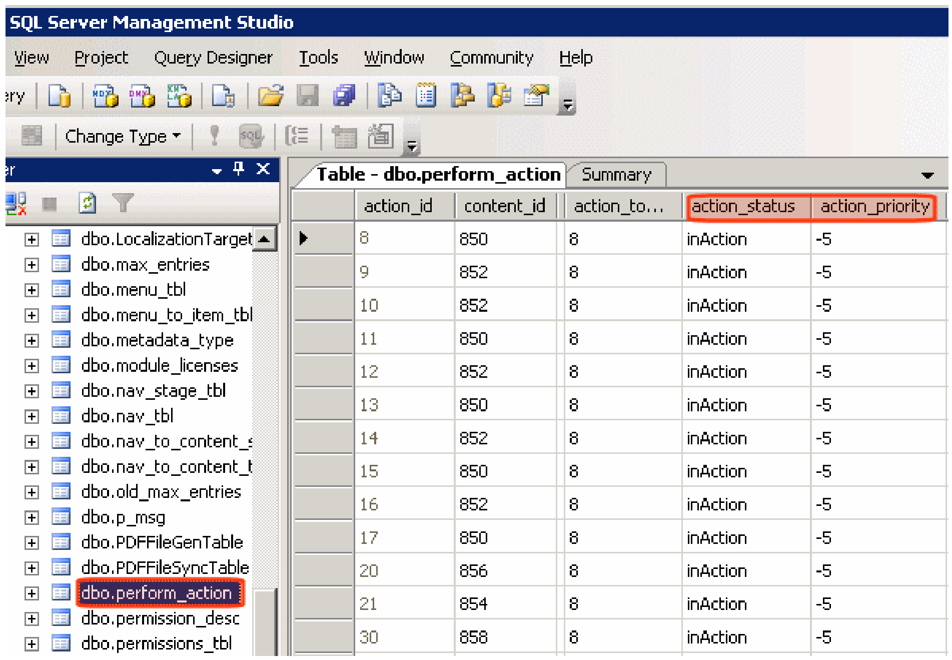
4. The content should appear as shown above.

Checking the Priority of the Database Table

To check how your database is processing the documents, follow these steps.

1. Launch a database management tool, such as SQL Server Management Studio.

2. Find the Ektron CMS400.NET database.
3. Open **Tables > dbo.perform.action**.
4. A list of content blocks being processed appears.



5. Make sure the **action_priority** for each item is less than -8. If that is the case, the database will process the record.

   If the priority is -8 and the action status is **inAction**, there is a problem with the service that processes the document. To resolve the problem, you can

   – go to **Computer Management > System Tools > Error Log** to find any errors and fix them

   – reset the **action_priority** value to zero (0) and the action status to **PerformAction**

   – contact Ektron Support

Web Search Server Control

The Web Search server control lets you customize the behavior of the search. You place this control on any Web form from which a site visitor can search your site. For more information about the site visitor experience, see "Web Site Search" on page 9-5

Property Usage Table

Properties in the Search server control generally affect the control in one of three ways:

- **Search Display** - the Web Search server control's appearance on your site.
- **Search Criteria** - criteria used to search the site
- **Search Results Display** - appearance of search results on your site

The following table shows which properties are associated with each category. See Also: "WebSearch Property Descriptions" on page 9-69

Search Display	Search Criteria	Search Results Display
		CustomOrderBy
		DynamicContentTemplate
ButtonImgSrc		DisplayXslt
ButtonText	CustomSearch	Hide
DisableForumSearch	FolderID	Language
EnableAdvanced Link	Language	LinkTarget
Hide	Recursive	MaxTeaserLength
Language	SearchFor	OrderBy
MaxCharacters	ShowCategories	OrderDirection
ShowSearchOptions	ShowSearchOptions	RemoveTeaserHtml
Text Box Size	ShowSuggested Results	ResultsPageSize
WrapTag		ResultTagId
		ShowCustomSummary
		ShowSearchBoxAlways

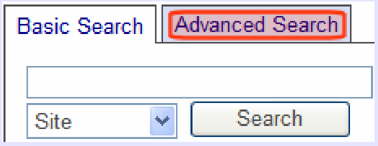
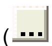
WebSearch Property Descriptions

The following table describes the Web Search server control properties. See Also: "Property Usage Table" on page 9-69

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer. If logged in, you can browse to the folder needed for the `FolderID` property. More information: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
ButtonImgSrc	If you want to display an image on the submit button, enter the server path to it.	String
ButtonText	The text used for the button if no image source is identified. If an image source is identified, this is alternative text for the button.	String
CustomOrderBy	Provide a property's Friendly Name defined in the Indexing Service to sort search results by that property. For example, if you define DocAuthor, results will be sorted by the document's author. Results can be ascending or descending based on `OrderDirection`. If you enter an invalid property, no search results are returned. If you specify `CustomOrderBy` and `OrderBy`, the `OrderBy` property is ignored. The Friendly Name of a property can be found in **Computer Management** > **Services and Applications** > **Indexing Service** > ***Your Index*** > **Properties** > **Friendly Name column**.	String
CustomSearch	If you want the search to include folders that are not part of Ektron CMS400.NET, enter the folder names here. Separate multiple items with a comma. You do not need to enter the folder path, but it must reside within the site root folder. More information: "Using the Integrated Search" on page 9-42	String
DisableForumSearch	Set to **true** if you want to remove **Forums** from the dropdown list that appears on the Search server control (see image below). The default value is **false**.	Boolean

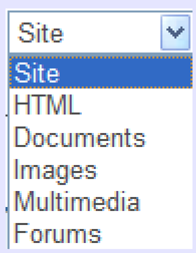
Property	Description	Data Type
 Regardless of this setting, if a user selects **Site** (the first option in the dropdown), forum posts are searched.		
DisplayXslt	Determines the display of the search results page. **None** - databind only **ecmNavigation** - lists the title of every content item found by the search **ecmTeaser** - lists the title and summary of every content item found by the search. **ecmUnOrderedList** - sorts the list in no particular order. Shows the title and content summary. **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page. **Warning! Important!**: If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning! Important!** If you enter a valid EkML file at the `MarkupLanguage` property, this property value is ignored. More information: "Determining the Display of Search Results" on page 9-80 **ecmNavigation** -"Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - "Example of ecmTeaser Display" on page 9-124	String
DynamicContentTemplate	Sets the template for dynamic content. This property overrides any quicklink template for the content.	String

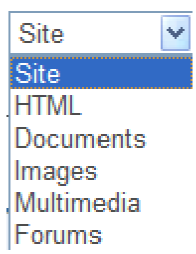
Property	Description	Data Type
EnableAdvancedLink	Set to **true** to display an additional tab (**Advanced**) on the Search control.  More information:"The Advanced Search" on page 9-21	Boolean
FolderID	The folder at which the search begins. The starting folder need not be the root folder. The `Recursive` property determines if the search examines this folder's subfolders. More information: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
Hide	Used to hide WebSearch Server Control in design time and runtime. **True** = Hide control **False** = Show control	Boolean
Language	If the template on which this server control resides includes a language selection control, and you want to let the site visitor select the language, enter zero (0). Otherwise, click the field, then the ellipsis button ( and a popup box appears. Select a language from the list. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Description	Data Type
LinkTarget	Defines how a link on the search results display acts when clicked. The choices are: **_blank** - loads the link in a new blank window. This window is not named. **_self** - loads the link in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - loads the link in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - loads the link in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	String
MarkupLanguage	Identify the template markup file that controls the display of search results. For example, mysearchmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\`*`siteroot`*`\workarea\customfiles\markup\mysearchmarkup.ekml`. Note: If you enter a valid EkML file, the `Displayxslt` property is ignored. More information: - "Determining the Display of Search Results" on page 9-80 - "Ektron Markup Language" on page 21-414 - "websearch.ekml" on page 21-474	String
MaxCharacters	The maximum number of characters the **Search** text box accepts. If you enter a value less than 50, set the `TextBoxSize` property to the same number.	Integer

<table>
<tr><th>Property</th><th>Description</th><th>Data Type</th></tr>
<tr><td>MaxTeaserLength</td><td>Limits the length of any returned content's abstract. To allow unlimited length, set to zero.
This property is active only if both of these conditions are true.
■ you use <code>the DisplayXslt</code> property to identify an xslt and <code>ecmteaser</code> as a value of that property.
If you enter an .ekml file at the <code>Mark-upLanguage</code> property, this value is ignored.
■ the <code>ShowCustomSummary</code> property is set to false. If it is set to true, the entire summary appears in search results.</td><td>Integer</td></tr>
<tr><td>OrderBy</td><td>The order of search results. For example, you want to sort search results by last modified date.
Title - The content title (alphabetical)
ID - The content ID number
Date Created - The date the content was created
Date Modified - The date the content was most recently modified
Editor - The user who last edited the content (alphabetical)
Rank - The rank assigned to the content.
See Also: "Search Result Ranking" on page 9-27
Note: The Order Direction field determines the direction of the search results. For example, if you sort by ID and Order Direction is set to Descending, the results sort by ContentID number with the highest number at the top of the list.</td><td>String</td></tr>
<tr><td>OrderDirection</td><td>The direction in which search results are sorted. The default is Ascending.
Ascending - Alphabetical results from A to Z; numeric values low to high; dates from oldest to most recent
Descending - Alphabetical results from Z to A; numeric values high to low; dates from most recent to oldest</td><td>String</td></tr>
</table>

Property	Description	Data Type
Recursive	Determines whether to search sub-folders of the starting folder. The starting folder is identified in the `FolderID` property. More information: "FolderID" on page 9-89	Boolean
RemoveTeaserHTML	Set to true if you want to remove HTML tags from the content summary when it appears in search results.	Boolean
ResultsPageSize	Use to set the maximum number of results on a page. If a search returns more than this number of results, the following text appears below the last one: **Result Page: 1 2 3 Next** The user can click **Next** or a number to view additional results. This property defaults to the value set at the `ek_PageSize element` in the `web.config` file. **Property's Effect on Suggested Results** Only the number of Suggested Results up to this maximum appear. If more than this number should display, they do not. This is unlike natural search results, whose additional links are available via numbers below the maximum page size. More information: "Suggested Results" on page 9-31	Integer
ResultTagId	Lets you designate where search results appear. You can place search criteria in one area of a Web form and the results in another. For example, you have the following tag. `<span id="results"></span>` In this case, enter **results** for this property value. More information: "ResultTagId" on page 9-97	String

Property	Description	Data Type
SearchFor	Choose the type of content to search. - All - HTML - Documents - Images - Multimedia - Discussion Forums - Tags - Products If the value is anything other than **All**, this server control only looks though the selected content type. **Warning! Important:** When this property is set to anything other than **All**, the search options drop down does not appear. . 	String
SearchSynonyms	If set to **true**, the Synonym Search is incorporated into the search logic. If **false**, Synonym Sets are ignored. More information: "Synonym Sets" on page 9-28	Boolean
ShowCategories	If set to **true**, when this server control appears, the user see a **Filter by Category** option. This option helps a site visitor zero in on relevant content. If **false**, the **Filter by Category** option does not appear. Note: To see the **Filter by Category** option, the `ShowSearchBoxAlways` property must be set to `true`. More information: "Filtering Search Results by Category" on page 9-81	Boolean

Property	Description	Data Type
ShowCustomSummary	If set to **true**, the search results display the content item's summary instead of the characterization. Note: If this property is set to **true**, the `MaxTeaserLength` property is ignored. So, the entire summary appears with search results, regardless of length. If **false**, the search results display the characterization. The default is **false**. More information: "Display of Search Results" on page 9-24	Boolean
ShowSearchBoxAlways	If set to **true**, the search box appears on the PostBack screen. If **false**, the search box does not appear on the PostBack screen. The default is **true**.	Boolean
ShowSearchOptions	If set to **true**, the following dropdown options appear to the right of the **Search** box.  A site visitor can click an option to limit the search by content type. If the user accepts the default value, **Site**, all content types are searched. **Warning! Important:** If the `SearchFor` property is set to anything other than **All**, the search options drop down does not appear. See Also: "SearchFor" on page 9-76 **Note:** If the `DisableForumSearch` property is set to true, **Forums** does not appear in the dropdown list.	Boolean

Property	Description	Data Type
ShowSuggestedResults	If set to **true**, Suggested Results related to the search term appear. If **false**, Suggested Results do not appear. **Note:** If the `ResultsPageSize` property is set it to less than the number of suggested results applied to a term or synonym set, only the property's number of results appears. For example, if you assign five links to a Suggested Result set but set `ResultsPageSize` to three, only the first three results appear. More information: "Suggested Results" on page 9-31	Boolean
Stylesheet	Specify the location of a style sheet to use for the search results page. Set the location relative to the site root folder. For example: `Workarea\csslib\mytest.css` Leave blank to use the default style sheet, `\` *`webroot`* `\Workarea\csslib\search.css`. **Warning! Important!** If you enter a valid EkML file at the `MarkupLanguage` property, or a value at the `DisplayXslt` property, this property is ignored. More information: "Determining the Display of Search Results" on page 9-80	String
SuppressWrapperTags	Suppresses the output of span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Description	Data Type
TaxonomyOperator	Select whether to use an **And** or **Or** operator when filtering results by taxonomy. By default, the property is set to **Or**. This allows for a wider range of returned results. **And** - Only results that match all categories selected in the Filter by Category tree appear. For example, if you are searching for a medical document in the Hospital and Doctor's Office categories, the document must be assigned to both categories or it is not shown. **Or** - when more than one category is selected in the Filter by Category tree, results must match at least one category to be shown. **Note:** For this property to be active, the `ShowCategories` property must be set to **True**. More information: "Filtering Search Results by Category" on page 9-81	Enum - TaxCategoryOperator
TextBoxSize	The size of the **Search** text box for user input. The width is based on the number of characters.	Integer
WrapTag	Use to specify a server control's tag. The default is **Span**. **Span** - designates an in-line portion of an HTML document as a span element. **Div** - use when you want to apply attributes to a block of code. **Custom** - use a custom tag.	String

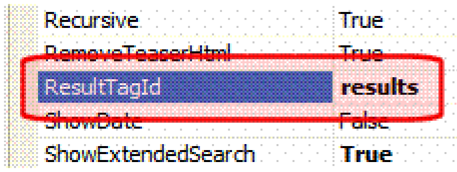
ResultTagId

The `ResultTagId` property lets you designate where search results appear. So, you can place search criteria in one area of a Web form and the results in another.

For example, you have the following tag.

```
<span id="results"></span>
```

You would enter **results** for the property value, as shown below.



(continued in Displaying WebSearch Results on a Separate Page)

Determining the Display of Search Results

You have three options for determining the display of the search results.

Order of Precedence	Option	Control over Styling	Control over Element Placement	Difficulty Level for Novices	More Information
1	websearch.ekml file	limited	excellent	low	"websearch.ekml" on page 21-474
2	XSLT	excellent	excellent	high	"DisplayXslt" on page 9-71
3	Style Sheet	excellent	not available	medium	"Using a Style Sheet" on page 9-80

You can only use one option to determine the search results display. The options appear in the table above in order of precedence.

That is, if an .ekml file is defined, the other two properties are ignored. If no .ekml file is defined, then an XSLT can determine the display. Finally, if neither an ekml file nor a display xslt is defined, a style sheet is used. If you do not specify a style sheet in the `Stylesheet` property, the default one is used (*`siteroot`*`\Workarea\csslib\search.css`).

Using a Style Sheet

Style Sheets let you customize visual elements such as color, alignment, font, and size. Ektron CMS400.NET's search results style sheet has been carefully crafted to give you precise control of even the smallest elements of the page. For more information on working with style sheets, visit http://www.w3.org/Style/CSS/.

You can create your own style sheet or modify the default one, *siteroot*\Workarea\csslib\search.css.

Best Practice

Ektron recommends copying and renaming the default style sheet. Then, enter the new one into the Web Search server control's `Stylesheet` property. This insures you always have a clean file to start with and gives you something to reference if you are not getting expected results.

The style sheet must reside underneath the site root.

You can only define one Search style sheet for each Web page. If you place more than one Web Search server control on a page, they share a style sheet.

Filtering Search Results by Category

The Filter by Category feature helps a site visitor zero in on relevant content.

As explained in "Taxonomy" on page 9-253, the Taxonomy Feature lets users assign information categories to content. For example, if your organization is a university, taxonomy categories might be Athletics, Alumni, Admissions, Academic Departments, etc.

As new content is created, users should apply relevant taxonomy categories to it. This makes it easier to find content on your site, because a site visitor can search by category along with search terms. For example, if the search term is *calendar,* and the category is *Athletics*, the search would typically return calendars of the sports teams but not other calendars, such as those for graduation, exams, or parents weekend.

To let users filter search results by category, set the `ShowCategories` property to **true**. (The `ShowSearchBoxAlways` property must also be **true**.)

TIP!

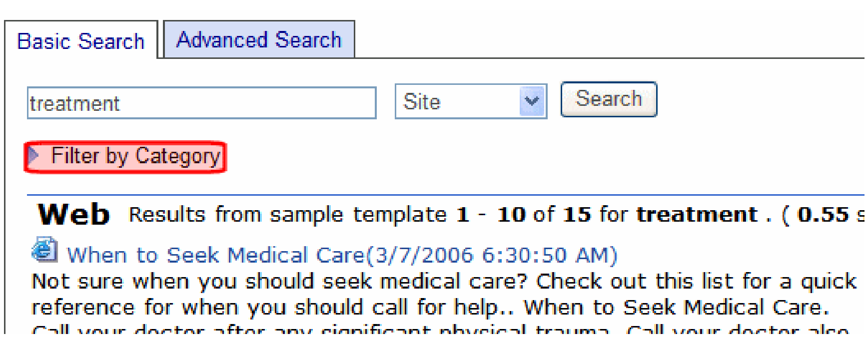
Note: This additional search criterion depends on the assignment of taxonomy categories to your content. If they are not, the filter hides relevant but unclassified content. For example, someone authors an article on "Treating Heart Disease" but doesn't assign a taxonomy category to it. If a site visitor on the search page selects **Filter by Category** then the **Medical Forum** > **Heart Disease** category, he will not find that article.

As a developer, you can control whether the results must match all categories selected in the Filter by Category tree or match at least one category. To display results that must match all categories, set the `TaxonomyOperator` property to **And**. To show results that match one or more categories, set `TaxonomyOperator` to **Or**. By default, the property is set to **Or**. This allows for a wider range of returned results.

Effect of Setting ShowCategories to True

If you set the `ShowCategories` property to **true**, initially the site visitor sees no difference. However, if he enters a search term that exists in content to which a taxonomy category is assigned and clicks the **Search** button, he sees **Filter by Category** above the results (illustrated below).

Note: If no categories are assigned to the content in the search results, the **Filter by Category** link does not appear.



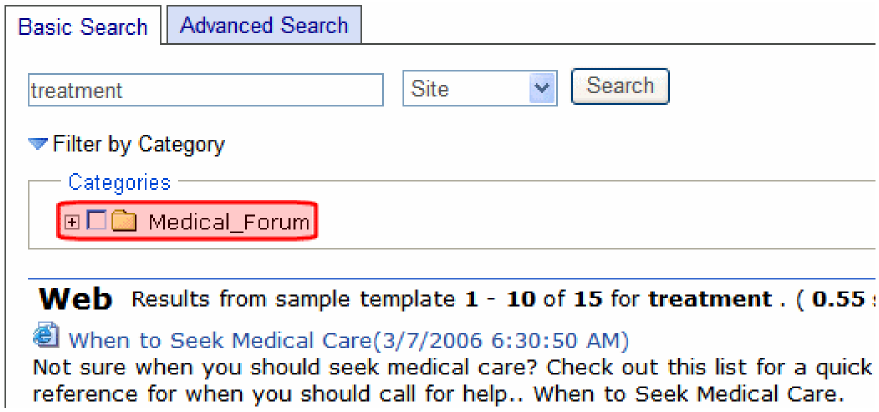
If he clicks **Filter by Category**, the visitor sees all taxonomies with at least one content item that contains the search term. He can then select categories from the taxonomies. If he does, the results refresh, and only content that contains the search term *and* is assigned to the selected categories appears.

If a visitor selects more than one category, the `TaxonomyOperator` property determines which content appears.

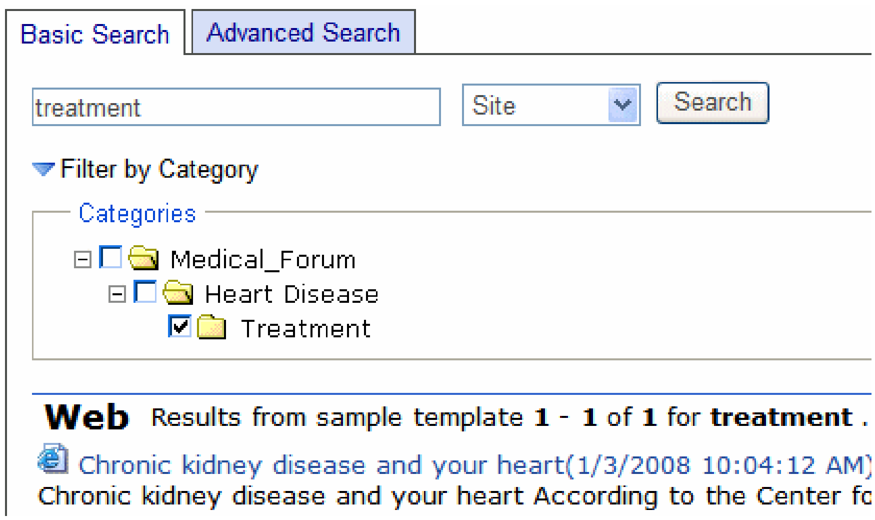
TaxonomyOperator property value	This content appears in search results
and	content assigned to *all* selected categories
or	content assigned to *any* selected category

Note: If the visitor selects a parent category, all of its child categories are selected by default.

In the sample below, the site has 15 content items with the word **treatment** that are assigned to the **Medical Forum** taxonomy.



If the user drills down to the **Treatment** category, only one content item is found.



If a site visitor performs any of the following actions, all taxonomy category selections are cleared, and a new search is performed.

- clicks the **Search** button
- presses <Enter>
- uses the document type dropdown (site, multimedia, images, etc.)
- performs an **Advanced Search**

On the other hand, if a site visitor closes folders in the taxonomy structure, all selected categories remain selected.

Using Ektron's Search APIs

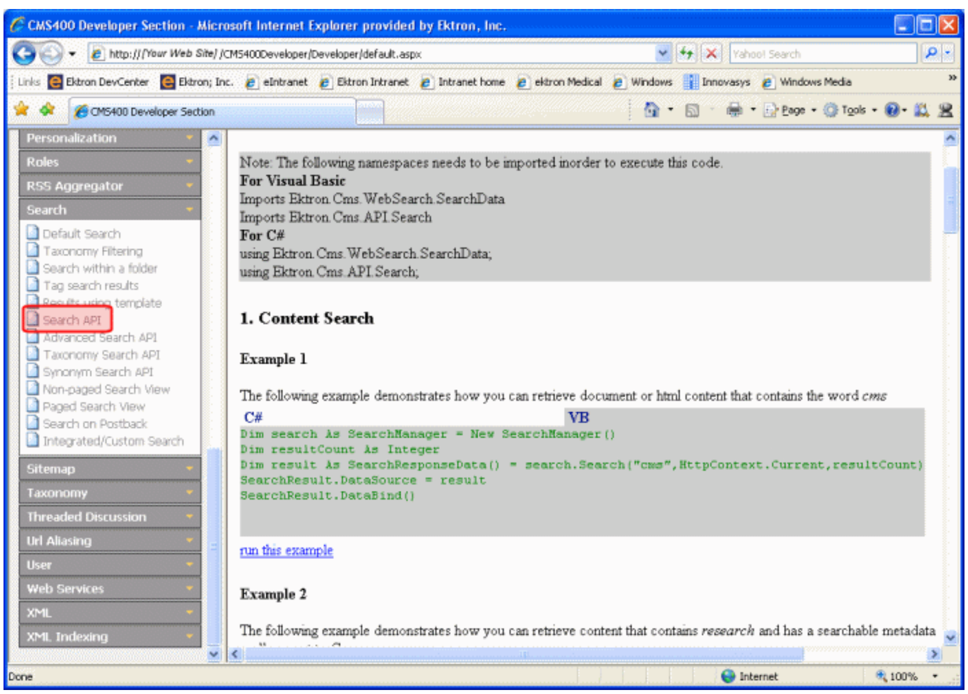
Ektron Provides two separate APIs for search. One is based on the "Web Search" architecture. The other is based on Ektron's previous "Search' architecture.

- "Using the Web Search API" on page 9-84
- "Using the Search API" on page 9-85

Using the Web Search API

Ektron CMS400.NET provides an API that lets you create a programmatic Web Search.

To see an example of the search API, go to the Developer Starter Site's developer page (http://[*your Web server*]/cms400Developer/Developer/default.aspx) and click **Search** > **Search API**. In this section there are several examples of using the Web Search API for programmatic searches.



Note that below each example on the page is **run this example**. Click this link to run the search and view the results.

If you do not have the Developer Starter site installed, you can download it from:

http://www.ektron.com/products.aspx?id=5948

The Developer site is located in the Example site section.

Using the Search API

Warning! This Search API is deprecated as of the 7.0 Release. For optimal performance, Ektron recommends using Ektron's Web Search API. See "Using the Web Search API" on page 9-84.

Note: The Programmatic Search API does not support recursive searches. However, using code behind you can use the Search server control to programmatically search recursively. See Also: "Web Search Server Control" on page 9-68

Ektron CMS400.NET provides an API that lets you create a programmatic search on users and content. For example, you could use it to find all membership users whose zip code is 03031.

Guidelines for Creating a Search

Here are guidelines to follow when creating a search.

1. A search consists of one or more conditions. Each condition consists of an operator (and, OR, Like), a value, and the field whose value you are setting. See illustration below.

```
Dim isMemberShip As UserSearchCondition = New UserSearchCondition '''Condition
isMemberShip.setType = SearchType.Equal '''Operater
isMemberShip.setValue = 1 '''Value. The value can be integer,string,date and boolean
should be match with db type
isMemberShip.setVariable = Users.membership_user '''Field
Dim isInEktron As UserSearchCondition = New UserSearchCondition '''Condition
isInEktron.setType = SearchType.Equal '''Operater
isInEktron.setValue = "03031" '''Value. The value can be integer,string,date and boolean
should be match with dynamic_data_tbl labels type
isInEktron.setVariable = "customproperties.zip" '''Condition
```

Warning! If the field is a date, you can only use the following operators: EQUAL, NOT EQUAL, GREATERTHAN or LESSTHAN.

2. After all conditions are declared, declare the logical relationship between them. In other words, must the search criteria satisfy all or any conditions?

   In the sample code below, the search only returns users that satisfy both declared conditions. This is indicated by the AND operator.

```
Dim condition As UserSearchCondition = New UserSearchCondition
condition.setType = SearchType.AND
condition.AddCondition(isInEktron)
condition.AddCondition(isMemberShip)
```

3. Execute the search.

```
Dim search As New SearchManager
Dim result As UserData() = search.Execute(condition)
search = Nothing
```

Searching the Workarea

You can search any folder to quickly locate content within Ektron CMS400.NET. The following sections explains how to use the content search through the following subtopics.

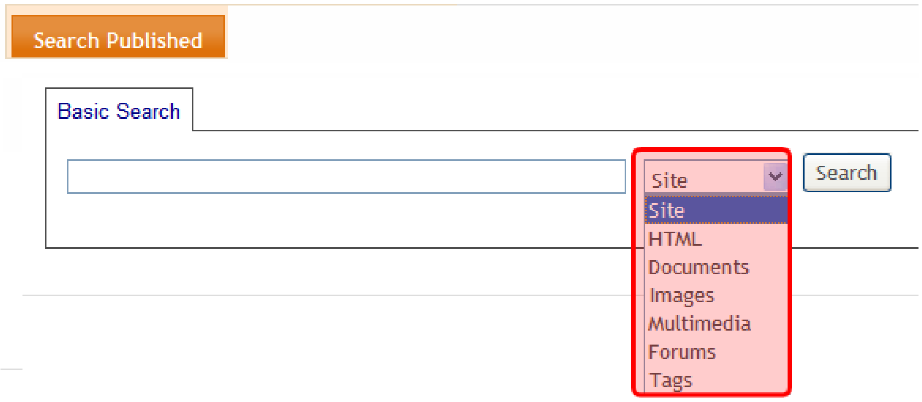
- Accessing the Search Content Folder Screen
- "The Search Published Tab" on page 9-87
- "The Advanced Search Tab" on page 9-90
- "Result Display Options" on page 9-96
- "Information on the Advanced Search Results Screen" on page 9-97

(continued in Accessing the Search Content Folder Screen)

The Search Published Tab

The Search Published tab within the Workarea finds content that satisfies these criteria.

- status is published
- active (archived content is ignored; however, the Advanced Search finds archived content. See "The Advanced Search Tab" on page 9-90)
- you have read-only or greater permission for the content's folder
- content is public. However, private content is available to those with permission to view it, such as membership users after logging in. See Also: "Private Content" on page 7-191
- matches selected language, if site is multilingual. See Also: Multi-Language Support
- the content's **Content Searchable** check box is checked
- is *not* a non-image file added to the library. Images are searchable, while other files added to the library are not. So, to make files searchable, add them as assets, not library files.
- content resides in the folder you selected before launching the search or one of its subfolders. To search the entire Web site, begin the search at the root folder.
- satisfies text and/or query entered in the search box (no value returns nothing). The text inserted in the search field can appear in the content, summary, or metadata. See Also: "Query Language" on page 9-52
- satisfies content type criterion, if chosen (see below). These are described in "Search Screen Options" on page 9-88.



Search Screen Options

Search Screen Option	Finds submitted text in these content types
Site	Content from all options listed below.
HTML	- HTML - Smart Form (XML) Note: Finds field values but not field labels. This has not changed since prior releases. - HTML Form - Blog entries (not comments)
Documents	- MS Office document (includes Powerpoint, Excel) Note: The search finds text within Visio documents if the Visio IFilter has been installed on the server. See "Installing the Visio IFilter" on page 9-52. - PDF file - .txt file
Images added as assets or through the library	.gif, .jpeg, etc.
Multi Media	Flash, .mp3, etc.
Forums	Forum posts and topics

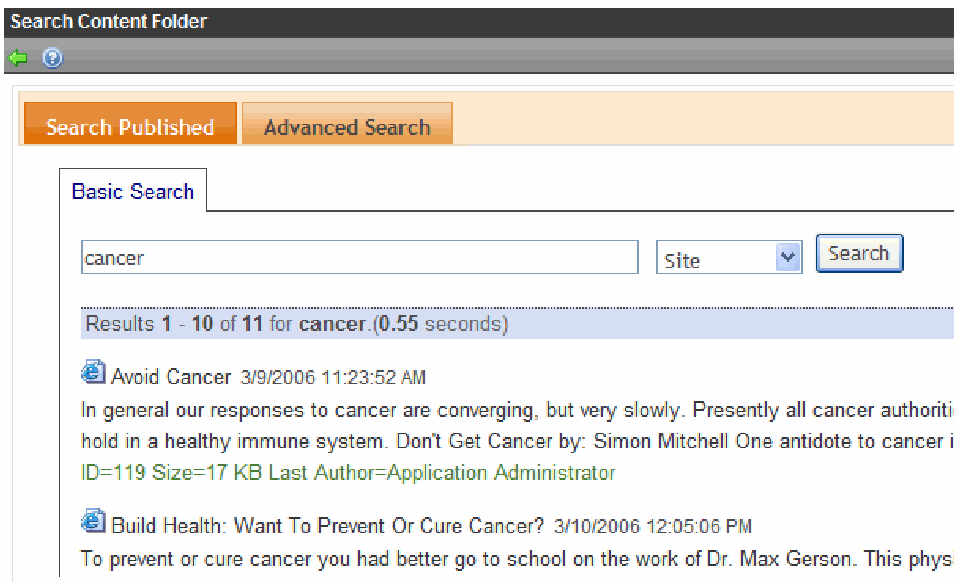
Note: The search cannot find calendar events.

Searching for Metadata

- Searchable type metadata values are returned like regular content.
- It can take up to 30 minutes for newly-added metadata to be available to the search.
- Searchable metadata field names must not include a space. If they do, the search cannot find the metadata.
- To find content with searchable metadata whose style is **yes or no**, enter `true` or `false`.

Display of Published Search Results

Below is an example of the Search Published results screen.



As you can see, content on the search results screen begins with the title and last edited date/time. Following them is either an abstract or the summary of the content. This is determined by your web developer in the Web Search server control.

Following the abstract is additional information, such as content ID number, size, last author, etc.

Search Result Ranking

Each content item found by a catalog search is given a numerical rank between 0 and 1000. Search results can be sorted by rank.

Criteria used to calculate rank include the

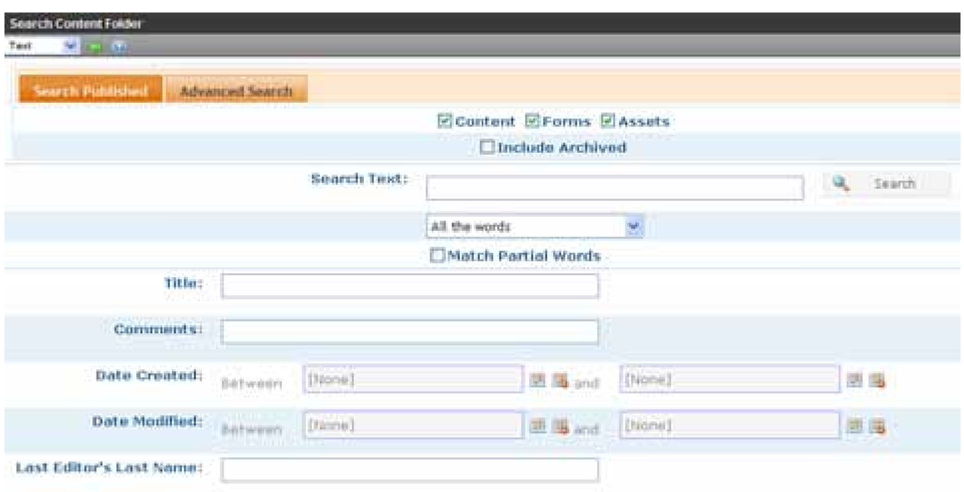
- number of occurrences of the search term
- proximity of search term to beginning of file
- proximity of search term to other occurrences of the term
- whether the term is in the title

The Advanced Search Tab

The Advanced Search within the Workarea finds content that satisfies these criteria.

Warning! The Advanced search finds content whether or not it is marked **Searchable**.

- user must have read-only or greater permission for content's folder
- matches selected language, if site is multilingual
- satisfies criteria entered on the screen (see below)



The Advanced Search Tab helps you find Ektron CMS400.NET content by specifying the following criteria. All fields are optional. However, the search only finds content that satisfies *all* criteria.

- the kind of content you want to search (for example, HTML content, forms, assets)
- a search word or words. Unlike the **Search Published** tab, you cannot use a query.
- how the search words must match the content in order for a document to be found
- whether the title is searched
- whether the comments are searched
- a range of created or modified dates
- the editor who updated the content most recently
- the content's status
- any searchable *metadata* assigned to the folder

See Also:

- "Using the Advanced Search" on page 9-91
- "Specifying the Kind of Content to Search" on page 9-92
- "Specifying a Search Word or Phrase" on page 9-92
- "The Noise File" on page 9-93
- "Specifying Match Criteria" on page 9-93
- "Additional Search Criteria" on page 9-95
- "Custom Fields" on page 9-96

Each feature is explained below.

Note: To help track search activity, the Search Phrase Report provides a count of all words and phrases searched within a date range. In Ektron CMS400.NET, this report is available from the **Smart Desktop > Reports**. See Also: "Search Phrase Report" on page 7-724

Using the Advanced Search

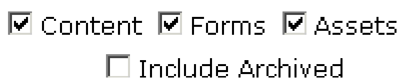
When performing a search, enter one or more words into the text box, select search preferences, then click the **Search** button.

You can use an asterisk as a *wildcard* character, in other words, to stand for any character. For example, the phrase **CMS*00** returns topics that include the following text: CMS400, CMS300, CMS200 and CMS100.

Your system administrator can add custom search fields that only appear if a user is logged in. For more information, see "Working with Metadata" on page 7-146.

Specifying the Kind of Content to Search

Near the top of the screen, check boxes let you determine the kinds of content to search.



Note: Assets only appears if your organization has implemented Ektron's Document Management feature.

Check this box	To search
Content	HTML content, blogs entries, and XML Smart Form field values
Forms	HTML forms
Assets	Content that is neither HTML nor XML, such as Office documents and managed files. See Also: "Using the Document Management System" on page 7-408
Include Archived	Content, forms and assets that have been archived. See Also: "Setting Archive Options" on page 7-198

Specifying a Search Word or Phrase

In the **Search Text** field, enter one or more words that you want to find within content, forms, and assets. The search returns content that includes these words.

Entering text here is optional. That is, you can use fields on the lower portion of the screen to find content without entering words contained in the content. For example, you can find every piece of HTML content that was modified by a certain user within the last 30 days.

If you check off HTML and Form content, you can enter no search criteria and get a list of all HTML and Form content on your site. However, if you enter search text, the search only finds items that include the search text *and* satisfy other criteria on the screen.

The Noise File

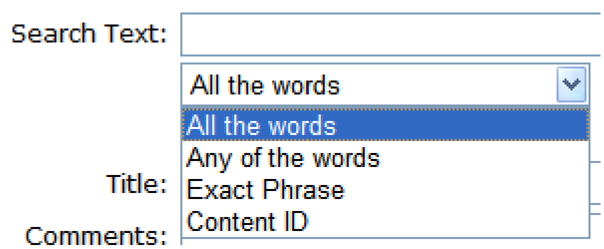
Ektron CMS400.NET has a *noise* file that screens from the search every single letter of the alphabet as well as common words. Examples of common words are **about**, **after**, **all**, and **also**. Avoid entering such words into the **Search Text** field, because the search ignores them.

For information on managing the noise files, see "Rules for Formulating Queries" on page 9-53.

Specifying Match Criteria

Note: This field is only applicable if you entered one or more words in the **Search Text** field.

From this dropdown list, select criteria for how the search word or words must appear within the content of the files being searched.



Your choices are described below.

Choice	A search returns content that has	For more information, see
All the words	all words in the search field	"All the Words" on page 9-94
Any of the words	any word in the search field	"Any of the Words" on page 9-94
Exact Phrase	all words in the order specified in the search field	"Exact Phrase" on page 9-94
Content ID	the submitted ID number	"Content ID" on page 9-94

Match Criteria Examples

The examples below assume you entered these words into the **Search Text** field.

- partners
- content
- Monday
- employee
- green

All the Words

All Words is an "and" function. The search returns only content that has the words partners *and* content *and* Monday *and* employee *and* green. The words can be in any order within the file.

Any of the Words

Any Word is almost the opposite of All of the Words. It is an "or" function.

When you select this option, the search returns all files that have *at least one* of the words entered in the search text field. In other words, it returns files with the word partners *or* content *or* Monday *or* employee *or* green.

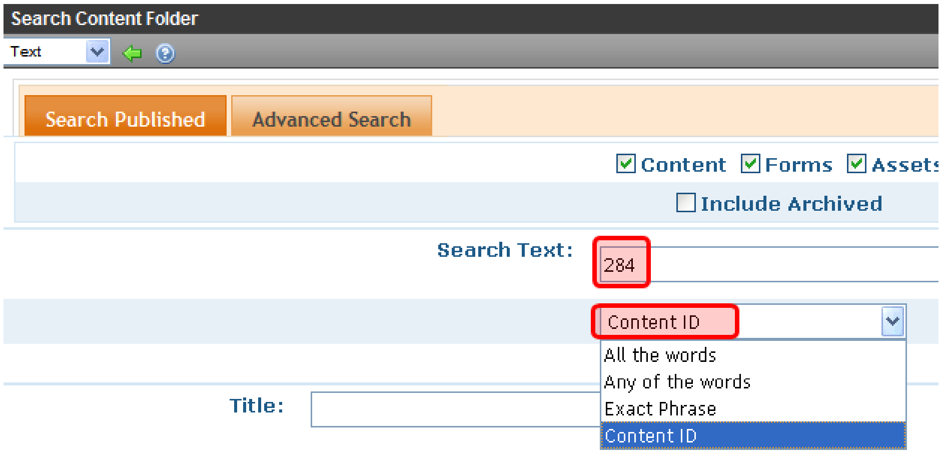
Exact Phrase

Exact Phrase returns content that have all five words in the order specified in the search text field.

A better example would be to search for a phrase, such as Content Management Solution. The search yields only content with that exact phrase.

Content ID

You can find content by its ID number. To do so, select **Content ID** from the drop down box below the **Search Text** field. Then, enter the ID number in the **Search Text** field and click **Search**.



Additional Search Criteria

The next section of the Advanced Search Tab lets you choose one or more customized search criteria. Note that if you enter more than one criterion, only content satisfying *all* criteria appears on the search results screen.

Fields that Apply to Content, Forms and Assets

Search criterion	Description
Title	The title of the content. You can enter a partial word. For example, entering **Part** yields the following results. - Multi-Hospital Nurse Executive Participation - Ektron Partners and Customers You can enter more than one word or phrase as long as they are in the correct sequence.
Comments	The content's comments, which can be inserted via the **Comment** tab.
Date Created	The file's creation date. You can enter a single date or a range of dates. The search returns all content with that creation date that satisfy the other criteria.
Date Modified	The last date when the file was modified. You can enter a single date or a range of dates. The search returns all items with that edit date that satisfy the other criteria.

Search criterion	Description
Last Editor's Last Name	The last name (surname) of the user who most recently changed the content. This is taken from the **Last Name** field on the User Information screen. The search returns all items last edited by that user that satisfy the other criteria.
Status	The content status. See Also: "Content Statuses" on page 7-133 Note: Although you can search for content by any status, the search results display only the most recently published version. If a version has never been approved, nothing appears.

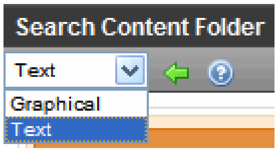
Custom Fields

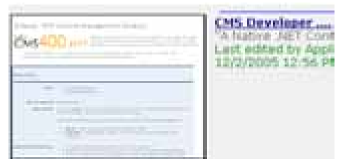
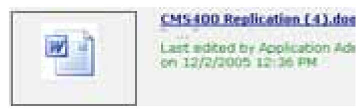
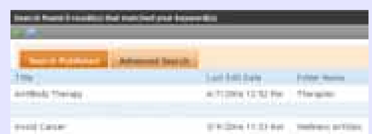
Custom fields are defined by your system administrator and applied to content by its author or editor. They are custom-defined, so would be different for every site.

The custom search fields appear below the **Status** field.

Result Display Options

At the top of the Advanced Search Tab, a pull-down list lets you choose the how to display the search results.



View option	Description	Example
Graphical	If the item is content or a form, display a thumbnail of it. If the item is an asset, display a generic icon that indicates asset type. In both cases, to the right are the item's - title - summary - last edited user, date and time You can click the title to display the item inside the View Contents screen. From there, you can perform all available functions on the item. Note: Graphical search results require the Internet Explorer browser, version 6 or greater.	**Sample HTML content**  **Sample Microsoft Word document** 
Text	Display item's title in the left column. To the right, display the - last edit date/time - folder name - size (assets only) - DMS rank (assets only) - language - status	

Information on the Advanced Search Results Screen

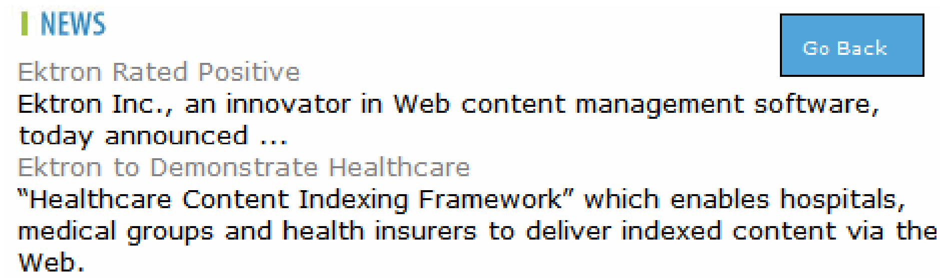
The following column headers describe the information displayed for all content items that satisfy the search criteria.

Column Header	Description
Content Title	The title of the content item
Last Edit Date	The most recent date on which content was edited. If it was never edited, its creation date.
Folder name	The folder that contains the content
Size	The size of the content item in kilobytes
DMS Rank	An indication of how well a content item page matches the search criteria, using a range of 0 to 1000. The higher the rank, the more relevant content is to the search criteria.
Language	The locale id value of the content's language.
Status	A one-character abbreviation of the content item's status. See Also: "Content Statuses" on page 7-133

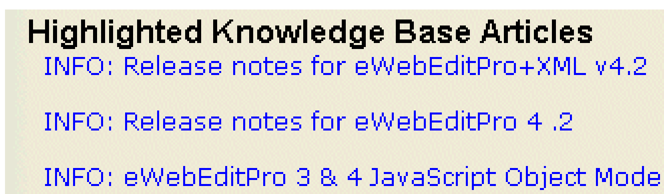
Note: If you install Ektron CMS400.NET then later select a different database to search, you must run `C:\Program Files\ Ektron\releasenumber\utilities\software\searchconfig\SearchConfig.exe` against the new database. This program gets all required data from the new database.

Working with Collections

A collection is a list of content links offered to readers of a Web page. The following illustration shows a collection on a Web page.



You can also use a collection to display listings such as job postings, press releases, and knowledge base articles. The following graphic illustrates a collection on the landing page of Ektron's Knowledge Base.



This section explains how to create collections. Your system administrator then creates or updates a Web page to display the collections using the Collection server control.

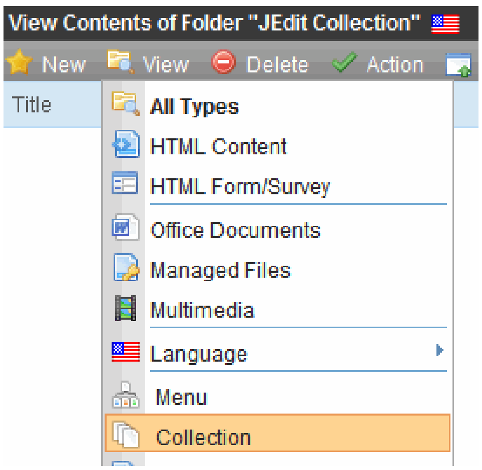
This section explains how to find, create, and manage collections through the following subtopics.

ektron

- "Collection Server Control" on page 9-118

Finding Collections

Every collection is assigned to a folder. To find the collections assigned to any folder, navigate to the folder and click the folder. Next, Click **View> Collection** menu.



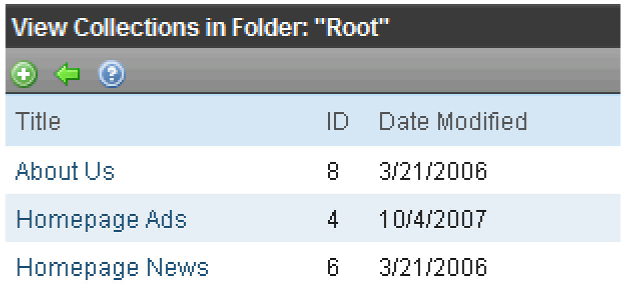
For more information, see "Finding a Collection by Navigating to its Content Folder" on page 9-100.

Since collections can be assigned to any content folder, the Content Tab provides a central Collections folder, which displays *all* collections, regardless of their content folder. For more information, see "Finding a Collection Using the Collections Tab" on page 9-101.

Finding a Collection by Navigating to its Content Folder

To access collections for a content folder, follow these steps.

1. Click the content folder that contains the collection.
2. If you are using Ektron CMS400.NET’s multi-language support features, select the language by clicking **View** > **Language**. See Also:
3. Click **View** > **Collection**.
4. The View Collections screen appears.



The screen displays each collection created for the folder. The following table explains each column.

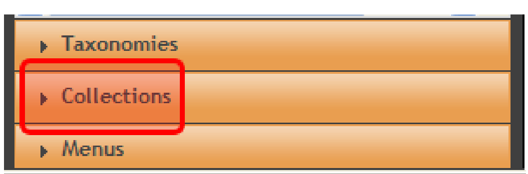
Column	Description
Title	The title assigned to the collection by the creator.
ID	The ID assigned to the collection by Ektron CMS400.NET. This number is used to store and retrieve the data to/from the database.
Date Modified	When the collection was last edited.
URL	The default template used to display the content.

To learn more about a collection and perform tasks on it, proceed to .

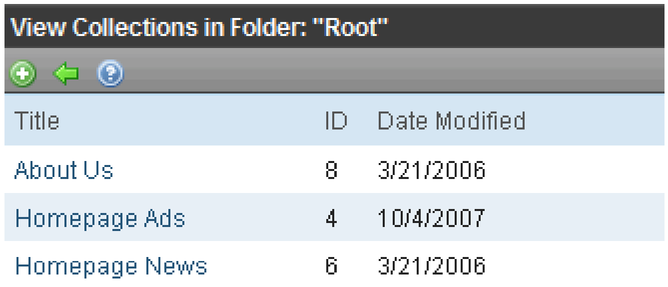
Finding a Collection Using the Collections Tab

To view *all* collections in *all* content folders, follow these steps.

1. From the Workarea, click the **Content menu tab.**
2. In the lower left, click the **Collections tab**.



3. The Collections screen appears.



Note: The `ek_PageSize` setting in the web.config file determines the maximum number of collections that appear on a page before it "breaks." When a page breaks, additional collections appear on another screen, and the following appears at the bottom of the list:
Page 1 of 2[First Page] [Previous Page] [Next Page] [Last Page]

Note: If you have a large number of collections, use the **Search** box to help find one.

4. The screen has four columns, described below.

Column Title	Description
Title	Title given to collection by user who created, or last edited, it.
ID	ID number assigned by Ektron CMS400.NET. (Developers use this number to reference the collection in ecmCollection custom function.)
Description	Description given to collection by user who created, or last edited, it.
Path	Folder location of the collection.

You can click any collection to view information about it and perform tasks on it. See "Viewing a Collection" on page 9-102.

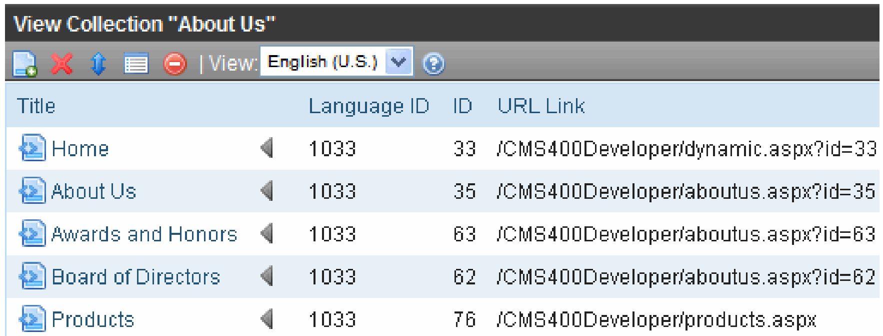
You can also add a new collection. See "Creating a Collection" on page 9-104.

See Also: "Finding Collections" on page 9-100

Viewing a Collection

To view a collection, follow these steps.

1. Select a collection using the procedure described in "Finding Collections" on page 9-100.
2. The View Collection screen appears.



To see more details about a collection, Click the **Properties button** ( ). The Collection Properties screen appears.

The screen displays each item in the collection. To learn more about a collection, click **More Info**. When you do, the lower section of the screen displays the following information about the collection.

- title
- description
- ID number
- template
- last user who edited it
- last date when it was edited

- date it was created
- whether or not the content folder's subfolders can be included
- for each content item in the collection
  - a link to the content (click this to view and edit the content)
  - ID number
  - quicklink

See Also: "Viewing a Collection" on page 9-102

Collections Toolbar

The following table describes the collection toolbar buttons.

Button	Name	Description	More Information
	Add	Add new collection or add items to a collection.	"Adding a Collection" on page 9-105
	Remove	Remove items from a collection.	"Removing Content from the Collection" on page 9-110
	Reorder	Reorder items in a collection.	"Reordering Collections List" on page 9-111
	Edit	Edit collection information.	"Editing Collection Information" on page 9-112
	Delete	Delete a collection.	"Deleting a Collection" on page 9-112
	Back	Return to previous screen.	

Creating a Collection

Creating a collection involves two steps:

- "Adding a Collection" on page 9-105
- "Assigning Content to the Collection" on page 9-107

The following sections explain each step.

Note: This section explains creating a collection in a site that does not support multiple languages. If you want to create collections in several languages, see "Working with Collections in a Multi-Language System" on page 9-113.

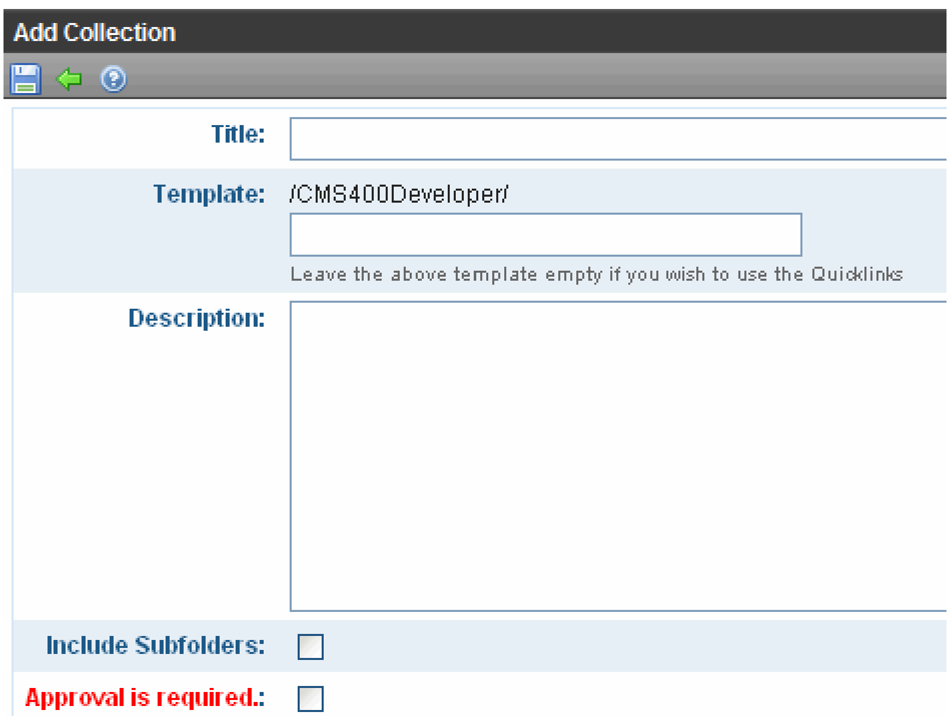
Adding a Collection

To add a new collection, follow these steps.

1. Navigate to the content folder in which you want to create the collection.
2. Click **New** > **Collection**.

Note: If you access the collection via the Collections folder, you cannot choose the collection's folder. It is automatically placed in the root folder.

3. The Add Collection screen appears.



4. Complete the screen using the following table.

Field	Description
Title	Assign a unique title to the collection.
Template	Enter the default template for the collection. This template is used to display the content of the links generated if no template is assigned in the custom function.

Field	Description
	If left blank, the links use their respective Quicklinks. See Also: "Default Template vs. Quicklinks" on page 9-106
Description	Add a more detailed description for the collection.
Include Subfolders	Check if you want to add to the collection content in subfolders of the content folder.
Approval is Required	See "Setting up Approval for Collections" on page 9-116.

5. Click the Save button ( ).

You can now assign content to the collection. See "Assigning Content to the Collection" on page 9-107.

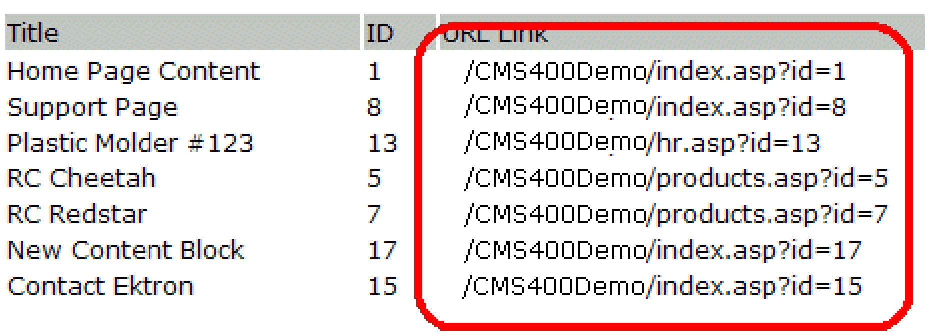
See Also: "Creating a Collection" on page 9-104

Default Template vs. Quicklinks

You can specify a template that determines the screen display for a collection when it is published on a Web page. (See your system administrator for information about Ektron CMS400.NET templates.) Or, you can disable the template and, instead, use Quicklinks to determine the page template. (See Also: "Quicklinks and Forms" on page 8-22)

If you specify a *template*, all content in the collection uses the same screen elements other than the specific content. For example, the page header, footer and information in the right frame of the screen are all the same. On the other hand, if you use *Quicklinks*, every page in the collection uses its original template. As a result, the surrounding information may change for every content item in the collection.

Here is an example of links using Quicklinks. Notice that content uses several templates. As a result, when a user clicks content in the collection, the screen information around the content changes according to its template.



Title	ID	URL Link
Home Page Content	1	/CMS400Demo/index.asp?id=1
Support Page	8	/CMS400Demo/index.asp?id=8
Plastic Molder #123	13	/CMS400Demo/hr.asp?id=13
RC Cheetah	5	/CMS400Demo/products.asp?id=5
RC Redstar	7	/CMS400Demo/products.asp?id=7
New Content Block	17	/CMS400Demo/index.asp?id=17
Contact Ektron	15	/CMS400Demo/index.asp?id=15

Here is an example of links when using a template named index.asp. In this case, all pages have the same information surrounding the content.

Title	ID	URL Link
Home Page Content	1	/CMS400Demo/index.asp?id=1
Support Page	8	/CMS400Demo/index.asp?id=8
Plastic Molder #123	13	/CMS400Demo/index.asp?id=13
RC Cheetah	5	/CMS400Demo/index.asp?id=5
RC Redstar	7	/CMS400Demo/index.asp?id=7
New Content Block	17	/CMS400Demo/index.asp?id=17
Contact Ektron	15	/CMS400Demo/index.asp?id=15

Note: If a collection item is a form, **ekfrm** is used instead of **id** to denote form block .

To toggle between a default template and Quicklinks, follow these steps.

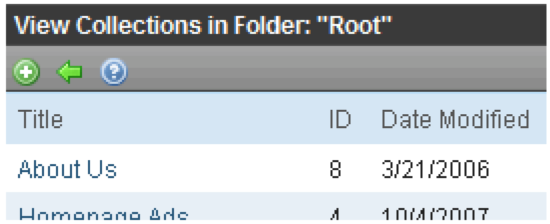
1. Access the Edit Collection screen for the collection you want to edit.
2. Modify the **Template** field.
3. Click the Save ( ) button.

Assigning Content to the Collection

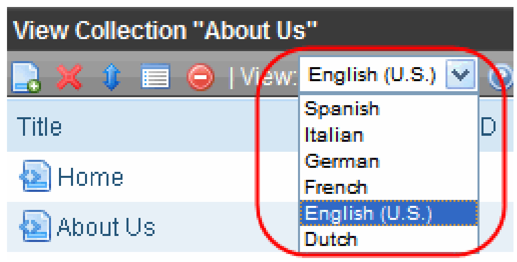
After a collection is created, your next step is to assign content to it. To do so, follow these steps.

Note: When viewing a Collection on the Web site, the last published version of content appears. If the content has never been published, nothing appears.

1. Access the collections screen for the content folder in which you want to add the collection, as described in "Finding a Collection by Navigating to its Content Folder" on page 9-100.
2. Access the View Collection Screen, as described in "Creating a Collection" on page 9-104.
3. Click the collection to which you want to assign content.



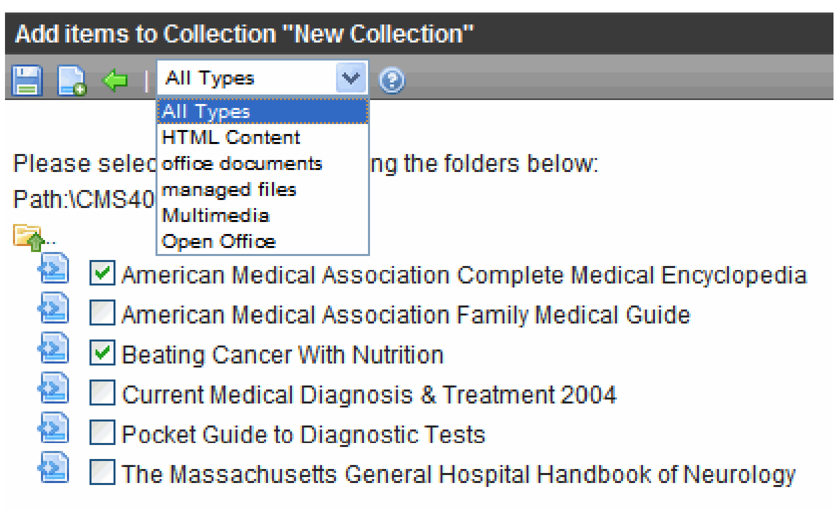
4. The View Collection screen appears.
5. Accept or change the language.



6. Click the Add button ( ).
7. The Add Items to Collection screen appears, displaying

- all subfolders within the selected folder (Subfolders are available if the **Include subfolders** checkbox was checked for the collection.)
- content in the selected folder that is not part of the collection.

Note that the file types selection remembers your most recent choice and can filter which files appear. You can change the selection if desired.



8. Check boxes next to content to add to the collection. You can only add content from the selected folder or its subfolders.

   (Subfolders are available if the **Include subfolders** checkbox is checked for the collection.)

   Click a subfolder to view its content. To return to the parent folder, click the folder with the up arrow ( ).

Note: If you select content from a subfolder, click the Add button to add selected content to the collection. Navigating between subfolders deselects content.

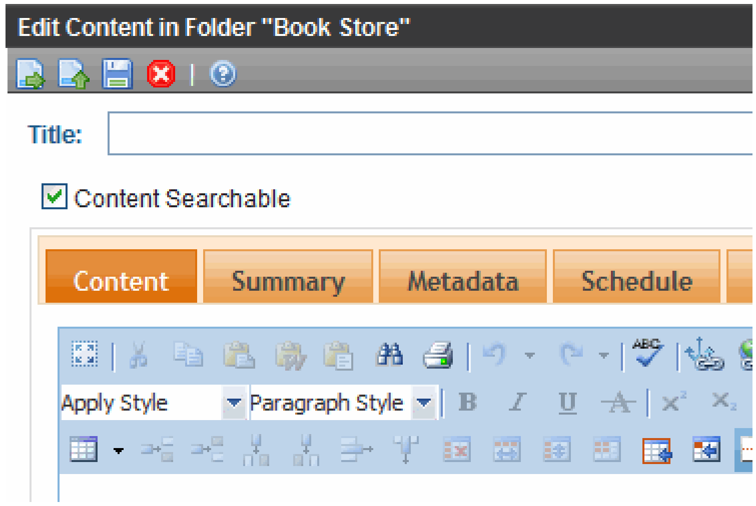
9. Click the Add button ().

See Also: "Creating a Collection" on page 9-104

Creating New Content for a Collection

You can create new content while adding content links to a collection. To add content, follow these steps.

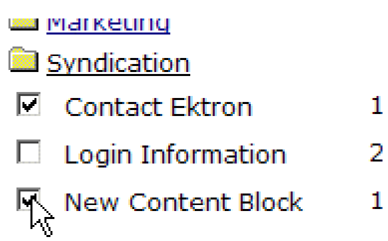
1. Access the View Collections screen for the content folder in which you want to add the collection, as described in "Finding a Collection by Navigating to its Content Folder" on page 9-100.
2. Access the View Collection Screen for a collection, as described in "Creating a Collection" on page 9-104.
3. If you are using Ektron CMS400.NET's multi-language support, select the language of the collection.
4. Click the Add button ().
5. The Add Items to Collection screen appears.
6. If your collection includes subfolders and you want to add the content to one of them, navigate to that subfolder. Otherwise, proceed to the next step.
7. Click the Add Content button ().
8. The Add Content screen appears. If you are using Ektron CMS400.NET's multi-language support, the content's language appears next to the title. The language is derived from the collection's language and cannot be changed.



9. Create the content.

Note: Refer to "Adding HTML Content" on page 7-15 for additional information about creating new content.

10. Click a workflow option in the Add Content screen.
11. The Add Content screen closes, and the new content link appears in the list of links available to the collection.
12. Check off the content you created and other content.



13. Click the Add button ( ) to add the content to the collection.

Editing Content in a Collection

After a collection is created, you can add or remove links to and from it.

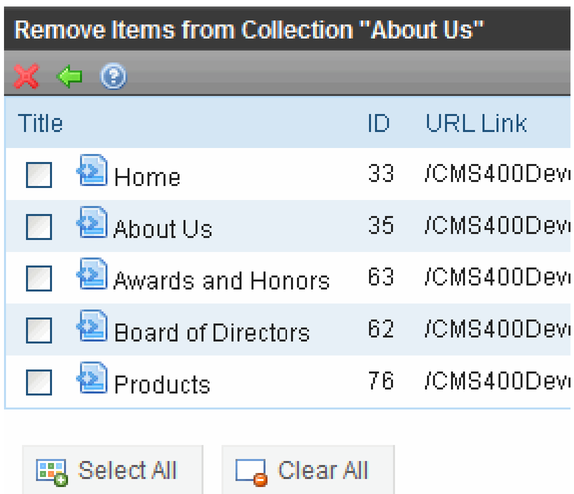
Adding Content to the Collection

For information about adding content links to a collection, see "Assigning Content to the Collection" on page 9-107.

Removing Content from the Collection

To remove a content link from a collection, follow these steps.

1. Access the collections screen for the content folder in which you want to add the collection, as described in "Finding a Collection by Navigating to its Content Folder" on page 9-100.
2. Access the View Collection Screen, as described in "Editing Content in a Collection" on page 9-110.
3. Click the Remove button ( ).
4. The Remove Items from Collection screen appears.
5. Check boxes next to links that you want to delete.



Click **Select All** to select all boxes.

Click **Clear All** to remove all check marks.

6. Click the Delete button ( ).

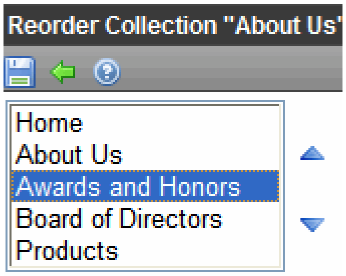
See Also: "Editing Content in a Collection" on page 9-110

Reordering Collections List

After a collection is created, and more than one content item is assigned to it, you can reorder the collections list. To do so, follow these steps.

1. Access the collections screen for the content folder in which you want to add the collection, as described in "Finding a Collection by Navigating to its Content Folder" on page 9-100.

2. Access the View Collection Screen, as described in "Reordering Collections List" on page 9-111.
3. Click the Reorder button ( ).
4. The Reorder Collection screen appears.



5. Click the content whose order you want to change.
6. Click the up or down arrow to move the content in either direction.
7. Repeat steps five and six until you set the desired order.
8. Click the Update button ( ).

See Also: "Reordering Collections List" on page 9-111

Editing Collection Information

To edit information about a collection, follow these steps.

1. Access the collections screen for the content folder in which you want to add the collection, as described in "Finding a Collection by Navigating to its Content Folder" on page 9-100.
2. Access the View Collection Screen, as described in "Viewing a Collection" on page 9-102.
3. Click the collection whose information you want to change.
4. Change any of the field values. For documentation of the fields, see "Complete the screen using the following table." on page 9-105.

Deleting a Collection

When you no longer want a collection, you can delete it. To delete a collection, follow these steps.

1. Access the collections screen for the content folder in which you want to add the collection, as described in "Finding a Collection by Navigating to its Content Folder" on page 9-100.
2. Access the View Collection Screen, as described in "Editing Content in a Collection" on page 9-110.
3. Click the Delete button ( ).
4. A confirmation message appears.
5. Click **OK** to proceed.

Working with Collections in a Multi-Language System

In a multi-language Ektron CMS400.NET system, you can create a language-specific edition of each collection. When a site visitor selects a language then navigates to a page with a collection, Ektron CMS400.NET displays the collection in the selected language if available. If not, Ektron CMS400.NET displays nothing.

Note: Note the contrast between the collections and content: if a collection is not available in the selected language, nothing appears. But if content is not available in the selected language, content in the default language appears.

When creating a collection for a foreign language, decide if you want to create

- a foreign edition of an existing collection, or
- a new collection in a foreign language

For example, if you want to provide several versions of a single page that change depending on the language selected by the user, see "Creating a Language-Specific Collection if Another Edition Exists" on page 9-113.

On the other hand, if you are creating a collection to appear only on a foreign language page, and no other edition of the collection will appear on your site, see "Creating a Language-Specific Collection if Another Edition Does Not Exist" on page 9-114.

You can only add content in the language of a collection. So, create the content first, then create the collection that links to them.

Creating a Language-Specific Collection if Another Edition Exists

1. Click the content folder in which your collection exists. The folder's contents are displayed.
2. Click **View** > **Collection**.
3. The View Collections screen is displayed.
4. Select the collection that you want to translate.
5. From the Add drop-down list, select the language of the new collection.
6. Using the Add button ( ), select the content to add to the collection. Navigate through the folders to the content you want to add. You can only add content in the selected language.

Creating a Language-Specific Collection if Another Edition Does Not Exist

1. Navigate to the folder in which you will create the collection.
2. Click **View** > **Collections**. The View Collections screen is displayed.
3. Click the Add button ( ) and enter basic information about the collection. (This screen is described in "Working with Collections in a Multi-Language System" on page 9-113.)
4. The View Collections in Folder screen appears. Click the collection you just created.
5. From the Add drop-down list, select the language of the new collection.
6. Using the Add button ( ), select the content to add to the collection. Navigate through the folders to the content you want to add. You can only add content in the selected language.

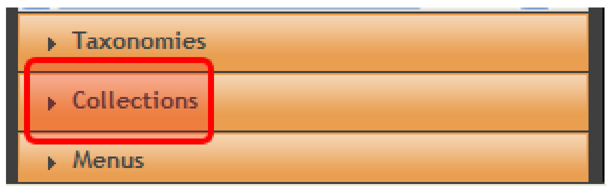
Collection Permissions

Any of the following users have permission to create or edit a collection.

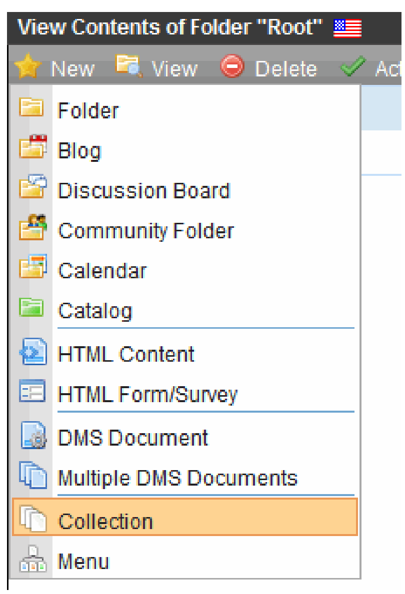
- a member of the Administrators group
- a user who has been assigned the Collection and Menu Admin role. See Also:
- a user who has been granted collection permission for the collection's folder. Permission is granted on the folder Permission screen (see graphic below). See Also:

How a Folder is Assigned to a Collection

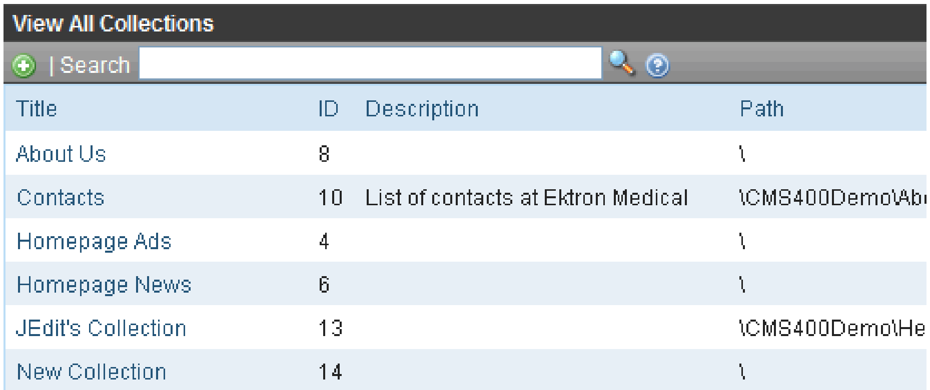
If you create a collection by going to the Workarea's **Content> Collections Tab**, it is assigned to the root folder.



If you create a collection by going to a folder then selecting **New** > **Collection**, it is assigned to that folder.



A collection's folder appears on the **Content** > **Collections** > **Collection Report** screen, in the **Path** column. No value there indicates root folder.



Setting up Approval for Collections

If desired, you can set up an approval system for any collection. As with a content approval chain, you specify users who must approve changes to a collection before it can be published.

Any collection approver can either approve or decline the modified collection. And, if a user who is not an approver tries to delete a collection, that action also requires approval.

See Also:

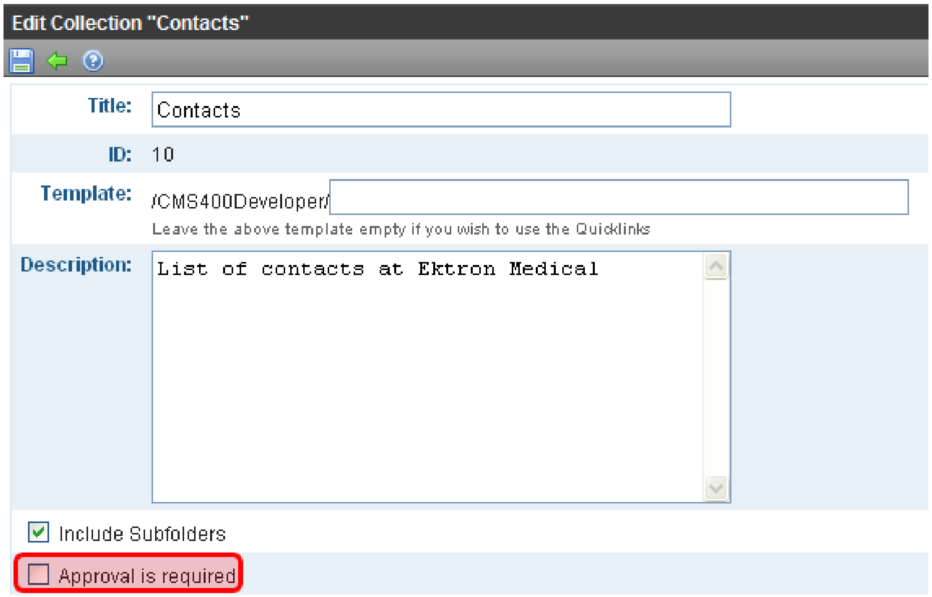
- "Differences Between Content and Collection Approval Systems" on page 9-116
- "Creating a Collection that Requires Approval" on page 9-116
- "Which Users Can Approve Collections" on page 9-117
- "What Happens When an non-Approver Submits Changes to a Collection" on page 9-117
- "How Approvals Affect Deleting a Collection" on page 9-118

Differences Between Content and Collection Approval Systems

- While content can have a chain of approvers, a collection has a list of approvers. *Any collection approver can publish or decline changes*. There is no concept of a “chain” of approvers.
- While content approval is folder-specific, collection approval is not. Once set up, collection approval affects the collection to which it was assigned, regardless of its folder.

Creating a Collection that Requires Approval

Only administrators or users to whom the folder-admin role has been assigned see the **Approval is Required** checkbox on the Add and Edit Collection screens. See Also: See "Defining Roles" on page 15-32



When the collection is created, its status is set to checked out. This allows you to add items to it. When ready, you can publish it.

Which Users Can Approve Collections

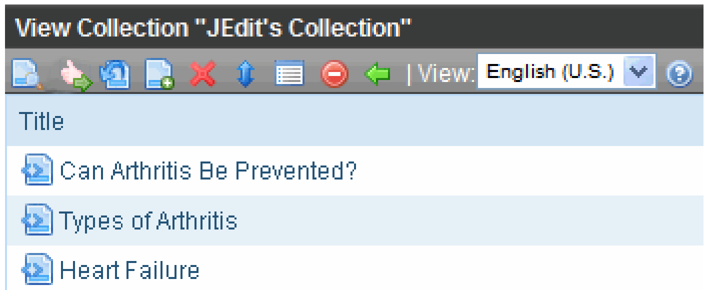
If you require a collection to be approved, only the following users have permission to create or edit a collection and can approve a change to a collection.

- a member of the Administrators group
- users to whom the Collection Approver role has been assigned and who have permission to work with the collection
- users to whom the Folder User Admin role has been assigned and who have permission to work with the collection

See Also: See "Defining Roles" on page 15-32

What Happens When an non-Approver Submits Changes to a Collection

A user who has permission to edit collections but not approve changes sees the following buttons.



After making the change, the user clicks the submit button ( ). This action triggers an email notification to all approval users for the collection. It also changes the collection's status to checked out. No other users can edit it in this status.

Next, one of the approval users must open the Edit Collection screen and click the Publish or Decline button. If he clicks Publish ( ), the new version of the collection is published to your Web site. If Decline ( ), the user who submitted the changes is notified by email but no changes are made to your Web site.

If the user who made the changes realizes he made a mistake, he can go to the screen and click the Undo Checkout button at any time before the approval. In this case, his submitted changes are deleted, and the collection reverts to its original state.

In fact, any user with permission to edit a collection can perform the undo function until the content is approved.

How Approvals Affect Deleting a Collection

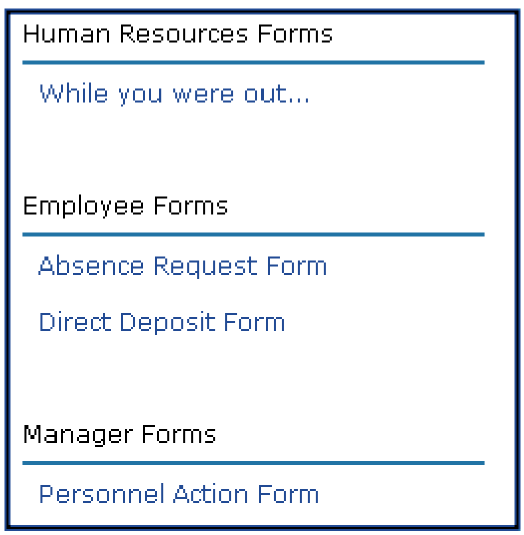
To delete a collection, a user who has permission to work with collections but not approve changes clicks the Delete button ( ) from the View Collection screen. This action changes the collection's status to Marked for Deletion (M) and triggers an email notification to all approval users for the collection. One of the approval users must open the Edit Collection screen and click the Delete or Decline button.

If the approval user clicks Delete ( ), the collection is removed from your Web site. If the approval user clicks Decline ( ), the user who submitted the deletion is notified by email but no changes are made to your Web site.

Collection Server Control

The Collection server control displays a collection, that is a list of content links that is created in the Ektron CMS400.NET Workarea. The control lets you customize the display of the collection on a Web page.

When added to a template and visited, collections can look like this. (The following illustration shows three collections on the same page of a sample site.) You can modify the display by editing its server control properties.

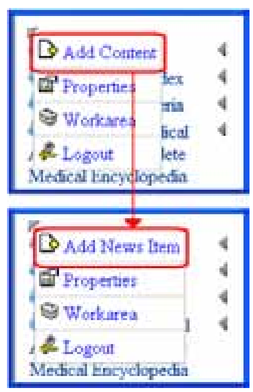


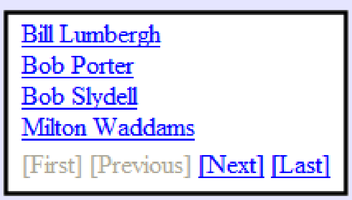
This section contains the following topics:

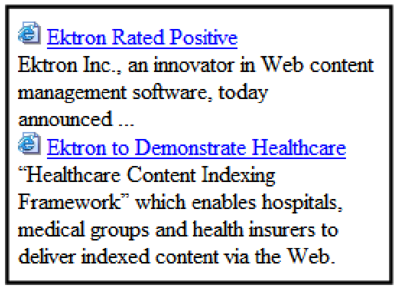
Collection Server Control Properties

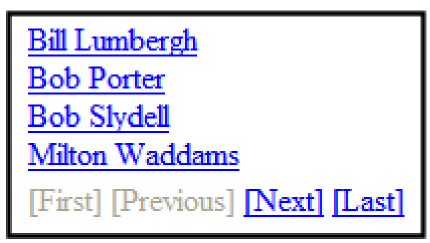
The Collection server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
AddText	Override the control's default text for the Add Content menu item. For example, If you have a News Web site, you could change **Add Content** to **Add News Item**. 	String
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, to cache data for five minutes, set the `CacheInterval` property to 300. See Also: "Caching with Server Controls" on page 21-31 **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.	Double
ContentParameter	Checks the QueryString for this value and replaces the collection with a content block when specified. Leave blank to always display the Collection.	String
DefaultCollectionID	The ID of a collection that appears where you insert this server control if no other collection is identified, or is not available. If you don't know the ID number of the collection, use the CMS Explorer to	Long

Property	Description	Data Type
	browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	
DisplayXslt	Determines how the information on the page is displayed. **None**-databind only **ecmNavigation** - lists the title of every content block in the collection See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the collection plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page. **Warning! Important:** If you specify a custom XSLT, it is strongly recommended that you do not store this file in the Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Displayxslt` property value is ignored.	String
DynamicParameter	To make this collection dynamic, select **coll_id**. When you do, this server control uses the collection passed as a URL parameter.	String
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of collection items while controlling the amount of screen space. To accomplish this, the collection display is limited to the number set in the `MaxResults` property. If you set this property to **true**, and the number of collection items exceeds the `MaxResults` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below.  So, for example, if a collection has 9 items and the `MaxResults` property is set to 4, the screen displays only the first four items. When the site visitor clicks **[Next]**, he sees items 5, 6, 7 and 8, etc. **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.	Boolean

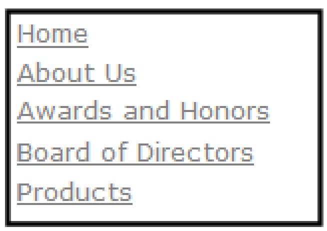
Property	Description	Data Type
GetHtml	Set to **True** if you want to retrieve and display content (html body) for all content blocks in the collection. For example, to display content inside a web server control such as a GridView.	Boolean
Hide	Used to hide output of collection in design time and run time. **True** = Hide collection **False** = Display collection	Boolean
IncludeIcons	Choose whether to display icons next to the collection list's links. **Warning! Important**: This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. 	Boolean
Language	Set a language for viewing the collection. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Defines the way a link acts when a link is clicked. Choices are: **_blank** - Target causes the link to always be loaded in a new blank window. This window is not named. **_self** - Target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned BASE target. **_parent** - Target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - Target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	ItemLinkTargets

Property	Description	Data Type
MarkupLanguage	Identify the template markup file that controls the display of the collection. For example, mycollectionmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, .. `\workarea\customfiles\markup\mycollectionmarkup.ekml` . See Also: "Ektron Markup Language" on page 21-414 and "collection.ekml" on page 21-441 **Note**: If you enter a valid EkML file, the `Displayxslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.	String
MaxResults	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter zero (0). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, set the `EnablePaging` property to **true**. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below.  	Integer
MemberMenuActive	Set this property to True to hide the drop down menu next to a content item when a membership user is logged-in. **True** - Hide the drop down next to a content item from membership users. **False** - Membership users can have access to the drop down menu next to content item. Note: This only affects membership users. CMS400.NET user will always see the drop down menu when they are logged-in.	Boolean
Random	Set to **True** if you want to randomly display one collection item. The item changes each time a site visitor views the page. **Note:** If you use a custom XSLT or EkML file, the type of content displayed can be manipulated. For example, if you use an EkML file that has the [$Html] variable in it, the actual content is displayed instead of a link. See Also: "Ektron Markup Language" on page 21-414 and "[$Html]" on page 21-429.	Boolean

Property	Description	Data Type
SelTaxonomyID	Set the ID of the taxonomy that content will be associated with when a logged-in site visitor uses the Silver Access Point's **Add HTML Content** to add content to a Collection server control.	Integer
SuppressWrapperTags	This property is set to `false` because Ajax uses `<div>` tags to rewrite the region around the tag. You *cannot* change the value to `true`.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Example of ecmNavigation Display

The following is an example of a collection being used as a navigation menu.



ecmNavigation XSL code

Below is the XSL code that is used to create ecmNavigation Display. You can use this code as the basis to design your own XSLT.

Warning! If you create a custom file, it is strongly recommended that you do not store this file in the Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">


<xsl:template match="/">
  <table border="0" cellspacing="0" cellpadding="0" width="100%">
   <xsl:for-each select="Collection/Content">
   <tr>
      <td>
         <a>
```

```
            <xsl:attribute name="href">
                <xsl:value-of select="QuickLink"/>
            </xsl:attribute>
                <xsl:value-of select="Title"/>
         </a>
     </td>
   </tr>
   </xsl:for-each>
  </table>
</xsl:template>

</xsl:stylesheet>
```

Example of ecmTeaser Display

The following is an example of a collection using the ecmTeaser display style.

ecmTeaser XSL code

Below is the XSL code that is used to create ecmTeaser Display. You can use this code as the basis to design your own XSLT.

Warning! If you create a custom file, it is strongly recommended that you do not store this file in the Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

<xsl:template match="/">
  <table border="0" cellspacing="0" cellpadding="0" width="100%">
    <xsl:for-each select="Collection/Content">
      <tr>
        <td>
          <a>
            <xsl:attribute name="href">
              <xsl:value-of select="QuickLink"/>
              </xsl:attribute>
             <xsl:value-of select="Title"/>
          </a> 
        </td>
      </tr>
      <tr>
         <td>
            <xsl:value-of select="Teaser" />
```

```
        </td>
      </tr>
      <tr>
          <td> </td>
      </tr>
    </xsl:for-each>
  </table>

</xsl:template></xsl:stylesheet>
```

Retrieving the XML Structure of a Collection

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a Collection server control onto it.
3. Set the `DefaultCollectionID` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to MultiLine.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
   `Textbox1.Text = Collection1.XmlDoc.InnerXml`
7. Build the project.
8. View the Web form in a browser.
9. The XML structure of the collection appears in the textbox.

For an additional example, see the Collection XML page on the CMS400Developer samples page. It is located at:

In a browser:

`http://<site root>/CMS400Developer/Developer/Collection/CollectionXML.aspx`

In the source code:

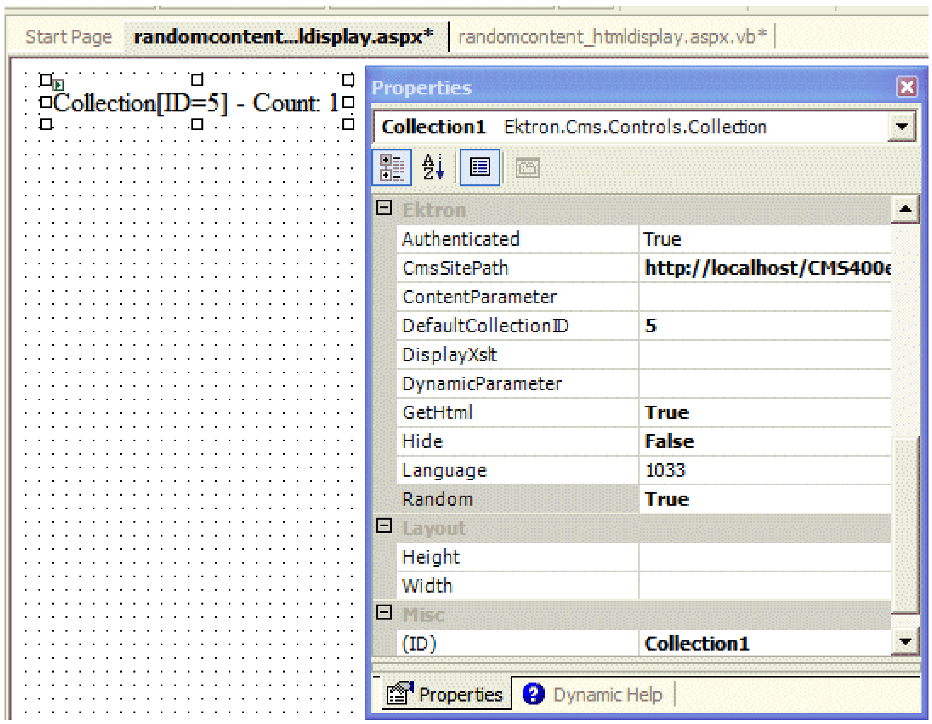
`<site root>/CMS400Developer/Developer/Collection/CollectionXML.aspx and CollectionXML.aspx.vb`

Using the Collection Server Control Programmatically Example

The following is an example of using code behind, and a drag and drop Collection server control to display random content from a collection.

1. Drag and Drop a Collection server control on your Web form.
2. Set the properties in the properties window.

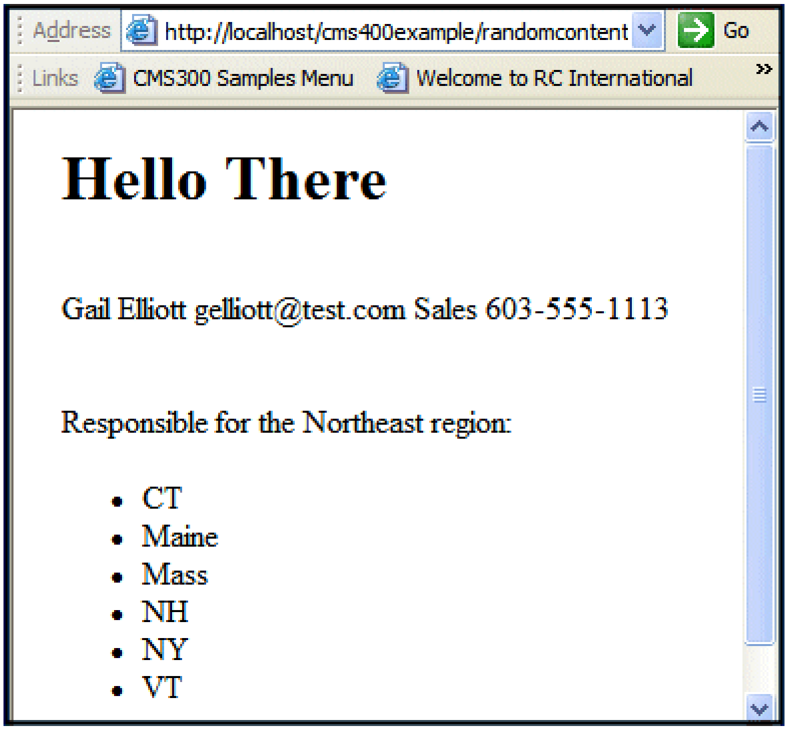
Note: In this example, the `Random` property and the `GetHtml` property must be set to **True**.



3. Add the following code to the code behind.

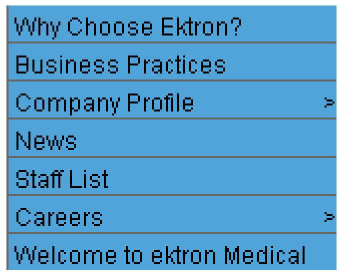
```
Dim str As String
str = "<h1>Hello There</h1><br>"
str &= Collection1.EkItems(0).Html
Collection1.Text = str
```

4. Build and browse your web form.


Address
http://localhost/cms400example/randomcontent
Go
Links
CMS300 Samples Menu
Welcome to RC International
Hello There
Gail Elliott gelliott@test.com Sales 603-555-1113
Responsible for the Northeast region:
CT
Maine
Mass
NH
NY
VT

Working with Menus

Ektron CMS400.NET's Menu feature lets users create and maintain a dropdown menu system for your Web site. The menu options can link to content, library assets, external hyperlinks, and submenus. Below is a sample menu.



In this example (delivered with Ektron CMS400.NET), the menu appears when a site visitor moves the cursor over **About Us** on the home page.

However, if a content contributor with permission to edit menus signs in to Ektron CMS400.NET then views the menu, it has additional options for editing the menu or adding content.

Warning! If you chooses to hide the border that appears around content when you are logged in, the Add and Edit options are also hidden. This allows you to view the page as it appears when you are not logged in. If the page is set to show borders and you still do not see the Add and Edit buttons, the feature may be turned off. Ask your administrator or Web site Developer for additional information.

Managing menus is a two-step process. The first sections in this chapter describe the first step: how Ektron CMS400.NET users create and update menus. In the second step, a developer placing a menu server control on a Web form. The control manages how the menu displays on your Web site.

What's In This Chapter

The following topics explain Menus.

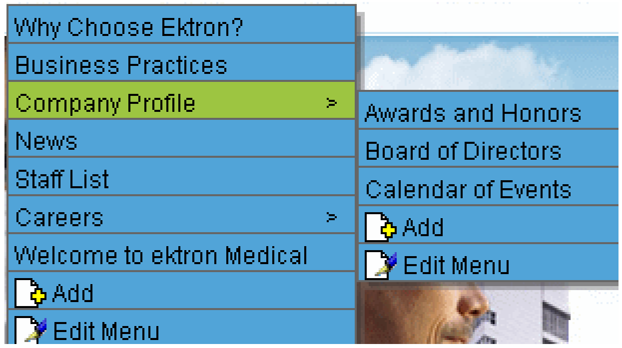
The Structure of Menus and Menu Items

Menus have the following structure:

- **menu** - top level structure that is a placeholder for menu items and submenus. It is assigned to a content folder.

A menu identifies a page template used to display menu options that are content.

- **menu item** - the individual options on a menu; can be any of the following
  - content of any type
  - library asset
  - external hyperlink (link to a page outside your Web site)
  - submenu (a link to another menu. In the illustration below, the menu on the right is a submenu. It appears when the user hovers the cursor over **Company Profile**. The right arrow indicates a submenu is available.)



Access to the Menus Feature

There are three ways to access the Menus feature:

- the Workarea, by choosing the associated content folder then clicking **View** > **Menus**
- the Workarea, by choosing **Content** > **Menus**
- the **Edit Menu** option on the sample menu displayed above

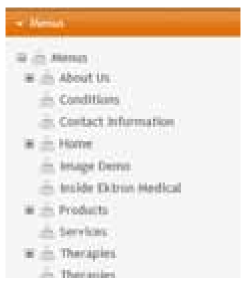
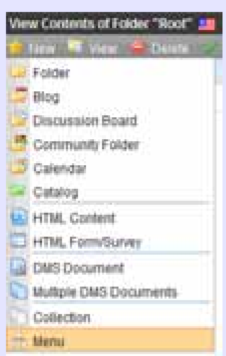
If you choose the first or second option, you select a specific menu. Then, it appears on the View Menu screen. For the third option, the selected menu appears on the View Menu screen.

From the View Menu screen, you can perform the following actions on a menu.

- Create a new menu
- Edit its information (for example, the URL and template link)
- Translate it
- Delete it
- Add or remove items
- Change the sequence of menu items
- Edit menu items
- For submenus
  - add /remove items
  - change sequence of menu items
  - edit menu information
  - edit menu items

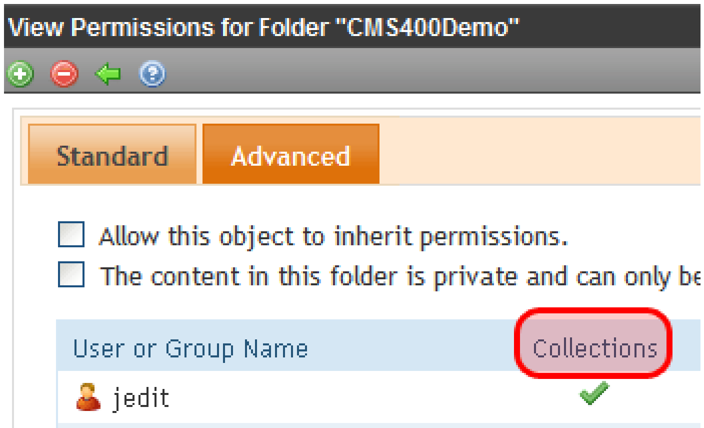
Permission to Use the Menus Feature

There are two ways to create a menu. Each has its own permission model.

Menu Creation Method	Illustration	How to set permissions
Via the Workarea's Content> Menus tab		The user must be one of the following. - a member of the Administrators user group - assigned the Collection and Menu Admin role. See Also: "Defining Roles" on page 15-32 - granted permissions to Collections for the root folder. This is advanced permission. See Also: "Setting Permissions through the Permissions Table" on page 5-43
Via the View Contents of Folder screen's New > Menu option		See "Permissions for Menus Created from the View Contents of Folder Screen" on page 9-132

Permissions for Menus Created from the View Contents of Folder Screen

Only users with permission to use the Collections feature (illustrated below) for a folder can work with menus. If user does not have permission to Collections, the **Menu** option does not appear on the **New** menu.



Also, if a user has permission to Collections but Read Only permission for content and the library, he cannot add content from a navigation link.

Managing Menus

Ektron CMS400.NET gives you the flexibility to add, edit, view and delete a menu. The following sections explain how to do that.

- "Adding a New Menu" on page 9-133
- "Adding a Menu Item" on page 9-138
- "Editing a Menu" on page 9-146
- "Editing a Menu Item" on page 9-148
- "Viewing a Menu" on page 9-150
- "Reordering Menu Items" on page 9-153
- "Deleting a Menu" on page 9-153
- "Deleting a Menu Item" on page 9-154

Adding a New Menu

You can create a menu by navigating to a folder or by choosing **Content > Menus** from the left frame of the Workarea. If you choose **Content > Menus,** it is automatically assigned to the root folder. In contrast, if you create a menu after choosing a content folder, it is assigned to the selected folder.

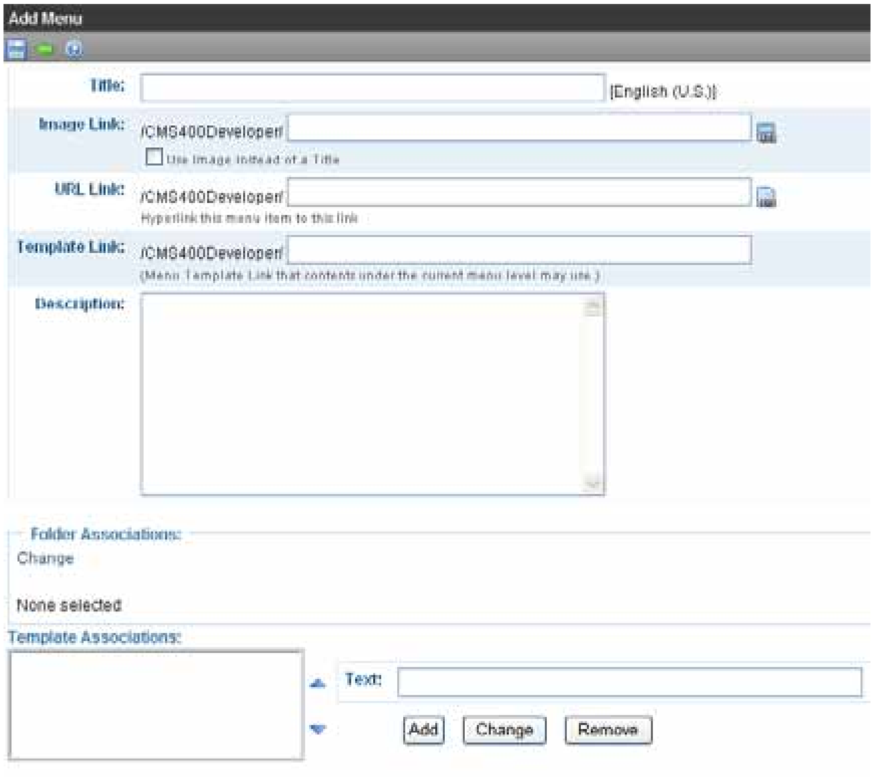
Adding a Menu via Content Folder

1. Navigate to a content folder.

2. The current language appears as a flag next to the screen title. To create the menu in this language, proceed to the next step.

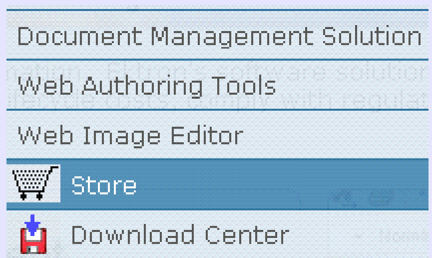
   To change the new menu's language, click **View > Language** and select the new language.

3. Click **New > Menu**.
4. The Add Menu screen appears.



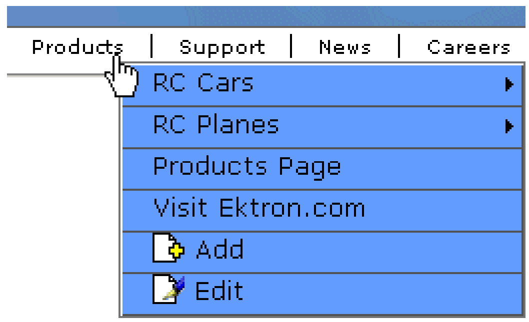
5. Use the following table to complete the screen.

Fields on the Add/Edit Menu Screen

Field	Description
Title	The name given to the menu by its creator. It appears on the Web page to indicate the kind of information on the menu.
Image Link	You can have an image appear next to or instead of the menu title. For example:  To do this, follow these steps. Note: Before beginning these steps, the image must reside in the library. if it does not, add it before proceeding. For more information, see "Copying Files to the Library" on page 8-12. 1. Click the image icon ( ). 2. The library window opens. 3. Navigate to the folder that contains the image you want to use. 4. Click the Insert button ( ) to insert it. Using Image to Replace Title Text Alternatively, you can have the image replace the menu text, so that only the image appears on the menu. To do this, check the **Use image instead of a title** checkbox. 

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>URL Link</td><td>

After you create a menu, your developer links it to text or an image on a Web page by modifying a page template. When a site visitor reading that Web page moves the cursor over the text or image, the menu appears. In the illustration below, the menu appears when the site visitor moves the cursor over **Products**.



You can also assign a URL link to a menu using this field. If you do, and the user *clicks* the link text or image, he jumps to the specified page.

For example, in this field you assign the product landing page, `siteroot/products.aspx`. In the illustration above, if the user *moves the cursor* over **Products**, the assigned menu appears. However, if the user *clicks* **Products** (as indicated by the hand), he jumps to `siteroot/products.aspx`.

Entering the Path to the Landing Page

This path is relative to the site root. For example: `siteroot/jobs.aspx`

This URL path can be a static template path (like the one mentioned above) or a dynamic path, such as

`wellness.aspx?id=40&wellness=Hemophilia`

</td></tr>
</table>

Field	Description
Template Link	Note: This field applies to content only. It has no effect on other types of menu items (such as images). Also, this field only affects content that dynamically references a content block, such as `/CMS400Min/therapies.aspx?id=84`. If the menu option is a template that includes content (for example, `/CMS400Min/news.aspx`), the template you identify here is ignored. If you want to apply a template to this menu, enter the template here. If you do, all content on this menu uses this template when selected from the menu. If you do not enter a template here, content on this menu uses the template specified in its Quicklink. **Overriding the Template Link** You can override the menu template for any content item on this menu and, instead, use the template specified in its Quicklink. To do so, follow these steps. 1. Add all items to the menu. (See "Adding a Menu Item" on page 9-138) 2. Go to the View Menus option. 3. Click **More Info**. 4. Click the menu item you want to change. 5. At the **Link** field, change the value from **Menu Template** to **Quicklink**.  **Warning!** If you created menus prior to upgrading to this version of Ektron CMS400.NET, those menu items are assigned as Quicklinks. You cannot change them to template links simply by entering a template link here. Instead, you must go to each menu item and change the **Link** field value from **Quick-Link** to **Menu Template** (as illustrated above).
Description	Add a more detailed description for the menu.
Folder Associations	See "Effect of Assigning a Folder to a Menu" on page 9-158.
Template Associations	See "Effect of Assigning a Template to a Menu" on page 9-160.

6. Click the Save button ( ).

With the menu added, you may assign menu items to it. See "Adding a Menu Item" on page 9-138.

Adding a Menu via the Menus Tab

1. From the left frame of the Workarea, click **Content** > **Menus**.
2. Click the Add Menu button ( ).
3. The Add Menu screen appears.

4. To complete the fields on the Add Menu screen, see "Fields on the Add/Edit Menu Screen" on page 9-135.

With the menu added, you may assign menu items to it. See "Adding a Menu Item" on page 9-138.

Adding a Menu Item

Similar to being able to add, edit, view or delete a menu, Ektron CMS400.NET also allows you to add, edit, view and delete a menu items.

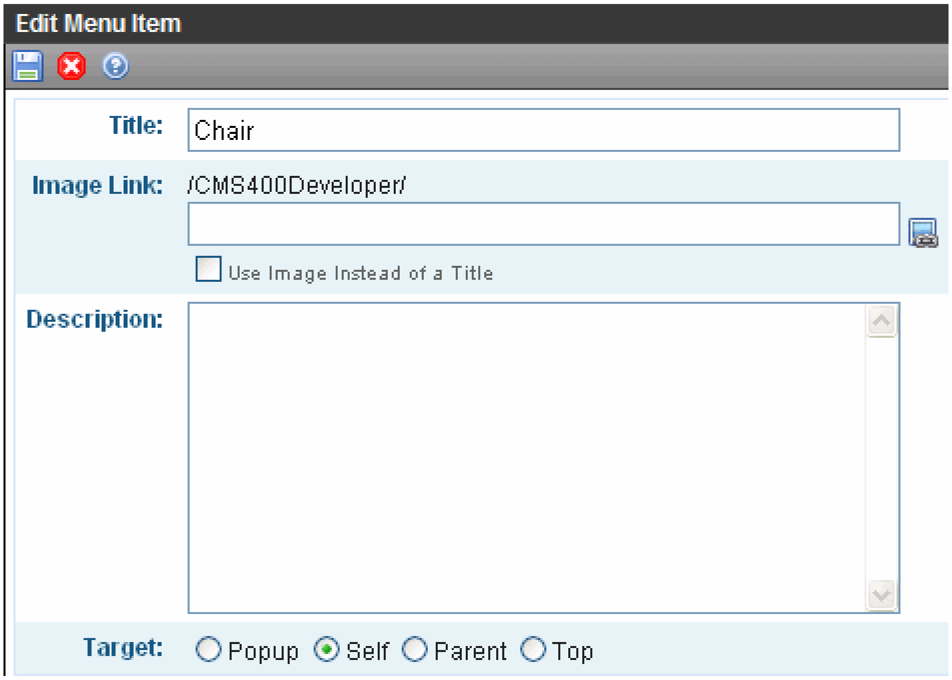
Adding a Menu Item via Content Folder

To add a menu item via a content folder, follow these steps.

1. Navigate to the content folder that contains the menu to which you want to add items.
2. Click **View** > **Menus**.
3. In the View Language dropdown list, select the language of the menu.
4. Click the menu.
5. The View Menu screen opens, displaying the items already on the menu. Submenus look like a folder with a plus sign to the left ( ).
6. To add a new item to the menu , click the Add Items button ( ).
7. The Add New Item screen appears. Use the table below to select a type of menu item and follow the steps to add it.

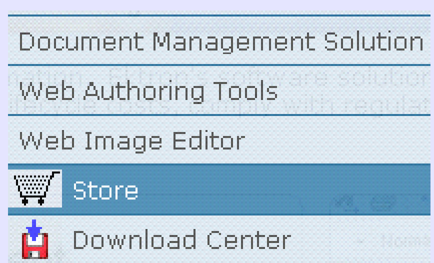
Assign this type of content to the menu	For details, see
Content	"Adding Content as a Menu Item" on page 9-142
Any library asset: images, files, Quicklinks, hyperlinks to the menu	"Adding a Library Asset as a Menu Item" on page 9-143
External hyperlink	"Adding an External Hyperlink as a Menu Item" on page 9-143
Submenu to the main menu	"Adding a Submenu as a Menu Item" on page 9-144

8. After you insert menu items, you can view and modify information about them. To do that, click the item's title. When you do, the Edit Menu Item screen appears.See Also: See "Managing Menus" on page 9-133



Fields on the Add/Edit Menu Item Screen

Use the following table to complete the fields on the Edit Menu Item screen

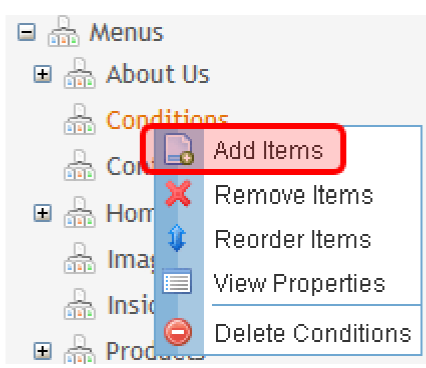
Field	Description
Title	The name of the menu item. It appears on the Web page to indicate the item.
Image Link	You can have an image appear next to or instead of the menu title. For example:  To do this, follow these steps. Note: Before beginning these steps, the image must reside in the library. if it does not, add it before proceeding. For more information, see "Copying Files to the Library" on page 8-12. 1. Click the image icon (). 2. The library window opens. 3. Navigate to the folder that contains the image you want to use.

Field	Description
	4. Click the Insert button ( ) to insert it. Using Image to Replace Title Text Alternatively, you can have the image replace the menu text, so that only the image appears on the menu. To do this, check the **Use image instead of a title** checkbox. 
Description	Add a more detailed description for the menu.
Target	This field determines the type of window in which this menu item appears. - Popup - opens in new window - Self -opens in same window. - Parent - opens in the parent frame - Top - opens in parent window

Adding a Menu Item via Menus Tab

To add a menu item via the Menus tab, follow these steps.

1. From the top tabs of the Workarea, click **Content** > **Menus**.
2. Click the menu to which want to add a menu item.
3. In the View Language dropdown list, select the language of the menu.
4. To add a new item to the selected menu or any submenus on it, move the cursor to the left panel then hover over the menu item and right click.
5. Click **Add Items** from the popup menu.



6. The Add New Item screen displays a list of items that you can add to the menu. Use to the table below to select the type of menu item and follow the steps to add it.

Menu item type	For more information, see
Content	"Adding Content as a Menu Item" on page 9-142
Any library assets: images, files, Quicklinks, hyperlinks to the menu	"Adding a Library Asset as a Menu Item" on page 9-143
External hyperlinks	"Adding an External Hyperlink as a Menu Item" on page 9-143
Submenu to the main menu	"Adding a Submenu as a Menu Item" on page 9-144

7. After you insert menu items, you can view and modify information about them. To do that, click the item's title. When you do, the Edit Menu Item screen appears. See Also: See "Managing Menus" on page 9-133

Adding a Menu Item via Navigation Link on a Web Page

1. Log in.
2. Access the Web page that contains the link to display the menu.
3. Place the cursor on the hyperlink that causes the menu to appear.
4. The menu appears.

5. Click **Add**.
6. The Add Menu screen displays a list of items you can add to the menu.
7. Use the table below to select the type of menu item and follow the steps to add it.

Assign this type of content to the menu	For details, see
Content	"Adding Content as a Menu Item" on page 9-142
Any library assets: images, files, Quicklinks, hyperlinks to the menu	"Adding a Library Asset as a Menu Item" on page 9-143
External hyperlinks	"Adding an External Hyperlink as a Menu Item" on page 9-143
Submenu to the main menu	"Adding a Submenu as a Menu Item" on page 9-144

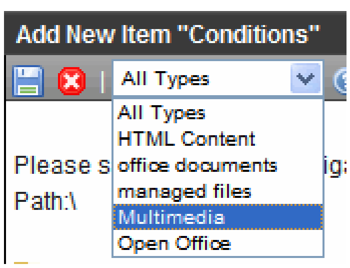
8. After you insert menu items, you can view and modify information about them. To do that, click the item's title. When you do, the Edit Menu Item screen appears. See Also: See "Managing Menus" on page 9-133

Adding Content as a Menu Item

To add content as a menu item, follow these steps.

Note: You can only add content that resides in the menu's content folder or its subfolders.

1. Follow the directions in "Adding a Menu Item via Content Folder" on page 9-138, "Adding a Menu Item via Menus Tab" on page 9-140, or "Adding a Menu Item via Navigation Link on a Web Page" on page 9-141.
2. Click the radio button next to **Content Item**.
3. Click the **Next...** button.
4. The Add New item screen appears, listing all content in the folder (and its subfolders) in which the menu was created.
5. By default, all content is available. To limit your selection to a type of content (for example, Word documents), click the content types dropdown and select a type.



6. Content items in the selected folder appear below any subfolders. You can click any subfolder to display its content.
7. Check all content you want to add from any single screen to the menu.

Warning! If you check items on a screen then proceed to another screen before clicking the Add button, the items on the first screen are not added to the menu.

8. Click the Add button ( ).
9. The View Menu screen reappears, showing the new content.
10. To access the Edit Menu Item screen for the new content, hover the cursor over the title, then click.
11. The Edit Menu Item screen lets you assign additional information to the menu item, such as the target window. See "Fields on the Add/Edit Menu Screen" on page 9-135.
12. Continue to add menu items as needed.

Adding a Library Asset as a Menu Item

To add a library asset as a menu item via a content folder or menus tab, follow these steps.

1. Follow the directions in "Adding a Menu Item via Content Folder" on page 9-138, "Adding a Menu Item via Menus Tab" on page 9-140, or "Adding a Menu Item via Navigation Link on a Web Page" on page 9-141.
2. Click the radio button next to **Library Asset**.
3. Click the **Next** button.
4. The Add New Item screen appears. Enter a title for the library asset that will be on the menu.
5. Click **Browse Library**.
6. The library screen opens.
7. In the right frame, select the type of asset to insert (image, hyperlink, etc.).

Note: To insert assets, the menu's folder must contain library assets. However, you can insert library assets from other folders for which you have permission.

8. Select a library asset and click the Insert button ( ).
9. The Add New Item screen reappears.
10. Click the Save button ( ).

Adding an External Hyperlink as a Menu Item

To add an external hyperlink as a menu item via a content folder or the Menus tab, follow these steps.

1. Follow the directions in "Adding a Menu Item via Content Folder" on page 9-138, "Adding a Menu Item via Menus Tab" on page 9-140, or "Adding a Menu Item via Navigation Link on a Web Page" on page 9-141.
2. Click the circle next to **External Hyperlink**.
3. Click the **Next** button.
4. The Add New Item screen is displayed.
5. Complete the fields as needed.

Field	Description
Title	Title of the new external hyperlink menu item.
URL Link	The URL of the external hyperlink. For example, `www.example.com`.

6. Click the Save button ( ).

Note: When adding an External Hyperlink menu item, the URL does not get added to the library nor is an ID assigned to it. So, when you save the menu item, it is not added to the CMS database nor can it be retrieved for future use.

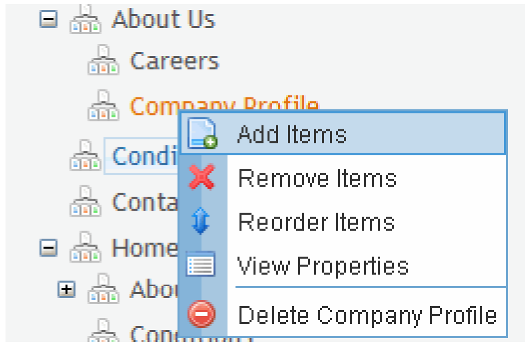
Adding a Submenu as a Menu Item

To add a submenu as a menu item via content folder or menus tab, follow these steps.

1. Follow the directions in "Adding a Menu Item via Content Folder" on page 9-138, "Adding a Menu Item via Menus Tab" on page 9-140, or "Adding a Menu Item via Navigation Link on a Web Page" on page 9-141.
2. Click the radio button next to **Submenu**.
3. The Add Menu screen is displayed.
4. Complete the fields using "Fields on the Add/Edit Menu Screen" on page 9-135 as a reference.
5. Click the Save button ( ).

Adding an Item to a Submenu

1. From the left frame of the Workarea, click **Content** > **Menus**.
2. Select the menu.
3. Find the submenu to which you want to add items. (Submenus have a folder icon ( ) next to them.)
4. Move the cursor over the submenu and click **Add Items** from the popup menu.



5. The Add New Item screen opens, displaying items you can add.
6. Refer to the table below for selecting a menu item and follow the steps to add it.

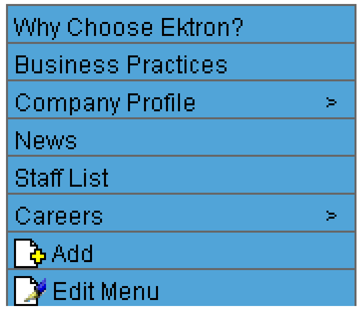
Assign this type of content to the menu	For details, see
Content	"Adding Content as a Menu Item" on page 9-142
Any library asset: images, files, Quicklinks, hyperlinks to the menu	"Adding a Library Asset as a Menu Item" on page 9-143
External hyperlink	"Adding an External Hyperlink as a Menu Item" on page 9-143
Submenu to the main menu	"Adding a Submenu as a Menu Item" on page 9-144

Adding New Content to a Menu via Navigation Link on a Web Page

Note: You can only use this feature after your Web developer has modified a page template to display the menu. For more information, see "Introduction to Menu Server Controls" on page 9-162.

To add new content to a menu via a navigation link on a Web page, follow these steps.

1. Access the Web page that contains the link to display the menu.
2. Place the mouse on the hyperlink that causes the menu to appear.
3. The menu appears.



4. Click ( ) **Add**.
5. The Add Menu screen opens, displaying items you can add.
6. Refer to the table below for selecting a menu item and follow the steps to add it.

Assign this type of content to the menu	For details, see
Content	"Adding Content as a Menu Item" on page 9-142
Any library asset: images, files, Quicklinks, hyperlinks to the menu	"Adding a Library Asset as a Menu Item" on page 9-143
External hyperlink	"Adding an External Hyperlink as a Menu Item" on page 9-143
Submenu to the main menu	"Adding a Submenu as a Menu Item" on page 9-144

Editing a Menu

You can edit a menu via:

- its content folder
- menus tab
- navigation link on a Web page

This section describes each option.

Editing a Menu via its Content Folder

To edit a menu from a content folder, follow these steps.

1. Access the Workarea and navigate to the content folder that contains the menu.

2. Click **View** > **Menus**.
3. Click the menu you want to edit.
4. Move the cursor over the menu that you want to edit.
5. Click **Edit** from the popup menu.

Note: When moving the cursor to the popup menu, avoid moving across other menus or options. When you move across another menu or option, it may become selected instead of the item you want to work with.

---

6. The Edit Menu screen is displayed.
7. Change the fields in Edit Menu screen by referencing "Fields on the Add/Edit Menu Screen" on page 9-135.
8. Click the Save button ().

Editing a Menu via Menus Tab

To edit a menu via the Menus tab, follow these steps.

1. From the left frame of the Workarea, click **Content** > **Menus**.
2. Click the menu you want to edit.
3. Move the cursor over the menu that you want to edit.
4. Click **Edit** from the popup menu.

Note: When moving the cursor to the popup menu, avoid moving across other menus or options. When you move across another menu or option, it may become selected instead of the item you want to work with.

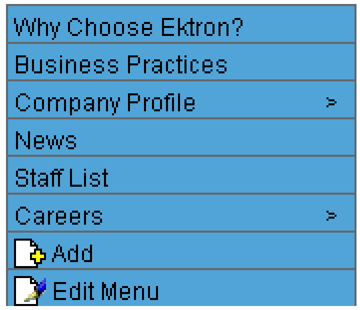
---

5. The Edit Menu screen is displayed.
6. As necessary, update the fields in Edit Menu screen by referencing "Fields on the Add/Edit Menu Screen" on page 9-135.
7. Click the Save button ().

Editing a Menu via Navigation Link on a Web Page

To edit a menu via a navigation link on a Web page, follow these steps.

1. Navigate to the Web page that contains the link to display the menu.
2. Click the menu link.
3. The menu appears.



4. Click **Edit Menu**.
5. The View Menu screen for the menu appears.
6. Move the cursor over the menu that you want to edit.
7. Click **Edit** from the popup menu.

Note: When moving the cursor to the popup menu, avoid moving across other menus or options. When you move across another menu or option, it may become selected instead of the item you want to work with.

8. The Edit Menu screen is displayed.
9. Update the fields by referencing "Fields on the Add/Edit Menu Screen" on page 9-135.
10. Click the Save button ( ).

Editing a Menu Item

This section explains how to edit the following types of menu items:

- content on your Web site
- library asset
- link to an external Web site
- submenu

You can edit a menu item via:

- its content folder
- menus tab
- navigation link on a Web page

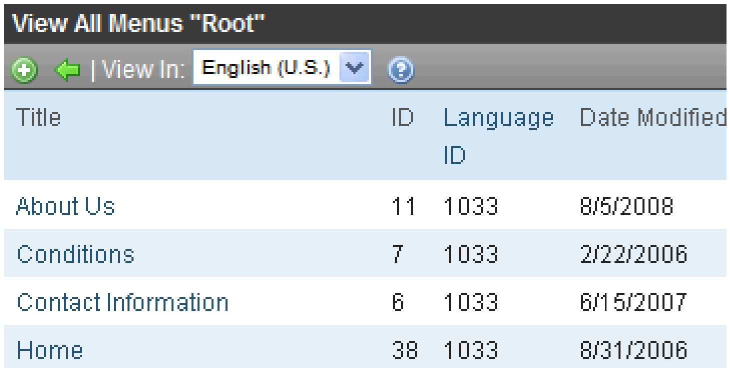
See Also: "Managing Menus" on page 9-133

Editing a Menu Item via its Content Folder

To edit a menu item from its content folder, follow these steps.

1. Access the Workarea and navigate to the content folder that contains the menu.

2. Click **View** > **Menus**.
3. Click the menu you want to edit.
4. The View Menu screen for that menu appears, listing all menu items.



Title	ID	Language ID	Date Modified
About Us	11	1033	8/5/2008
Conditions	7	1033	2/22/2006
Contact Information	6	1033	6/15/2007
Home	38	1033	8/31/2006

5. Move the cursor over the item you want to edit.
6. Click **Edit** from the popup menu.

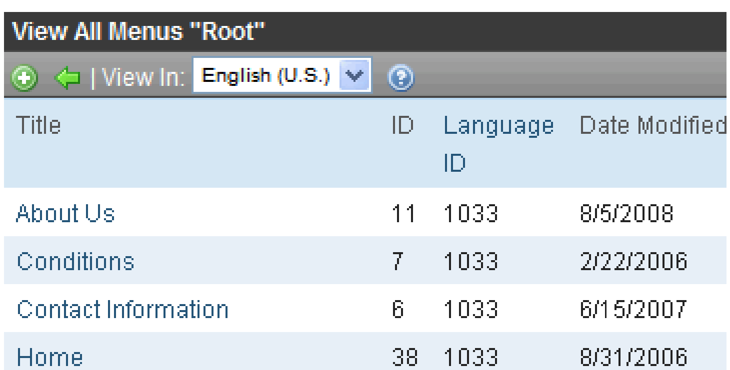
Note: When moving the cursor to the popup menu, avoid moving across other menus or options. When you move across another menu or option, it may become selected instead of the item you want to work with.

7. To learn about the fields on the screen, see "Fields on the Add/Edit Menu Screen" on page 9-135.

Editing a Menu Item via Menus Tab

To edit a menu via the Menus tab, follow these steps.

1. Access the Menu Report screen, as described in "Viewing a Menu via the Menus Tab" on page 9-151.
2. Click the menu you want to edit.
3. The View Menu screen for that menu appears, listing all items on the menu.



Title	ID	Language ID	Date Modified
About Us	11	1033	8/5/2008
Conditions	7	1033	2/22/2006
Contact Information	6	1033	6/15/2007
Home	38	1033	8/31/2006

4. Move the cursor over the item you want to edit, and click **Edit** from the popup menu.

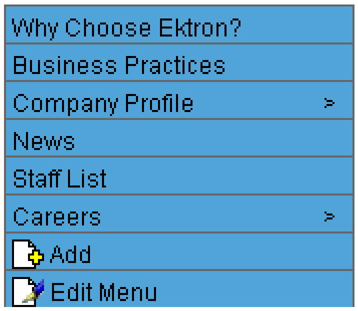
Note: When moving the cursor to the popup menu, avoid moving across other menus or options. When you move across another menu or option, it may become selected instead of the item you want to work with.

5. To learn about the fields on the screen, see "Fields on the Add/Edit Menu Screen" on page 9-135.

Editing a Menu Item via Navigation Link on a Web Page

To edit a menu via navigation link on a Web page, follow these steps.

1. Access the template where you inserted the link to display the menu.
2. Click the **Menu Navigation link** title on the Web page.
3. A menu is displayed along with all menu items on the menu.



4. Click **Edit Menu**.
5. The View Menu screen appears.
6. Move the cursor over the item you want to edit, and click **Edit** from the popup menu.
7. To learn about the fields on the screen, see "Fields on the Add/Edit Menu Screen" on page 9-135.

Viewing a Menu

Just like editing a menu, you can view a menu via

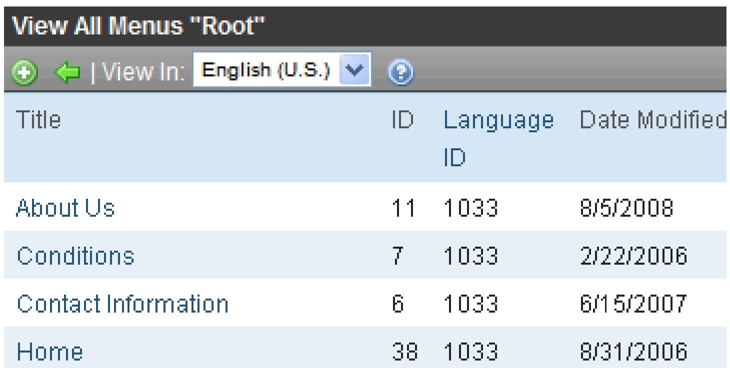
- its content folder
- menus tab
- navigation link on a Web page

When viewing a menu via the content or menu folder, you get an *internal* view of information entered by menu creator. When viewing via a navigation link on a Web page, you get an *external* view of the menu, as seen by anyone navigating Web site.

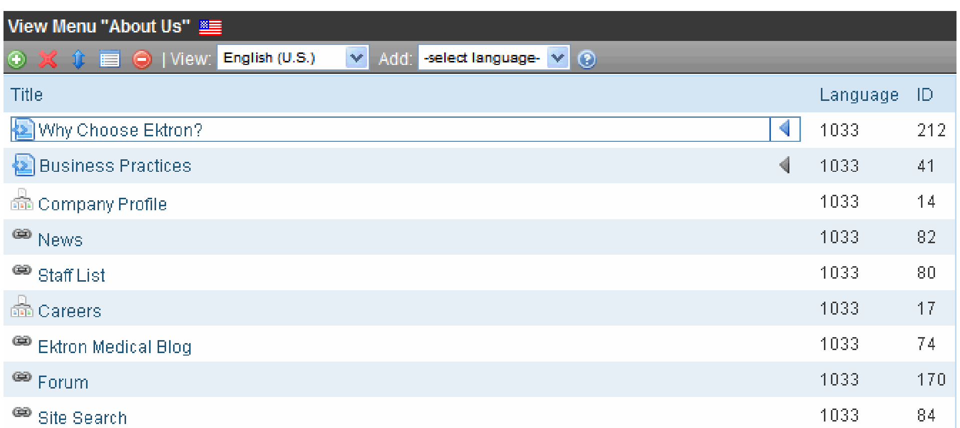
View a Menu via its Content Folder

To access a menu via its content folder, follow these steps.

1. Access the Workarea and navigate to the content folder that contains the menu.
2. Click **View** > **Menus**.
3. The View All Menus screen displays all menus in the folder.



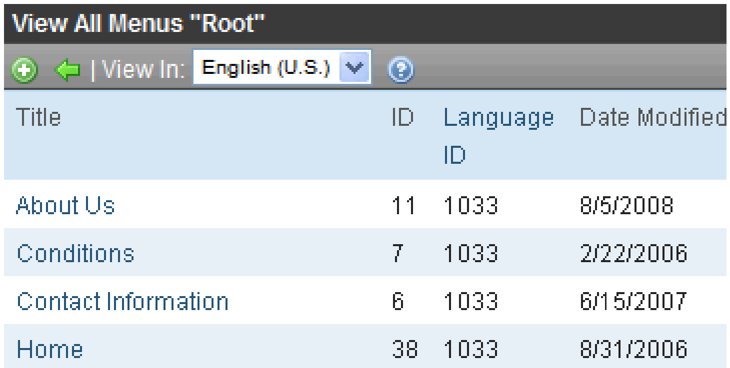
4. Click the menu you want to view.
5. The menu's options appear.



Viewing a Menu via the Menus Tab

To access the menu via the Content Tab, follow these steps.

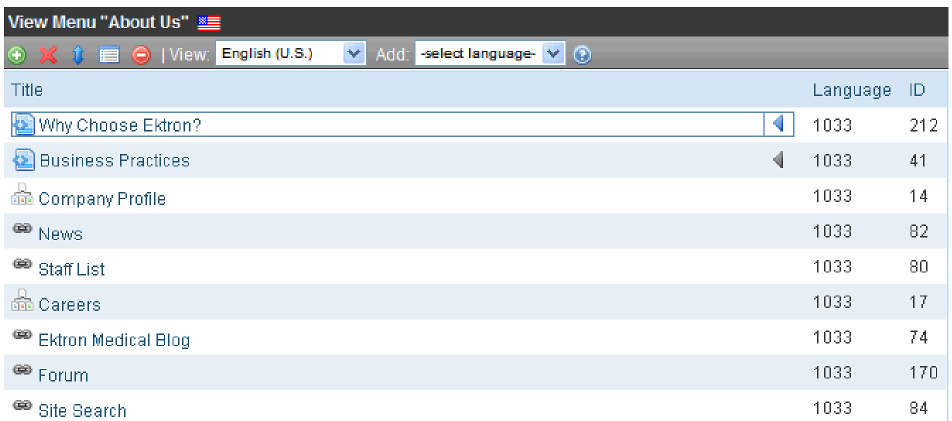
1. From the left frame of the Workarea, click **Content** > **Menus**.
2. The Menus Report screen displays all menus.



View All Menus "Root"

Title	ID	Language ID	Date Modified
About Us	11	1033	8/5/2008
Conditions	7	1033	2/22/2006
Contact Information	6	1033	6/15/2007
Home	38	1033	8/31/2006

3. Click the menu you want to view.
4. The menu's options appear.



View Menu "About Us"

Title	Language	ID
Why Choose Ektron?	1033	212
Business Practices	1033	41
Company Profile	1033	14
News	1033	82
Staff List	1033	80
Careers	1033	17
Ektron Medical Blog	1033	74
Forum	1033	170
Site Search	1033	84

View Menus via Navigation Link on a Web Page

To access the menu via a navigation link on a Web page, follow these steps.

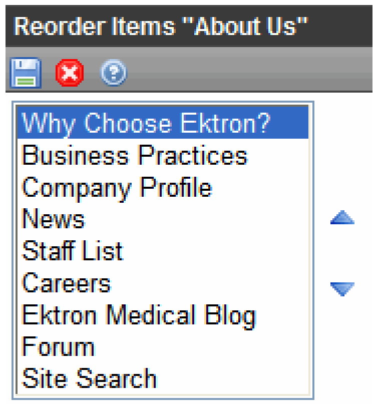
1. Access the Web page on which your Web developer inserted the link to display the menu.
2. Click the link that launches the menu on the Web page.
3. A menu is displayed.

See Also: "Managing Menus" on page 9-133

Reordering Menu Items

To rearrange the items on a menu, follow these steps.

1. Navigate to the View Menu screen for the menu that you want to rearrange. See "Viewing a Menu" on page 9-150.
2. Move the cursor over the menu, and click **Reorder**.
3. The Reorder Items screen appears.



4. Click the item you want to move.
5. Click the up arrow to move it up, or the down arrow to move it down.
6. When finished, click Save ( ).

See Also: "Managing Menus" on page 9-133

Deleting a Menu

Similar to editing and viewing a menu, you can delete a menu via

- its content folder
- menus tab

You cannot delete a menu from the navigation link on a Web page.

Deleting a Menu via Content Folder

To delete a menu via its content folder, follow these steps.

1. Access the View Menu screen, as described in "View a Menu via its Content Folder" on page 9-151.
2. Move the cursor over the menu, and click **Delete**.
3. A confirmation message is displayed.

4. Click **OK** to delete the menu.

Note: Deleting a menu automatically deletes all menu items associated with it. Do not confuse the menu link with the item itself. For example, deleting a menu deletes its *links* to content but has no effect on the content.

Deleting a Menu via Menus Tab

To delete a menu via its menus tab, follow these steps.

1. Access the View Menu screen, as described in "Viewing a Menu via the Menus Tab" on page 9-151.
2. Move the cursor over the menu, and click **Delete**.
3. A confirmation message is displayed.
4. Click **OK**.

Note: Deleting a menu automatically deletes all menu items associated with it. Do not confuse the menu link with the item itself. For example, deleting a menu deletes its *links* to content but has no effect on the content.

Deleting a Submenu

1. Access the View Menu page, as described in "Viewing a Menu via the Menus Tab" on page 9-151.
2. Select the submenu.
3. Move the cursor over the menu, and click **Delete**.

Deleting a Menu Item

Similar to editing and viewing a menu, you can remove a menu item from a menu via

- its content folder
- its menu folder

Removing a Menu Item via its Content Folder

1. Access the View Menu screen, as described in "View a Menu via its Content Folder" on page 9-151.
2. Move the cursor over the item.
3. Click **Delete**.

Removing a Menu Item via Menus Tab

1. Access the View Menu screen, as described in "View a Menu via its Content Folder" on page 9-151.
2. Move the cursor over the item.
3. Click **Delete**.

Working with Menus in a Multi-Language System

Note: For background information about supporting multiple languages on your Web site, see "Working with Menus in a Multi-Language System" on page 14-25.

You can create an edition of any menu in every supported language. When a site visitor selects a language, navigates to a page that has a menu and clicks the menu link, Ektron CMS400.NET displays the menu in the selected language if it is available. If a menu in that language is not available, nothing appears.

Before creating or translating a menu, it’s a good idea to create or translate all content that will be on the menu. In this way, you can link this content to the new menu. However, after creating a menu, you can add new items to it.

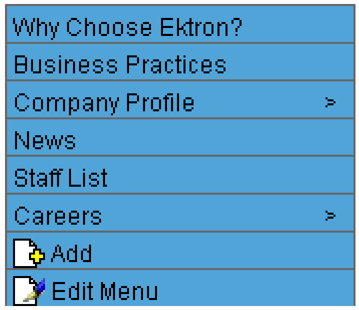
See Also: "Working with Menus" on page 9-129

Translating a Menu

To translate a menu into any supported language, follow these steps. You can navigate to the menu via the Web site or from the Workarea. Each procedure is described below.

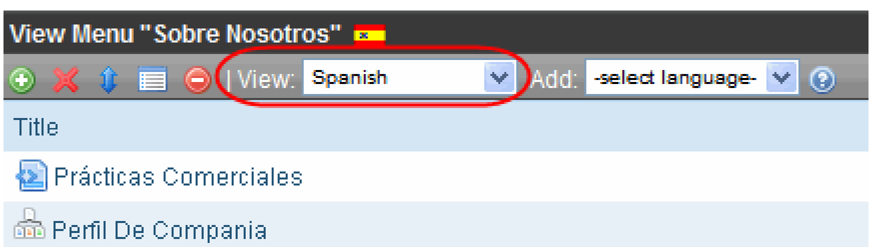
By Navigating the Site

1. Sign on to Ektron CMS400.NET
2. Select the menu’s current language.
3. Navigate to the page that has the menu you want to translate.
4. Click the menu and the **Edit Menu** option.



5. The View Menu screen appears for the selected menu.
6. From the Add drop-down list, select the language into which you want to translate the menu.

7. The Add Menu screen appears. Complete the screen for the menu in the selected language. See "Fields on the Add/Edit Menu Screen" on page 9-135.
8. Click the Save button ( ).
9. The View Menu screen reappears. Now, the **View In** drop-down list displays the menu's new language.



10. Add items to the menu. See "Adding a Menu Item" on page 9-138. If adding content, you can only insert an item in the selected language.
11. Later, you can add more menu items, edit them, delete them, view them, etc.

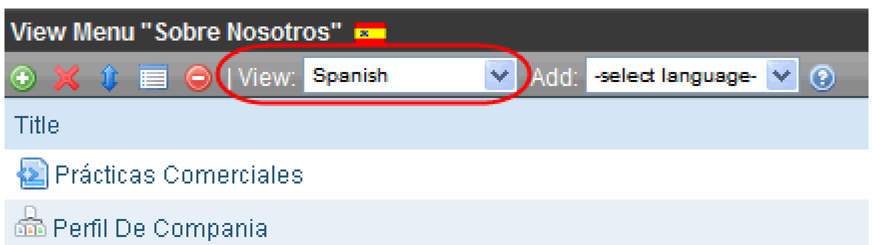
These capabilities are described in this chapter.

By Accessing the Menus Report Screen

1. From the Workarea screen, click **Content** > **Menus**.
2. Click the menu you want to translate.

3. The View Menu screen appears for the selected menu.
4. From the Add drop-down list, select the language into which you want to translate the menu.

5. The Add Menu screen appears. Complete the screen for the menu in the selected language. See "Fields on the Add/Edit Menu Screen" on page 9-135.
6. Click the Save button ( ).
7. The View Menu screen reappears. Now, the **View In** drop-down list displays the menu's new language.



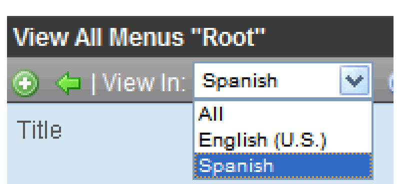
8. Add items to the menu. See "Adding a Menu Item" on page 9-138. If adding content, you can only insert an item in the selected language.

Later, you can add more menu items, edit them, delete them, view them, etc.

Creating a Menu in Any Language

To create a menu in any language, follow these steps.

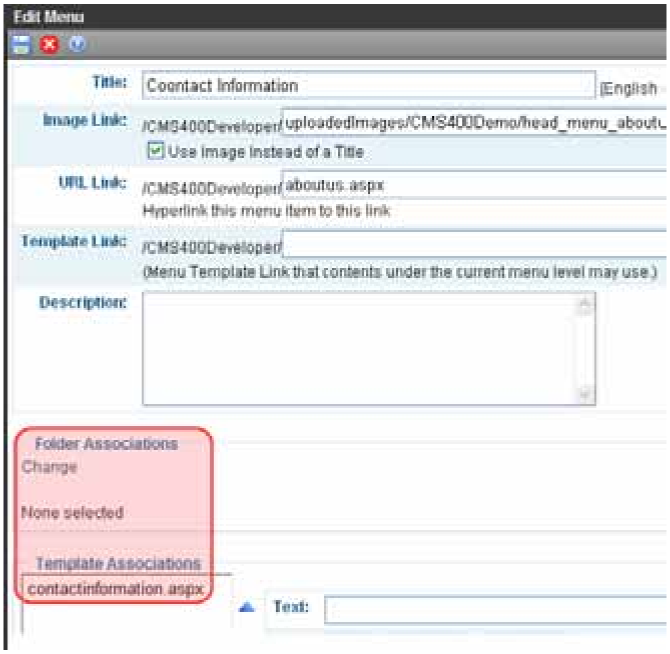
1. Form the Workarea screen, click **Content** > **Menus**.
2. From the language drop-down list, select the new menu's language.



3. Create the menu. See "Adding a Menu via the Menus Tab" on page 9-137.

Assigning Folders or Templates to a Menu

The Advanced Settings on the Edit Menu screen has **Folder Associations** and **Template Associations** sections (see image below). Any folders or templates currently assigned to the menu appear. You can use this section of the screen to add new templates/folders or remove existing ones.



For more information, see

- "Effect of Assigning a Folder to a Menu" on page 9-158
- "Effect of Assigning a Template to a Menu" on page 9-160

Effect of Assigning a Folder to a Menu

If

- you assign a folder to a menu

  and

- a user navigates to any content item that resides in the folder and

- a Smart Menu whose `EnableSmartOpen` property is **true** appears on the screen

the Smart Menu automatically displays the items on the associated submenu.

Note: Navigation to the content item can consist of clicking a quicklink, a menu option, a list summary item, the result of a search, etc.

In effect, you are instructing Ektron CMS400.NET to expose a menu whenever a content item that resides in one or more selected folders appears on the screen. As a result, a user who begins looking for a specific content item sees similar items on the screen.

As an example, assume your Web site sells books, and your folders are organized by genre. One of your folders is “Teen Fiction.” You create a submenu that contains the top five sellers in “Teen Fiction.” You then associate the Teen Fiction folder with that submenu.

If a site visitor uses the site search to find any book in that category, and proceeds to a page describing the book, the Smart Menu in the page’s left column displays the five top Teen Fiction titles.

Using the Select Folder Screen

The Select Folder screen lets you assign new folders to the menu, reorder the folders, and delete folders from the menu association. These tasks are described below.

When you click **Change** below **Folder Associations** on the Edit menu screen, the Select Folder screen appears (see image below).

The following table describes tasks you can perform on this screen.

Task	Instructions
Add folder to list	1. In the top of the screen, navigate to the folder you want to add. 2. Click the Add button ( ).
Remove folder from list	1. Click check box to the left of the folder. 2. Click the Delete button ( ).
Remove all folders from list	1. Click check box to the left of **Folder**.  2. Click the Delete button ( ).
Move a folder up or down on the list Note: The sequence in which folders appear has no impact on how they are used. It merely affects the appearance of the folders on the Select Folders screen.	1. Click check box to the left of the folder. 2. Click the up or down arrow buttons ( ).
Save changes and return to Edit Menu screen	Click the Save button ( ).
Exit screen; do not save changes	Click the Exit button ( ).

Effect of Assigning a Template to a Menu

If

- you assign a template to a menu
  and
- a user navigates to any content item that uses the template
  and
- a Smart Menu whose `EnableSmartOpen` property is **true** appears on the screen

the Smart Menu automatically displays the items on the associated submenu.

Note: Navigation to the content item can consist of clicking a quicklink, a menu option, a list summary item, the result of a search, etc.

In effect, you are instructing Ektron CMS400.NET to expose a menu whenever a content item that uses one or more selected templates appears on the screen. As a result, a user who begins looking for a specific content item sees similar items on the screen.

As an example, assume your Web site sells books, and your templates are organized by genre. One of your templates is “Teen Fiction.” You create a submenu that contains the top five sellers in “Teen Fiction.” You then associate the Teen Fiction template with that submenu.

If a site visitor uses the Web site search to find any book in that category, and proceeds to a page describing the book, the Smart Menu in the page’s left column displays the five top Teen Fiction titles.

Assigning a Template to a Menu

To add a new template, follow these steps.

1. Move to the **Template Associations** area of the Edit menu screen.
2. In the box on the right, enter the template that you are assigning to this menu. It can be a CMS template, or any file that you wish.
3. Click **Add**.

To later change or remove the template, select it then click **Change** or **Remove**.

Introduction to Menu Server Controls

Managing menus is a two-step process. The previous section describes the first step, which is how Ektron CMS400.NET users create and update menus. The second step involves a developer placing a menu server control on a Web form. The server control manages the display of the menu on your Web site.

Ektron CMS400.NET provides four menu server controls:

- "Flexible Menu Server Control" on page 9-164
- "Smart Menu Server Control" on page 9-178
- "Menu Server Control" on page 9-184
- "DhtmlMenu Server Control" on page 9-191

This section introduces concepts that affect all of them, and explains the differences between them.

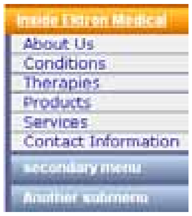
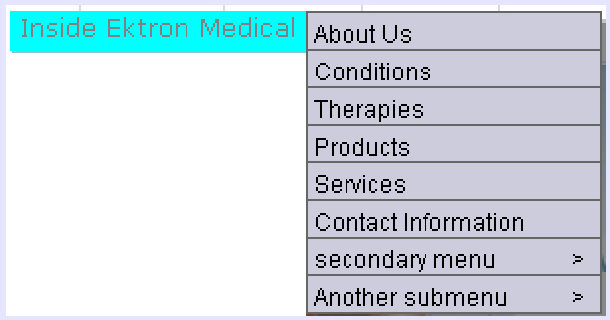
Prerequisites

Before you can use the server controls, you must create menus in the Workarea. To learn about creating menus, see "Working with Menus" on page 9-129.

Contrasting Menu Server Controls

- "Appearance" on page 9-162
- "Properties" on page 9-163

Appearance

Flex and Smart Menu	 or  (Other styles are available)
DHTML Menu	 (Styling is very customizable)
Menu	Inside Ektron Medical ○ About Us ○ Conditions ○ Therapies ○ Products ○ Services ○ Contact Information ○ secondary menu ■ Where did you hear about Ektron Medical? ■ Ektron ■ Ektron CMS400.NET Logo - Reflection ○ Another submenu ■ Sample Content Block

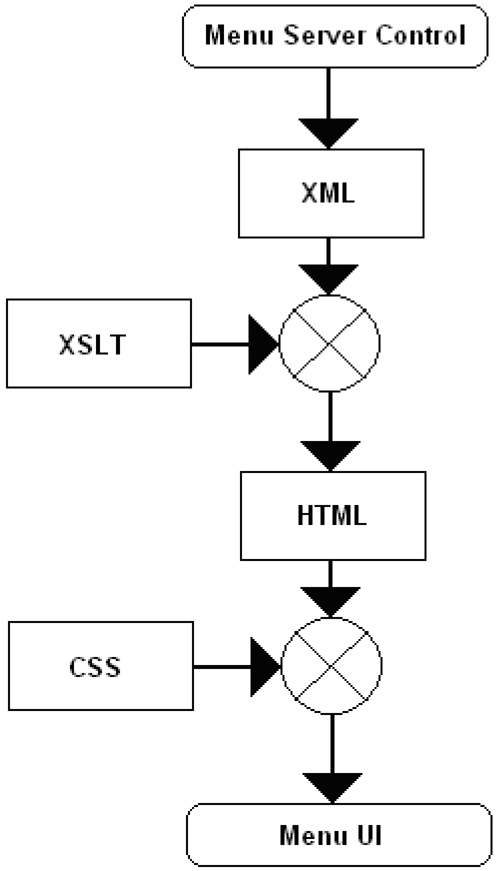
Properties

Property	Flex Menus	Smart Menu	DHTML Menu	Menu
508 compliant	✓	✓		
Shutter menu (When you click a menu, it opens directly below the menu title)	✓	✓		

Property	Flex Menus	Smart Menu	DHTML Menu	Menu
Secondary menu opens when cursor hovers over it	✓ (alternative: secondary menu opens when clicked)	(alternative: secondary menu opens when clicked)	✓	
Starts out collapsed; expands as site visitor selects secondary menu	✓	✓ (optional)	✓	
All menu levels open when page displays	✓ (optional)	✓ (optional)		✓
Can display secondary menu to the right of the root menu, instead of directly below it	✓ (optional)	✓ (controlled by style sheet)	✓	
How appearance is modified	Server control properties and style sheet	Server control properties and style sheet	Server control properties and style sheet	Xslt and style sheet
How behavior is modified	Xslt			Xslt and style sheet
Option to launch menu links in a new window		✓		

Flexible Menu Server Control

The FlexMenu server control displays a menu on a Web form. Although it looks and acts like a Smart Menu, its architecture is substantially different. Specifically, a FlexMenu creates XML. So, you can modify its behavior using an XSLT file, and change its appearance using a cascading style sheet (.css) file. This design is illustrated below.



Note: Before you can use this server control, you must create one or more menus in the Ektron CMS400.NET Workarea. To learn about creating menus, see "Working with Menus" on page 9-129.

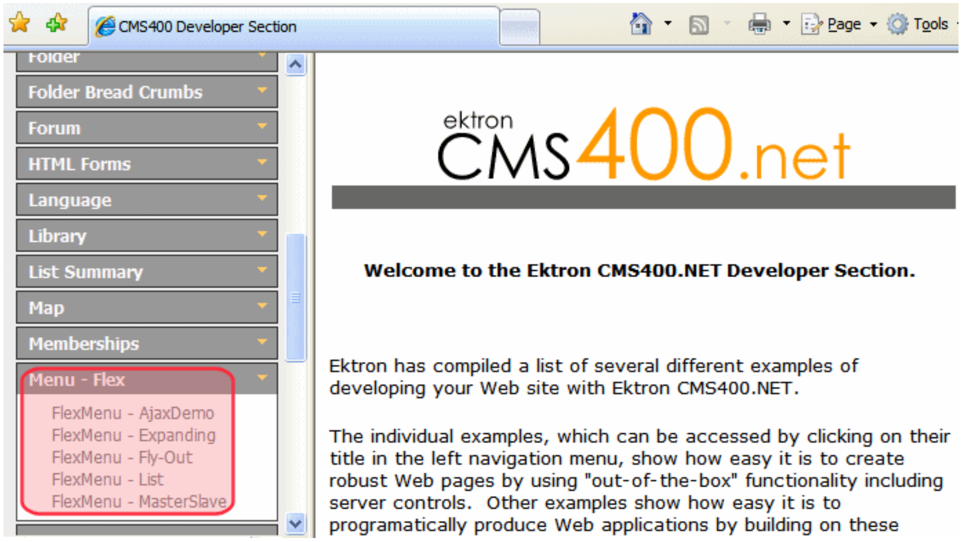
This subsection contains the following topics.

See Also: "Contrasting Menu Server Controls" on page 9-162

Sample Menus

To facilitate the deployment of Flex menus, Ektron CMS400.NET provides several sample menus that show their capabilities. You can use whichever sample meets your needs, then modify it for your site.

The sample menus can be viewed from the **Developer Sample Page** (*siteroot*/Developer/default.aspx) > **Menu - Flex**.

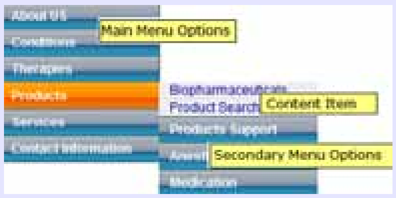


The samples are installed to the `siteroot/developer/menu/flexmenu` folder. Each sample has its own subfolder that contains sample aspx pages, a css file, and an xsl file.

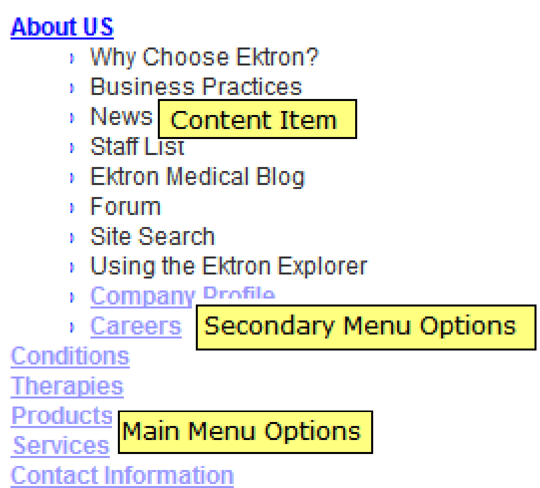
Description of the Sample Menus

Sample Menu	Description	Location on Server
AjaxDemo	The only sample menu for which Ajax is enabled by default. Ajax provides a quicker response time because the client only loads menu levels on an "as needed" basis. This feature eliminates the need to do a page refresh to get new content. You may not notice the speed on small menus, but with large menus, the speed improvement is significant. Note: The first time an Ajax-enabled menu is invoked, it is slow because the server is building it. After that, its response time should be quicker than non-Ajax menus. **How the Menu Works** - When you first click a menu, all text links are black. When you click it a second time, they are grayed out. - Secondary menus do not change. - There's no way to close a menu after it opens.  	`siteroot/Developer/Menu /FlexMenu/AjaxDemo/FMAjaxDemo.aspx`
Expanding	- Menu has gradient background, which changes when you hover over it. - Menu options that display content have a plain background. Submenus look like main menus but are indented.  - When you first click a menu, it expands vertically. When you click it a second time, it closes, so it looks like it did when you first viewed it.	*siteroot*//Developer/Menu /FlexMenu/Expanding/FMExpandDemo.aspx

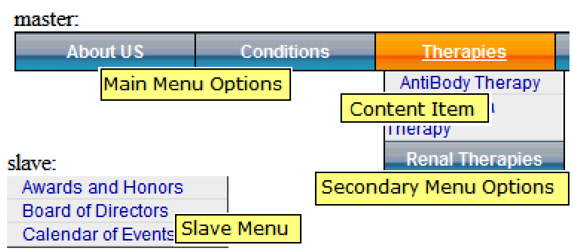
Sample Menu	Description	Location on Server
Fly-Out	Menus have gradient background. The color changes when you hover over it. Menu options that display content have a plain background. Their color changes when you hover over it. Submenus look like main menus but are offset to the right. (See illustration below.) When you first click a menu, it expands horizontally to the right. When you click it a second time, it closes, so it appears as it did when you first viewed it.	*siteroot*/Developer/Menu/FlexMenu/FlyOut/FMFlyOutDemo.aspx



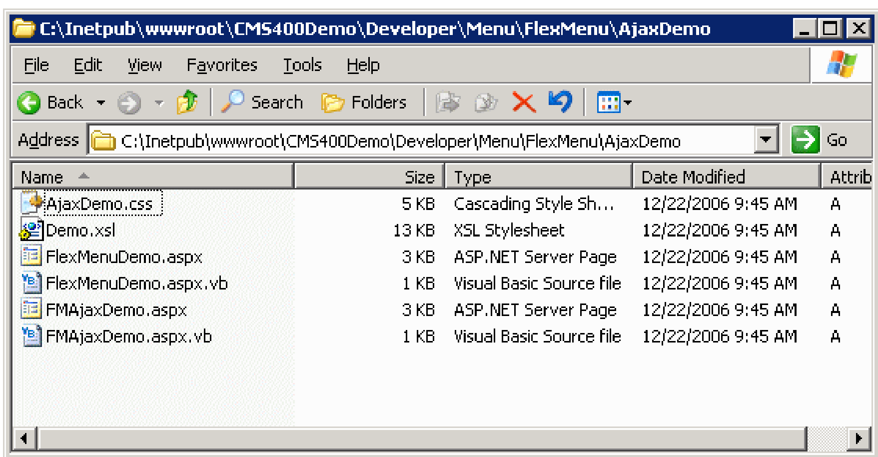
Sample Menu	Description	Location on Server
List	This menu's appearance is similar to the AjaxDemo but it doesn't use Ajax. The menu is an unordered list. When you first click a menu, all text links are black. When you click it a second time, it closes, so it appears as it did when you first viewed it.	*siteroot*/Developer/Menu/FlexMenu/List/FMListDemo.aspx



Sample Menu	Description	Location on Server
MasterSlave	Connects a slave menu to a master menu. In the graphic below, the upper menu (master) shows the top two levels while the lower (slave) menu shows levels three and on.	*siteroot*/Developer/Menu/FlexMenu/MasterSlave/FMMSDemo.aspx

Sample Menu	Description	Location on Server
		
XML Modify		

Copying and Editing Sample Menus



To create your menu based on a sample, follow these steps.

1. Examine the sample menus and decide which one best meets your needs for a particular page. See "Description of the Sample Menus" on page 9-166.
2. If you want to *create a new template* (.aspx page) for the menu, place the new template in a new folder. Then, copy all files in the sample menu folder to the new folder and rename each file. For example, change Ajaxdemo.aspx to myflexmenu.aspx, AjaxDemo.css to myflexmenu.css, and demo.xsl to myflexmenu.xsl.

   To insert a FlexMenu server control onto an *existing template*, copy the .css and .xsl file into the folder that contains the template.

Warning! If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.

Warning! The renamed .css file name must be all lowercase.

3. Open the .aspx page. Update the `stylesheet` and `DisplayXslt` properties to refer to the new .css and .xsl files.

   If the files do not reside in the template's folder, indicate their relative path using the syntax where slash (/) indicates the site root.

4. Open the .css file. Update the parent class name to match the new file name. For example, if you copied the AjaxDemo.css file, it looks like this.

```
.AjaxDemo .ekflexmenu
{
    /* DIV; wraps the entire menu */
    /* (the outer-most non-user container element) */
    color: rgb(0, 0, 255);
    /*width: 148px;*/
    font-size: 12px;
    font-family: Sans-Serif;
}

.AjaxDemo .ekflexmenu_submenu,
.AjaxDemo .ekflexmenu_submenu_hover,
.AjaxDemo .ekflexmenu_submenu_parent,
.AjaxDemo .ekflexmenu_submenu_parent_hover
{
    /* DIV; holds submenu items, such as a submenu title 
    top: 0px;
    left: 0px;
}

.AjaxDemo UL
{
    /* UL; a container for menu list items (useful for no
    /*list-style: none;
    /*margin: 0px;
    padding: 0px;*/
}

.AjaxDemo LI
{
    /* LI; container for menu items (typically either lin
    /*display:inline;
    margin: 0px;
    padding: 0px;*/
}
```

Notice that every class begins with the file name, **.AjaxDemo**. Replace all occurrences of this with the new file name. To continue the above example, begin all classes with **.myflexmenu**.

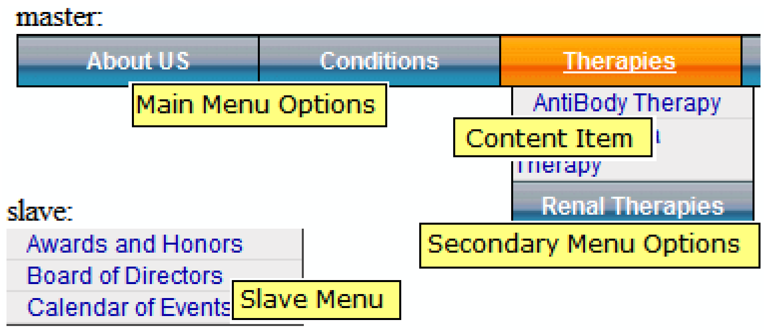
Working with the Flex Menu Xslt File

This section explains some non-intuitive elements of the*.xslt file.

Element	Context	Description
MenuFragment	`<xsl:when test="/MenuDataResult/Info/ menuFragment='false'">`	A flag that indicates the XML data is not complete. Instead, it's a fragment that begins deeper than the top level (for example, a submenu fragment). Because the data is incomplete, the XSLT processes the fragment differently. For example, don't generate Javascript startup code.
menuConst	`<xsl:attribute name="id"><xsl:value-of select="$menuConst"/>0_ ekflexmenu</xsl:attribute>`	Each menu generates several elements, which the client code (Javascript) accesses via a unique ID. For example, Javascript needs to identify the selected submenu or item when a user clicks on an element. `menuConst` is only used is when creating elements without a corresponding XML block, such as when creating a structure to hold the menu.
#NoScroll	`<xsl:attribute name="href"># NoScroll</xsl:attribute>`	`NoScroll` is sent to the `href` portion of a link when there is nothing to put there (for example, when the link is supposed to run Javascript). `NoScroll` prevents the page from refreshing, going to another page, or scrolling when it should not.
event	`<xsl:attribute name="onkeydown">return ekFlexMenu.menuBtnKeyHdlr( event);</xsl:attribute>`	To make the xslt cross-browser compatible, it must support different methods of obtaining/passing the event object. In this example, the global event object is passed to the handling function. Note: `event` corresponds to `window.event.` `window.` is implied.

Setting up a Master/Slave Menu Relationship

A master/slave menu relationship is one in which a few top-level menu controls appear on the *master* menu while all remaining menu levels appears on a *slave* menu (see graphic below).



The best way to set up a master/slave menu relationship is to copy and edit the sample, *siteroot*/Developer/Menu/FlexMenu/MasterSlave/FMMSDemo.aspx.

Whether you modify that sample or create your own from scratch, follow these guidelines.

- Ektron recommends starting with the .xsl files provided with the Master/Slave sample (FM MasterDemo.xsl and FMSlaveDemo.xsl), since they are optimized to work with this kind of menu relationship.
- Place both menu server controls (master and slave) on the same Web form (.aspx page).
- Both server controls must refer to the same `DefaultMenuID`.
  - Give each server control a unique ID number. (This property is located under the **Misc** properties, not Ektron.)
- For the master menu
  - limit the `MenuDepth` property to the number of levels that will appear. In the above example, the master menu's depth is set to **2**.
  - set the `StartLevel` to 0 or 1, since you want the highest level menu options to appear
- For the slave menu
  - set the `MenuDepth` property to zero (0). The slave menu should show all lower menu levels.
  - set the `StartLevel` property to one number higher than the master menu's `MenuDepth` property. In this way, the slave menu takes over where the master menu leaves off.
  - set the `MasterControlID` property to the ID number of the master menu. (This property is located under the **Misc** properties, not Ektron.)

How the FlexMenu Server Control Determines Which Item is Selected

The FlexMenu server control has the ability to select (highlight) options in a Flex menu as site visitors navigate around the Web site. For example, a site visitor arrives at a Web page through a link in an email. If the QueryString matches the an item in a Flex menu, the item is shown as selected.

Below is an overview of the logic that the Flex menu uses to decide when a menu item should show as selected. The list is presented in the order in which the code checks to see if an item should be highlighted.

If any menu item is selected, its parent menu is marked selected. If any menu is selected, all ancestor menus are selected. When all tests have been performed and no matches are found, the Flex menu is rendered with no items selected.

IMPORTANT!

Warning! Once a test is satisfied, the item is shown as selected and there are no further tests.

Note: Steps 2 through 9 are each repeated recursively throughout the menu data hierarchy until either a match is found or the end is reached. If there are no matches for a test, the control continues with the next one.

1. Inspects the QueryString to see if the `ekxmensel` parameter is present with a matching menu node ID. This parameter is used to specify the exact node a user clicked. The node, its parent, and ancestor menus are all marked as selected.
2. Inspects the QueryString to see if a Content ID parameter with a given value matches an item in the menu. If the Content ID passed in the QueryString matches an item in the Flex menu, that item is highlighted. For example, the QueryString has `ExamplePage.aspx`**`?id=123`** and there is an item on the menu item link that matches the Content ID of 123.
3. Inspects the QueryString to see if a Form ID parameter with a given value matches an item in the menu. If the Form ID passed in the QueryString matches an item in the Flex menu, that item is highlighted. For example, the QueryString has `ExamplePage.aspx`**`?ekfrm=456`** and there is an item on the menu item link that matches the Form ID of 456.
4. Inspects the QueryString to see if there is a direct match with a menu item link. If there is a match, the menu item is selected. For example, if the QueryString has `ExamplePage.aspx` and there is an item on the menu that matches, the menu item is shown as selected.
5. Inspects the QueryString to see if the `id`, `ekfrm` or `pageid` parameter exists. If so, the control tests to see if there is a folder association with any of it’s submenus and the folder that contains the object with the given ID. If the association exists, the menu item is shown as selected.
6. Inspects the QueryString to see if there is a direct match with a menu button link. If there is a match, the menu button is selected. For example, the QueryString has `ExamplePage.aspx` and there is a button on the menu that matches.
7. Inspects the QueryString to see if there’s a template association with the filename. If there’s a match, the menu item is shown as selected.
8. Inspects the QueryString for the `id` or `ekfrm` parameter and whether a value greater than zero is associated with it. If so, the control then checks the menu buttons for use of `LinkIt.aspx`. If a button is using LinkIt.aspx and either `id` or `ekfrm` parameter matches, the menu button is selected.
9. Tests to see if there is a URL-Aliasing issue. When the FlexMenu server control’s `UseAliasRealId` property is set to True, the control scans the data to see if there is a MenuData item ID match.

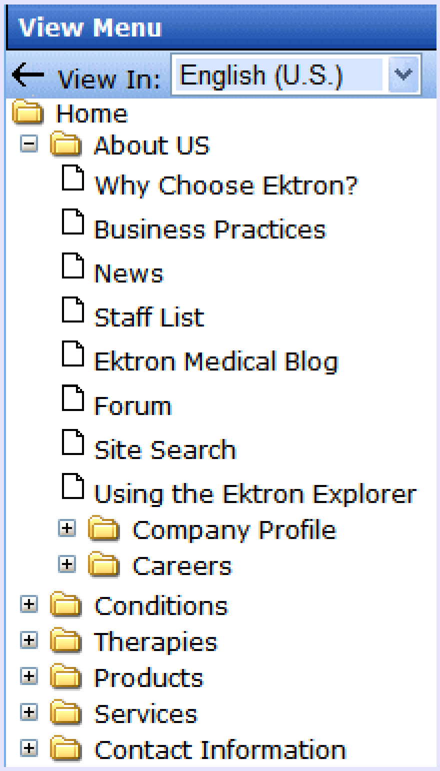
Flex Menu Server Control Properties

The Flex Menu server control properties are described in this table.

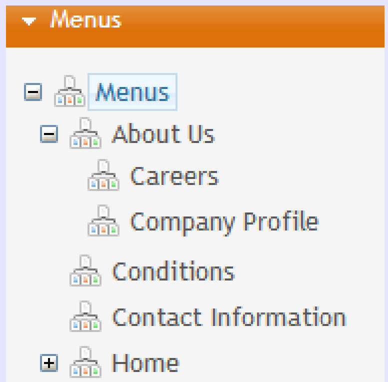
Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Boolean
AutoCollapseBranches	If you set to **true**, whenever a new submenu opens, all other submenus close. If **false**, other submenus remain open when a new one opens.	Boolean
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DefaultMenuID	The ID of a menu that appears where you insert this server control if no other menu is identified or available. If you don't know the ID number of the menu, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DisplayXslt	The xsl file used to render the menu. If nothing is specified, the menu is output as raw XML. Flex menus are designed to use the xsl file to control the menu's behavior, and the .css file to control its display. Ektron CMS400.NET provides several sample menus, and each has an xslt file. If this is a new menu, you may find it easier to copy and edit an xslt file provided with a sample menu. See Also: . "Sample Menus" on page 9-166 **Warning!** : If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.	String

Property	Value	Data Type
	Set to **true** to enable Ajax, which only downloads sub-menus as needed. See Also: "AjaxDemo" on page 9-167	Boolean
EnableMouseOverPopup	If you set to **true**, submenus appear as soon as the cursor moves over them. If you set to **false**, submenus only appear if a site visitor clicks them or a keyboard equivalent.	Boolean
EnableSmartOpen	If you set to **true**, any submenu on the Smart Menu can be set to open automatically. To learn about how to do this, see "Assigning Folders or Templates to a Menu" on page 9-158 If you set to **false**, even if all required conditions are present, submenus on a Smart Menu do not automatically open. This property lets you prevent submenus from opening by default. Under some circumstances, such submenus look cluttered.	Boolean
MasterControlId	Only use this property if you are setting up a master/slave menu relationship, and this menu is the slave. If both are true, enter the ID of the master menu. See Also: "Setting up a Master/Slave Menu Relationship" on page 9-171	String

<table>
<tr><th>Property</th><th>Value</th><th>Data Type</th></tr>
<tr><td>MenuDepth</td><td>
To let site visitors browse through all menu levels, enter zero (0).
To restrict site visitors to a menu level, enter the number of the lowest level.
In the following example, if you set this property to 1, a site visitor can browse through the About Us menu options but would not see the level 2 options (Company Profile and Careers).


</td><td>Integer</td></tr>
<tr><td>StartCollapsed</td><td>If you set to true, when the menu first appears, all submenus are closed.</td><td>Boolean</td></tr>
</table>

Property	Value	Data Type
StartLevel	Enter a number to indicate the level at which you want this menu to display when it first appears. To begin the menu display at the root level, enter zero (0). In the following example. the **Home** folder is level 0. The others are level 1.  A site visitor can click a menu option to navigate to folders below the displayed level.	Integer
Stylesheet	Enter the style sheet that will determine the appearance of the menus. Flex menus use an .xsl file to control their behavior, and a .css file to control their display. Ektron CMS400.NET provides several sample menus, and each has a .css file. If this is a new menu, you may find it easier to copy and edit a .css file provided with a sample menu. See Also: "Sample Menus" on page 9-166	String
SuppressAddEdit	When set to True, suppress the Add and Edit buttons on the menu when a user is logged in to Ektron CMS400.NET. The default is False. **True** - suppress the Add and Edit button when a user is logged in to Ektron CMS400.NET. **False** - show the Add and Edit buttons when a user is logged in to Ektron CMS400.NET.	Boolean
SuppressWrapperTags	This property is set to `false` because Ajax uses `<div>` tags to rewrite the region around the tag. You *cannot* change the value to `true`.	Boolean

Property	Value	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - Use the `<span>` tag to designate an inline portion of an HTML document as a span element. **Div** - Use the `<div>` tag used to apply attributes to a block of code. **Custom** - Use a custom tag.	String

(continued in Section 508 Compliance Features of Smart Menus)

Smart Menu Server Control

The Smart Menu server control displays a menu on a Web page.

Before you can use this server control, you must create a menu in the Ektron CMS400.NET Workarea. To learn about creating menus, see "Working with Menus" on page 9-129l.

To learn about how the Smart Menus compare to other Ektron CMS400.NET menus, see "Contrasting Menu Server Controls" on page 9-162.

Smart Menu Server Control Properties

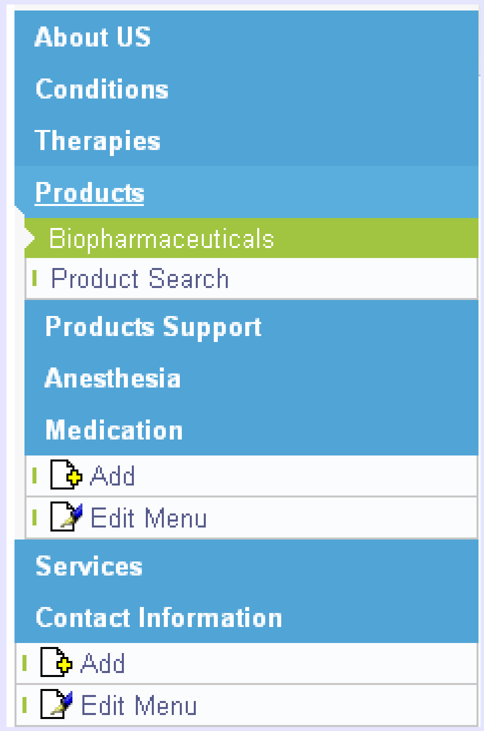
The Smart Menu server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String

Property	Value	Data Type
AutoCollapseBranches	If you set to **true**, whenever a new submenu opens, all other submenus close. If **false**, other submenus remain open when a new one opens.	Boolean
CacheInterval	Sets the amount of time the server control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300. The default is zero. See Also: "Caching with Server Controls" on page 21-31	Double
DefaultMenuID	The ID of a menu that appears where you insert this server control if no other menu is identified or available. If you don't know the ID number of the menu, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DynamicParameter	Select **menu_id**. When you do, this server control uses the menu passed as a URL parameter.	String
Enable508compliance	If you set to **true**, the menu will comply with Section 508.	Boolean
EnableMouseOverPopup	If you set to **true**, submenus appear as soon as the cursor moves over them. If you set to **false**, submenus only appear if a site visitor clicks them or a keyboard equivalent.	Boolean
EnableSmartOpen	If you set to **true**, any submenu on the Smart Menu can be set to open automatically. To learn about how to do this, see "Assigning Folders or Templates to a Menu" on page 9-158." If you set to **false**, even if all other conditions are present, submenus on a Smart Menu do not automatically open. This property lets you design pages whose submenus do not normally open by default. Under some circumstances, such submenus look cluttered.	Boolean
Hide	Used to hide a menu in design time and run time. **True** = Hide menu **False** = Show menu	Boolean

Property	Value	Data Type
Language	Set a language for viewing menus. This property shows results in design-time (in Visual Studio) and at run-time (in a browser). For more information, see "Working with Menus in a Multi-Language System" on page 9-155.	Integer
LaunchLinksinNew Window	If you set to **true** and a site visitor selects a menu option, it appears in a new browser window. If **false**, the new page replaces the current page in the browser.	Boolean
ShowRootFolder	If you set to **true**, a menu option listing the title of the root folder appears. If you set to **false**, the title of the root folder does not appear.	Boolean
SingleEditButton	Set to **true** if you want to a single edit button (and no add button) to appear on the menu when you are logged in. If you set to **false**, **Edit Menu** and **Add Menu** options appear at the bottom of every menu and submenu. Example of `SingleEditButton = true` 	Boolean

Property	Value	Data Type
SingleEditButton (continued)	Example of `SingleEditButton = false` 	Boolean
StartCollapsed	If you set to **true**, all submenus are closed when the menu initially displays.	Boolean
Start With RootCollapsed	If you set to **true**, the menu initially displays with its root menu closed. Note: This property is ignored if the `ShowRootFolder` property is set to set to `false`.	Boolean

<table>
<tr><th>Property</th><th>Value</th><th>Data Type</th></tr>
<tr><td>Stylesheet</td><td>Enter the style sheet that will determine the appearance of the menus. Menu style sheets reside in the <code>site root/workarea/csslib/smartmenu</code> folder. You can modify any standard style sheet or create your own.
Creating a Custom Style Sheet
To support more than one SmartMenu server control per page, the CSS file's name is used as a class and is prefixed to all selectors (without the path or extension).
The server control wraps the entire SmartMenu in a <code><div></code> tag, whose class name is derived from the filename.
Only the base ASCII character set is supported. Also, spaces and periods before the extension are converted to underscores, since these are not permitted within the selector.
So, to create your own style sheet, each selector must begin with the style sheet name. For example, <code>.my_custom_style_sheet .ekmenu</code>.</td><td>String</td></tr>
<tr><td>SuppressAddEdit</td><td>When set to True, suppress the Add and Edit buttons on the menu when a user is logged in to Ektron CMS400.NET. The default is False.
True - suppress the Add and Edit button when a user is logged in to Ektron CMS400.NET.
False - show the Add and Edit buttons when a user is logged in to Ektron CMS400.NET.</td><td>Boolean</td></tr>
<tr><td>SuppressWrapperTags</td><td>Suppresses the output of the span/div tags around the control. The default is False.
True - Suppress wrap tags.
False - Allow wrap tags.</td><td>Boolean</td></tr>
<tr><td>WrapTag</td><td>Allows a developer to specify a server control's tag. The default is Span.
Span - Use the <code><span></code> tag to designate an inline portion of an HTML document as a span element.
Div - Use the <code><div></code> tag used to apply attributes to a block of code.
Custom -Use a custom tag.</td><td>String</td></tr>
</table>

Section 508 Compliance Features of Smart Menus

Ektron CMS400.NET's Smart Menus are 508 compliant because they adhere to the following principles. They

- **are accessible** - the navigation functionality is accessible to all users who interact with a text-based Web page.
- **can work without DHTML - Underneath the surface, Smart Menus are rendered as an unordered list. By default, they are styled with CSS and made dynamic with JavaScript. But, if you don't use these features, the menu still works although its look and feel are different.**
- **are 100% navigable via the keyboard; no mouse actions are required - Each Smart Menu has an <H2> header, which is used by some screen readers (such as Jaws) to assist visually impaired users with page navigation A list of all headers is available via a key sequence.**

Also, all menu items are wrapped in links, which allow screen readers to assist a visually impaired user with page navigation. A list of links is available via a key sequence.

- **do not rely on color to convey important information - the standard style sheets use underlining and bold to (in addition to color) to distinguish normal from selected menu options.**

Also, **"(Selected)"** follows the title of selected items. This text is suppressed when viewed with graphical browsers (such as IE6 and FireFox1.5) but is visible in text browsers and announced when a screen reader is used.

- **provide sufficient contrast - the standard style sheets emphasize contrasting colors. In addition, because of the flexibility of Smart Menus, you can use your creative and artistic resources to develop menus that are attractive and have proper contrast.**
- **are understandable even when the style sheet is turned off**
- **let a screen reader skip repetitive navigation links**
- **when a user clicks a menu option, the screen reader proceeds to the new page - it does not read the remaining menu items.**

Note: To be sure your menus are 508 compliant, use either the treemenuex.css or treemenuex_images.css style sheet.

Retrieving the XML Structure of a Smart Menu

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.

2. Drag and drop a SmartMenu server control onto it.
3. Set the `DefaultMenuID` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to MultiLine.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = SmartMenu1.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.

The XML structure of the Smart Menu appears in the textbox.

Menu Server Control

The Menu server control calls a menu to be displayed on a page. Using the Menu server control, you can manipulate a menu by using the `DisplayXslt` property. Below is a menu display with the SampleMenu XSLT.

Before you can use the Menu server control, you must create a menu in the Ektron CMS400.NET work area. To learn about creating menus, "Working with Menus" on page 9-129.

This subsection contains the following topics:

- "Menu Server Control Properties" on page 9-185
- "Using DisplayXslt Samples" on page 9-187
- "Retrieving the XML Structure of a Menu" on page 9-190

See Also: "Contrasting Menu Server Controls" on page 9-162

Menu Server Control Properties

The Menu server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
DefaultMenuID	The ID of a menu that appears where you insert this server control if no other menu is identified or available. If you don't know the ID number of the menu, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DisplayXslt	The XSLT to use to render the menu. **None** - databind only **SampleMenu** - A sample display, formatted as a bulleted menu list **TreeMenu** - A sample display, formatted as a folder tree. You can expand the tree by clicking on the folder icon. **Path to Custom Xslt** - Enter the path to an XSLT that determines the display of the page For more information on using the SampleMenu and TreeMenu DisplayXslt, see "Using DisplayXslt Samples" on page 9-187. **Warning!** : If you want to edit this file, it is strongly rec-	String

Property	Value	Data Type
	ommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.	
DynamicParameter	Select **menu_id**. When you do, this server control uses the menu passed as a URL parameter.	String
Hide	Used to hide a menu in design time and run time. **True** = Hide menu **False** = Show menu	Boolean
Language	Set a language for viewing menus. This property shows results in design-time (in Visual Studio) and at run-time (in a browser). For more information, see "Working with Menus in a Multi-Language System" on page 9-155.	Integer
Stylesheet	Specify the location and style sheet for the menu. For example: `\Workarea\csslib\mytest.css`. Leave blank to use the default. `global.css` is the default style sheet. It is located in `\`*`webroot`*`\`*`siteroot`*`\Workarea\csslib`.	String
SuppressAddEdit	When set to True, suppress the Add and Edit buttons on the menu when a user is logged in to Ektron CMS400.NET. The default is False. **True** - suppress the Add and Edit button when a user is logged in to Ektron CMS400.NET. **False** - show the Add and Edit buttons when a user is logged in to Ektron CMS400.NET.	Boolean

Property	Value	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

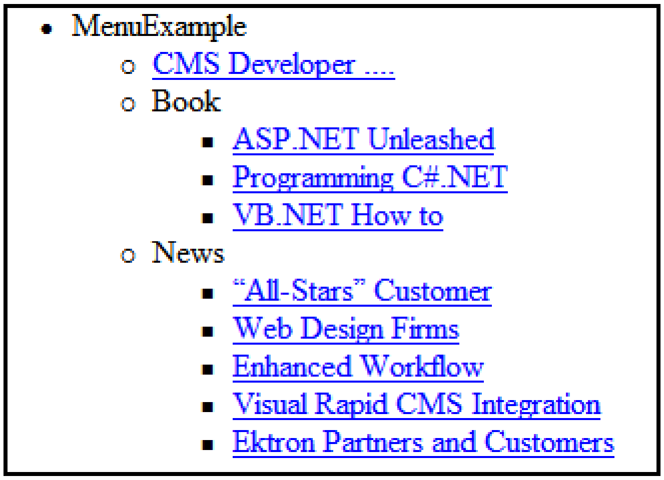
Using DisplayXslt Samples

Two DisplayXslt samples are provided with the Menu server control, SampleMenu and TreeMenu. This section explains how to use them.

Warning! If you want to edit either of these files, it is strongly recommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.

SampleMenu

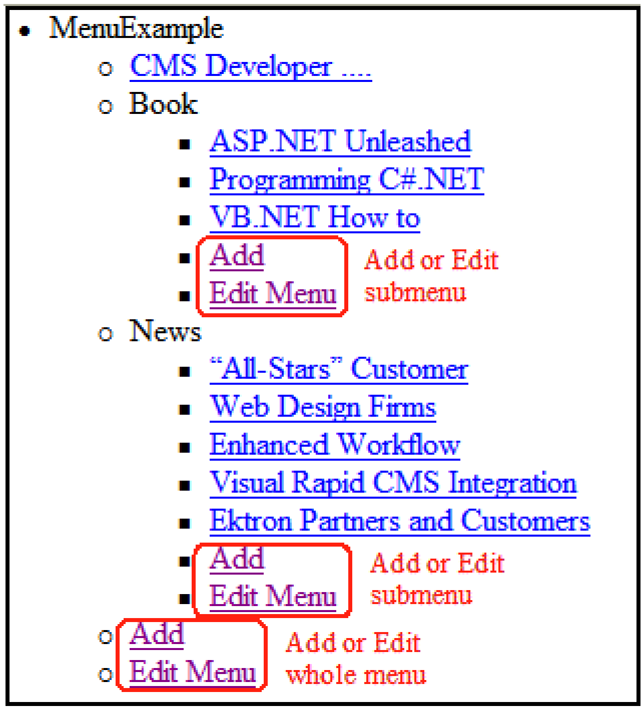
The SampleMenu DisplayXslt lets you display an Ektron CMS400.NET menu as a bulleted item list. See below for an example.



When you are logged in to your Ektron CMS400.NET site, two menu items are added to each section of the menu: Add and Edit Menu. The user can use these to add a new menu item or edit an existing one. See example below.

For Information on a adding a menu Item, see"Adding New Content to a Menu via Navigation Link on a Web Page" on page 9-145.

For Information on a editing a menu, see"Editing a Menu via Navigation Link on a Web Page" on page 9-147.



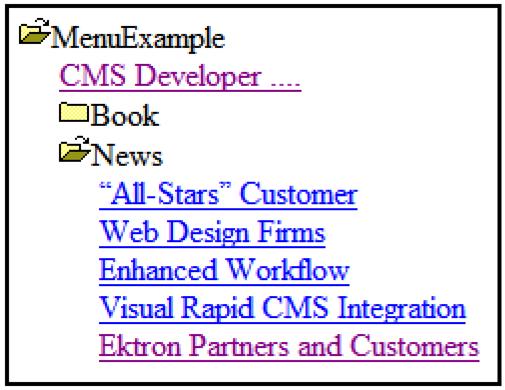
SampleMenu XSL code

For an example of the XSL code used in the SampleMenu, click the following link and choose the appropriate version.

http://dev.ektron.com/kb_article.aspx?id=2114

TreeMenu

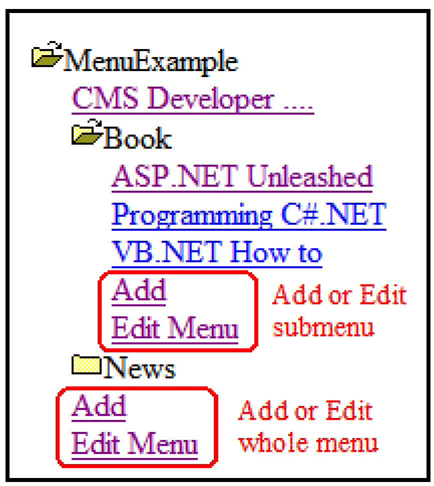
The TreeMenu DisplayXslt lets you display an Ektron CMS400.NET menu as a clickable folder list. You can expand and collapse the menu by clicking on the folder icons. See below for an example.



When you are logged in to your Ektron CMS400.NET site, two menu items are added to each section of the menu: Add and Edit Menu. The user can use these to add a new menu item, or edit an existing menu item. See example below.

For Information on a adding a menu Item, see "Adding New Content to a Menu via Navigation Link on a Web Page" on page 9-145.

For Information on a editing a menu, see "Editing a Menu via Navigation Link on a Web Page" on page 9-147.



Note: When using the TreeMenu server control with Visual Studio and Windows 2003, the folder images do not display during design-time. They do, however, display correctly during run-time.

TreeMenu XSL Code

For an example of the XSL code used in the MenuTree, click the following link and choose the appropriate version.

http://dev.ektron.com/kb_article.aspx?id=2114

Retrieving the XML Structure of a Menu

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a Menu server control onto it.
3. Set the `DefaultMenuID` properties.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to MultiLine.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
   ```
   Textbox1.Text = Menu1.XmlDoc.InnerXml
   ```
7. Build the project.
8. View the Web form in a browser.
9. The XML structure of the menu appears in the textbox.

For an additional example, see the Menu XML page on the CMS400Developer samples page. It is located at:

In a browser:

```
http://<site root>/CMS400Developer/Developer/Menu/MenuAsXML.aspx
```

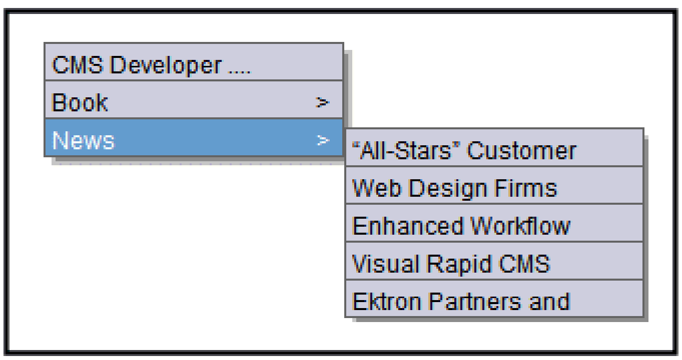
In the source code:

```
<site root>/CMS400Developer/Developer/Menu/MenuAsXML.aspx and MenuAsXML.aspx.vb
```

DhtmlMenu Server Control

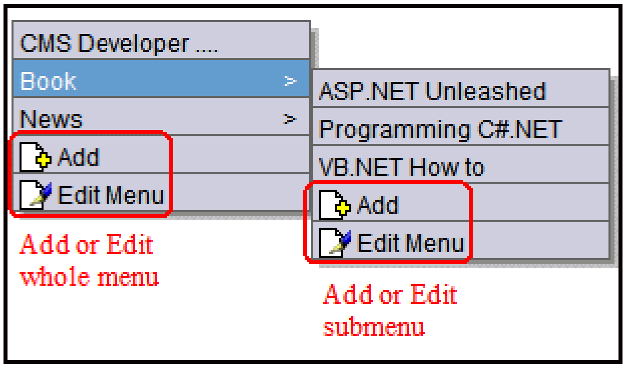
Note: For optimal performance, Ektron recommends using at minimum Internet Explorer 5.5 or Mozilla Firefox 1.0. Also, the following KB article describes a possible problem using a DHMTL menu with Internet Explorer 8: http://dev.ektron.com/kb_article.aspx?id=26942.

The DhtmlMenu server control lets you display a menu with drop down boxes and submenus. This lets developers add a menu to a page without taking up a lot space. You can modify the menu's style properties via a style sheet.



Before using the DhtmlMenu server control, you must create menus in the Ektron CMS400.NET workarea. See "Working with Menus" on page 9-129.

The DhtmlMenu server control also lets logged in users add content to a menu. When you are logged in to your Ektron CMS400.NET site, two items are added to each menu: **Add** and **Edit Menu**. Use them to add a new menu item or edit an existing one. See example below.



For Information on a adding a menu item, see "Adding New Content to a Menu via Navigation Link on a Web Page" on page 9-145.

For Information on a editing a menu, see "Editing a Menu Item via Navigation Link on a Web Page" on page 9-150.

Warning! You cannot create a DHTML menu using code behind -- you must drag and drop it. Once a DHTML menu is on a Web form, you can manipulate its properties using the code behind.

This subsection contains the following topics:

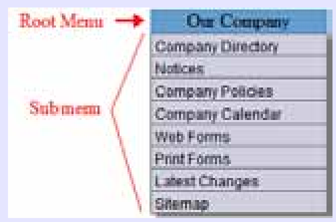
See Also: "Contrasting Menu Server Controls" on page 9-162

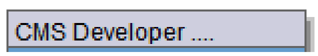
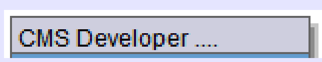
DhtmlMenu Server Control Properties

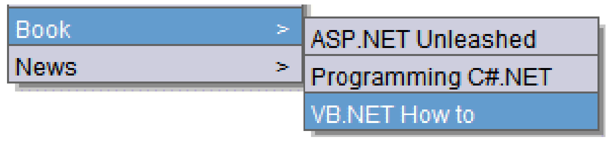
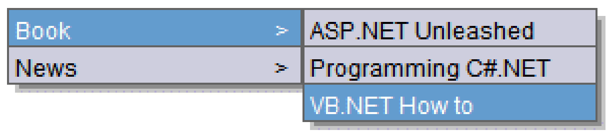
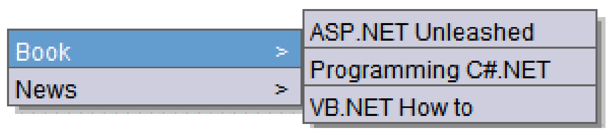
The DhtmlMenu server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Align	Specifies the horizontal alignment of the root menu text. The default is **Center.** **NotSet** - Use the default setting. **Left** - Aligns text to the left. **Center** - Aligns text to the center. **Right** - Aligns text to the right. **Justify** - Aligns text justified to both margins.	HorizontalAlign
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CssClass	Apply a .css class to the root menu. Enter the class name from the .css defined in the `Stylesheet` property. See Also: "Stylesheet" on page 9-195 Since pop_style.css is the default style sheet, you can use its classes without defining it in the `Stylesheet` property. For example, if you enter `lowtext` in the property, the root menu changes as shown below. 	String
DefaultMenuID	The ID of a menu that appears where you inserted this server control if no other menu is identified or is available. If you don't know the ID number of the menu, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
DynamicParameter	Select **menu_id**. When you do, this server control uses the menu passed as a URL parameter.	String
EnableIE6FormsFix	This should only be enabled when you have a DHTML menu rendering over an HTML select element. In IE6, the DHTML renders below the drop down. This temporarily disables the element when the DHTML Menu is rendered.	Boolean
Hide	Used to hide a menu in design time and run time. **True** = Hide menu **False** = Show menu	Boolean

Property	Value	Data Type
HorizontalDisplay	Displays submenu to the right of the root menu. This only affects the first submenu of the root menu. All subsequent submenus appear to the right of each submenu. The default is **False** **True** = Submenu appears to the right of the root menu  **False** = Submenu appears below the root menu  	Boolean
Language	Set a language for viewing Dhtml Menus. This property shows results in design-time (in Visual Studio) and at run-time (in a browser). For more information, see "Working with Menus in a Multi-Language System" on page 9-155	Integer
MenuHoverOverColor	Sets the background color for the root menu when hovering over it.	Color
MenuStyle	A specified inline style that defines the root menu. For example: `font: bold 18px Arial;color:royalblue; background-color:slateblue`  	String

Property	Value	Data Type
Stylesheet	Specify the location and style sheet for the submenu. For example: `\Workarea\csslib\mytest.css.` Leave blank to use the default. `pop_style.css` is the default style sheet. It is located in `\siteroot\Workarea\csslib`. For more information on style sheets, see "Using a Style Sheet" on page 9-197. You can use the `Stylesheet` property in conjunction with the `CssClass` property to define the root menu. See Also: "CssClass" on page 9-193	String
SubMenuBackColor	Sets the background color for the submenu.	Color
SubMenuHoverOverColor	Sets the background color for the submenu when the cursor hovers over it.	Color
SubMenuItemHeight	Sets the height of each submenu item in pixels. The default is 20. Example set to 20:  Example set to 30: 	Int16
SubMenuItemWidth	Sets the width of each submenu item in pixels. The Default is 150 Example set to 150:  Example set to 130: 	Int16

Property	Value	Data Type
SubMenuTopOffset	Sets the location of the top of the submenu relative to its parent. This number, in pixels, refers to the number of pixels the submenu appears below the parent menu. The default is 5. Example set to 5:  Example set to 0 (zero):  Example set to -10: 	Int16
SuppressAddEdit	When set to True, suppress the Add and Edit buttons on the menu when a user is logged in to Ektron CMS400.NET. The default is False. **True** - suppress the Add and Edit button when a user is logged in to Ektron CMS400.NET. **False** - show the Add and Edit buttons when a user is logged in to Ektron CMS400.NET.	Boolean
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Using a Style Sheet

You can create your own style sheet, or modify the existing default one, `pop_style.css`. It is located in `\site root\Workarea\csslib`.See Also: "pop_style.css" on page 9-197

Style Sheets let you choose different text colors, text alignment, text fonts, and text size to create a customized menu.

Best Practice

Ektron recommends copying and renaming the default style sheet. This insures you always have a clean file to start with. This also gives you something to reference if you are not getting the results you expect.

The style sheet must be located below the site root.

You can only define one menu style sheet for each Web page. If you have more than one menu on a single Web page, they share a style sheet.

For more information on style sheets, visit http://www.w3.org/Style/CSS/.

pop_style.css

This file is located in `webroot/siteroot/Workarea/csslib`. It is used to customize the look of the DhtmlMenu server control. The following is a list of style sheet properties that can be modified.

Style Class	Description	Attribute	Default Value
.lowText	Text of the floating menu as displayed on the menu.	- color - font - text-align - text-decoration	#000000 (Black) 12px Arial, sans-serif - left - none

Style Class	Description	Attribute	Default Value
.highText	Text of the floating menu when highlighted.	■ color ■ font ■ text-align ■ text-decoration	■ #000000 (Black) ■ 12px Arial, sans-serif ■ left ■ none
.roothighText Note: This class only works when called by the `CssClass` property. Use the `Font` property in the Appearance category to define root menu text.	Text of the root menu as displayed on a Web page.	■ color ■ font ■ text-align ■ text-decoration	■ #000000 (Black) ■ 16px Arial, sans-serif ■ center ■ none
.itemBorder	Border color and size of the menu.	■ border	■ 1px solid #666666
.itemBorderBlank	Separator border color and size of the menu.	■ border	■ 1px solid #CCCCDD

Formatting the DhtmlMenu Server Control

Additional information on formatting the DhtmlMenu server control can be found in the following Knowledge Base article.

http://dev.ektron.com/kb_article.aspx?id=2441

Retrieving the XML Structure of a DhtmlMenu

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

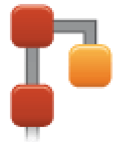
1. Open a new Web form.
2. Drag and drop a ContentList server control onto it.
3. Set the `DhtmlMenuID` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to MultiLine.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = DhtmlMenu1.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.

The XML structure of the DhtmlMenu appears in the textbox.

Taxonomy



Large amounts of content can be an organizational nightmare, and it takes a far reaching categorization model to allow content to be efficiently repurposed, searched for, and organized on a site. Ektron's taxonomy, a one-to-many relationship model, follows natural and organic methods all the way down to the content level, enabling an intuitive organization scheme that reflects how people think.

Click the following link to see a video introduction to taxonomy in Ektron CMS400.NET: http://www.ektron.com/learningcenter/taxonomy/taxonomy.html.

Ektron's taxonomy is a content-level categorization system that uses one-to-many relationships to create a scalable organization of content. Content is categorized in the database by how it relates to multiple categories, allowing it to be accessed in multiple ways for multiple purposes. The hierarchy of the content is arranged from the general to the specific, and there may be multiple "routes" that define the content at the end of the hierarchy.

This type of categorization lets you create a navigation structure (independent of the folder structure) that matches the way different site visitors want to find what they are looking for.

For example, Arnold Schwarzenegger can be thought of as an actor, Mr. Olympia or as a California governor. Taxonomy creates a one-to-many relationship with any content about

Schwarzenegger and auto-generates navigation which can support all of the approaches to accessing any content about him. Site visitors can find the content whichever way that they think about it.

Ektron's taxonomy system plays key roles in more than just organizing content. CMS400.NET's URL Aliasing is able to auto-generate human readable and SEO-friendly addresses based on the taxonomic structure of the page. Because it is using the various ways that people relate to the content to determine the alias, search engines will find it based on multiple terms as well.

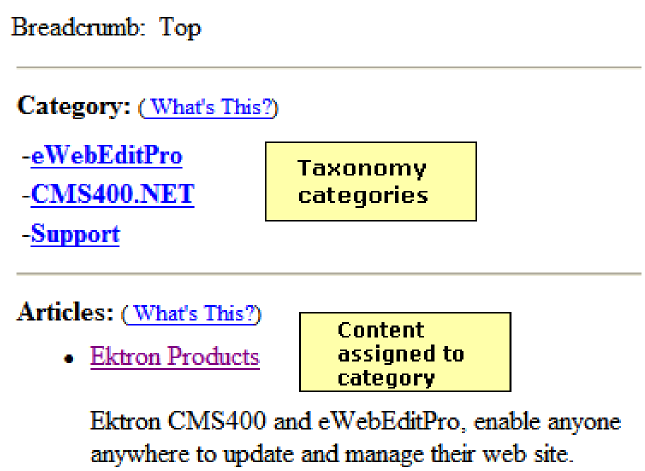
A taxonomy directory control can automatically create the navigation on your Web site. Once the content is tagged, it automatically shows up in the correct section of the site. The author doesn't need to know where the content is going to show up, the taxonomy tagging will determine that. If you are managing large amounts of information, this use of taxonomy is especially powerful.

Taxonomy can also improve search functionality, and Ektron's integrated search takes full advantage of it.

Introduction to Creating a Taxonomy

When working with content, you can place a listing of those categories (a *taxonomy*) on a Web page. When that page displays, the taxonomy's categories appear, followed by all published items in the taxonomy.

To help site visitors find your Web site's content via a taxonomy, your developer places a Directory server control on a Web page. It looks something like this.



See Also: "Directory Server Control" on page 9-241

There is no limit to the number of category levels you can assign to a taxonomy.

Also, a taxonomy can provide a link to all content in a folder, so the display is based on folder structure. Alternatively, you can assign content items from various folders to a taxonomy.

To illustrate the benefits of a content-based taxonomy, assume your Web site is for a college. Several items relating to the graduate school are organized under major departments: Admissions, Academics, Faculty, Library, etc. You can create a Graduate School taxonomy, use it to categorize all content relevant to graduate students (regardless of their department), and display them on a graduate students page.

The following sections explain Taxonomies in more detail.

- "Creating a Taxonomy" on page 9-202
- "Assigning a Taxonomy/Category to Content or Users" on page 9-212
- "Additional Taxonomy/Category Tasks" on page 9-221
- "Directory Server Control" on page 9-241

Creating a Taxonomy

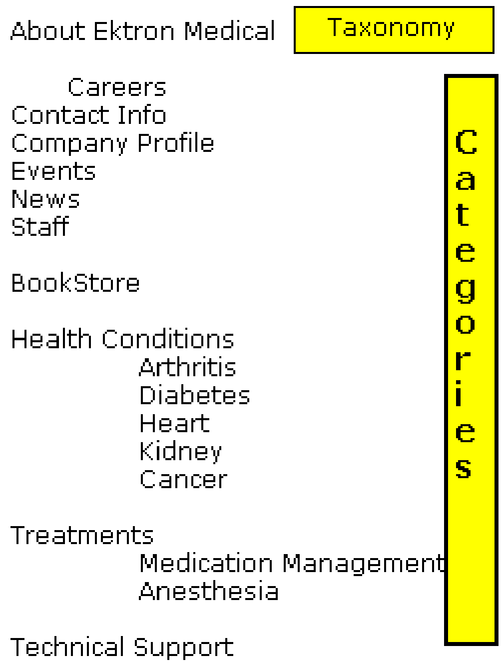
Follow these steps to create and deploy a taxonomy.

1. "Planning the Taxonomy " on page 9-202
2. "Creating a Taxonomy" on page 9-203
3. "Applying a Template to a Taxonomy or Category" on page 9-207
4. "Assigning a Taxonomy Configuration" on page 9-210

Planning the Taxonomy

It helps to design a taxonomy on paper before creating it in Ektron CMS400.NET. This can let you determine relationships among the kinds of information before you try to implement the taxonomy.

As an example, here is a hierarchy of some content in the Ektron CMS400.NET sample site. The top level item is the taxonomy. All levels below it are categories.



Next, review the site content and decide which content items and folders to assign to which taxonomy categories. Some categories may map directly to a folders. Other categories may use content from several folders.

Once you determine how content and folders will be assigned to taxonomy categories, sign on to Ektron CMS400.NET and set up those relationships.

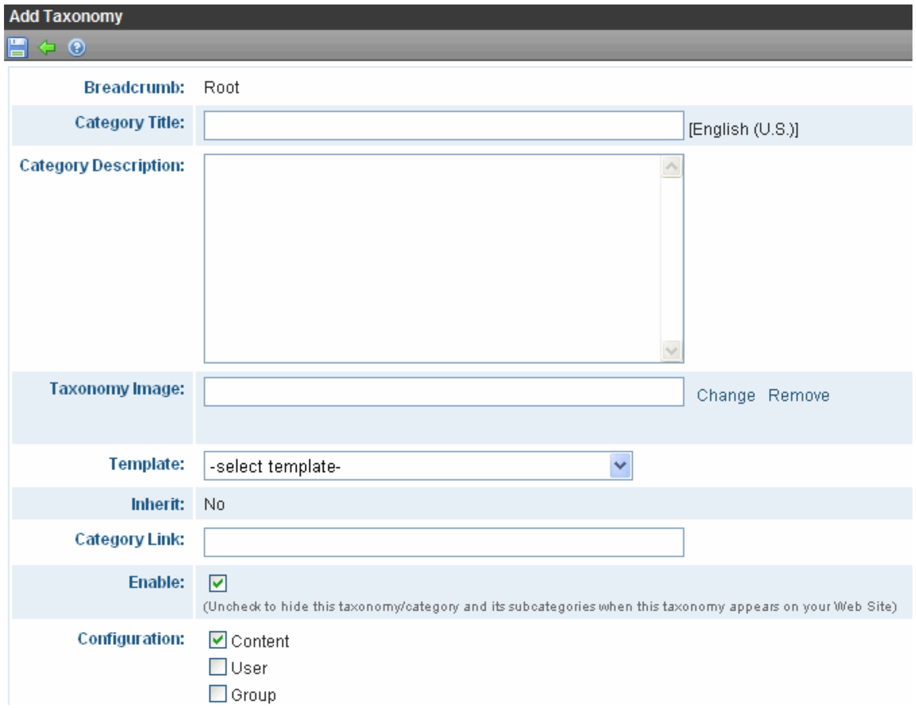
Creating a Taxonomy

Note: Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Content > Taxonomy** option. See Also: "Defining Roles" on page 15-32

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Use the language selector pull-down to choose a language for the taxonomy (see below).

See Also: See "Creating a Taxonomy in a Multi-Language Environment" on page 9-236

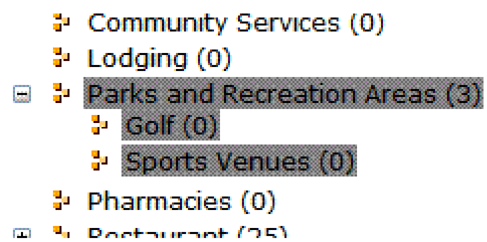
3. Click the Add Taxonomy button ( ).
4. The Add Taxonomy screen appears.



5. Use the following table to complete the screen.

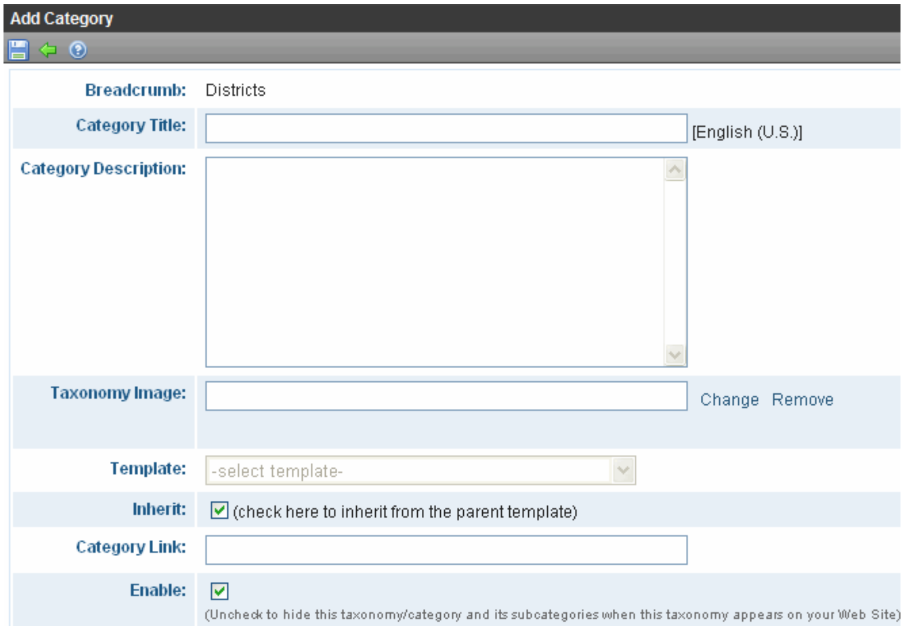
Taxonomy Field Description

Field	Description	For more information, see
Category Title	Give the taxonomy a title. The title identifies the taxonomy wherever it appears.	
Category Description	If desired, enter a more complete description of the taxonomy. It appears only on the Edit Taxonomy screen.	
Taxonomy Image	If desired, you can assign an image to this taxonomy. For example, in the eCommerce feature, you could display this taxonomy image to indicate the type of products that make up the taxonomy. To display the taxonomy image, use Ektron CMS400.NET's API. A sample of how to do this is provided in the following file: `site root/developer/taxonomy/taxonomy_image.aspx`. To see the sample on a Web page, go to the **Developer sample page > Taxonomy > Taxonomy Image**. To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`.	
Template	If desired, select a template to apply to the taxonomy or category.	"Applying a Template to a Taxonomy or Category" on page 9-207
Inherit (only appears when creating a category underneath a taxonomy)	Check this box if you want this category to inherit its template from the parent category or taxonomy. If not, assign a template using the **Template** field (above).	
Category Link	Use this field to direct a Web site visitor who clicks this taxonomy/category to any page on your Web site. For example, when someone is using your site's company directory and clicks Human Resources > Benefits, he is directed to that area of your Web site. Without a Category Link, if a site visitor clicks a taxonomy category, the results appear on the same page. Enter a path to a destination page relative to your site root folder. For example, `aboutus.aspx`. When a site visitor	

Field	Description	For more information, see
	clicks this taxonomy/category, he is directed to `http://`*your URL*`/`*Site root folder*`/aboutus.aspx`. You could also direct the user to a content ID, such as `aboutus.aspx?id=62`.	
Display?	Check this box if you want this taxonomy/category and its subcategories to appear when this taxonomy appears on your Web site. Use this field to block certain categories from appearing as part of this taxonomy. For example, you have not finished creating content for the category, so you don't want it to appear yet. If you uncheck this box, this node and its child nodes are indicated by a gray background (see image below).  The gray background also appears when users work with this taxonomy/category on the Edit Content screen's **Category** tab. This setting does not prevent you from assigning taxonomies/categories in the Ektron CMS400.NET Workarea.	
Configuration	Select a configuration with which to associate the taxonomy. - Content - User - Group Notes: * By default, a new taxonomy's configuration is content. * This field only appears for a taxonomy. It does not appear for categories, which are below the taxonomy.	"Assigning a Taxonomy Configuration" on page 9-210

6. Click the Save button ( ).
7. The View Taxonomies screen appears.
8. Next, add categories to this new taxonomy. To do this, Click the **Add Category** button ( ) .

9. The Add Category screen appears.



10. Enter the Category information. When finished, Click the Save button ( ) to save this category.
11. Repeat this process for each category you wish to add to this taxonomy.

.

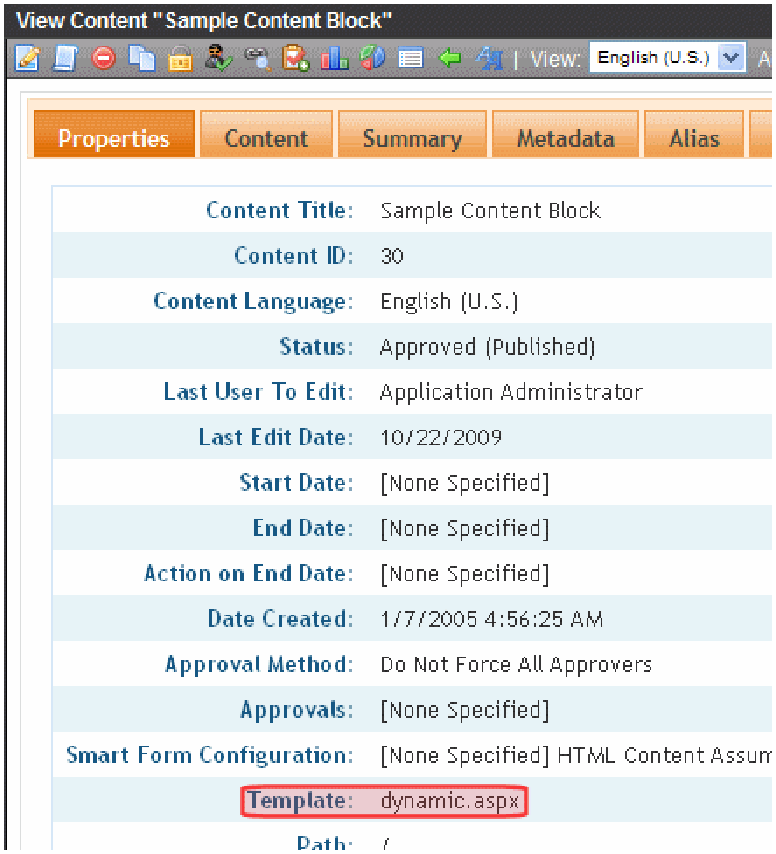
Note: You can also assign a Taxonomy to content using the Edit Content in Folder screen's **Category** tab.

12. If you want to add categories and subcategories underneath the top level taxonomy, Right Click on the taxonomy and choose Add Taxonomy.

Applying a Template to a Taxonomy or Category

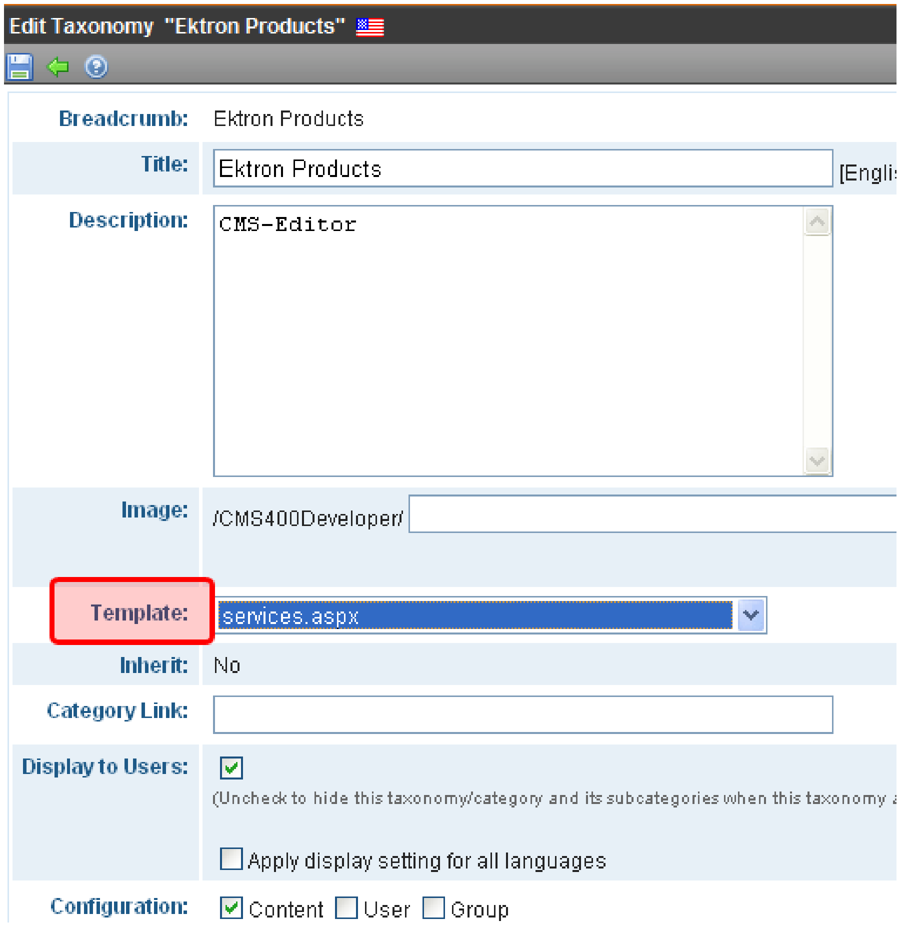
Taxonomy categories are designed to help site visitors find content. To provide a taxonomy-based search, your developer places a Directory server control on a Web page.

By default, when a user clicks a hyperlink on such a Web page, it uses the template assigned to the linked content (as illustrated below). See Also: "Creating/Updating Templates" on page 7-184



If you want to display the linked content using a different template, follow these steps.

1. When creating or editing a taxonomy or category, select the appropriate template at the **Template** pull-down field.



Note: Any category below the root level can inherit its parent's taxonomy template. Use the **Inherit** checkbox to do this.

You may need a developer's help with the rest of these steps.

2. In Visual Studio.Net, open the .aspx page that contains the directory server control.
3. Look at the server control's **MarkupLanguage** property.
4. If the property is blank, open the following file: `site root/workarea/template/taxonomy/taxonomy.ekml`.

   If the property displays an .ekml file, open that file. Its path may be listed in the property. If the .ekml file's path is blank, it is `workarea/template/taxonomy/`.
5. Find the following line:

```
[$HyperLink]<br/>[$Teaser]
```

6. Replace it with the following:

```
<a href="[$TemplateQuickLink]">[$Title]</a><br/>[$Teaser]
```

7. Save the .ekml file.

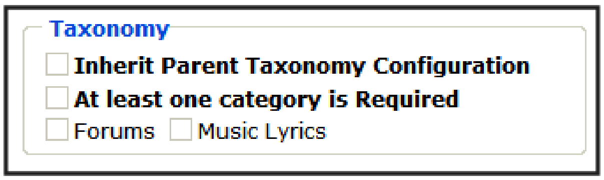
The content selected from this Directory server control will now use the template assigned to the taxonomy/category.

Assigning a Taxonomy Configuration

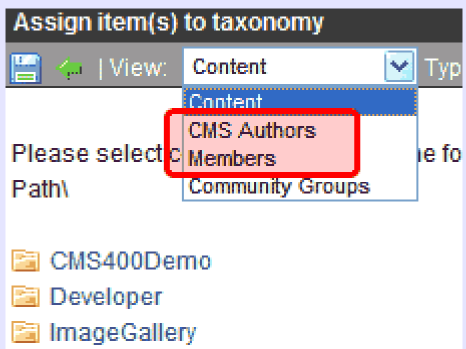
There are three taxonomy configurations (that is, types). Each taxonomy is one of these types - content, user, or group.

<table>
<tr><th>Configuration</th><th>Result</th></tr>
<tr><td>Content</td><td>
Associate this taxonomy with content. When this configuration is selected

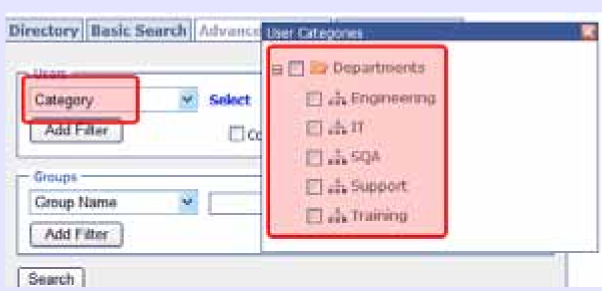
- you can assign content to the taxonomy/category
- the taxonomy category appears on every folder’s properties screen (shown below)



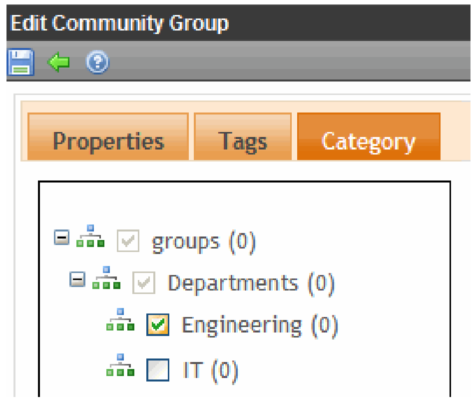
</td></tr>
<tr><td>User</td><td>
Associate this taxonomy with CMS or membership users. You select users for this taxonomy on the Assign Items to Taxonomy screen.



After users are assigned to a taxonomy, they can be found via the CommunitySearch server control’s **Advanced** tab. From the **Advanced** tab, select **Category** from the **Users** dropdown. Next Click **Select** and a User Categories selector appears (shown below).

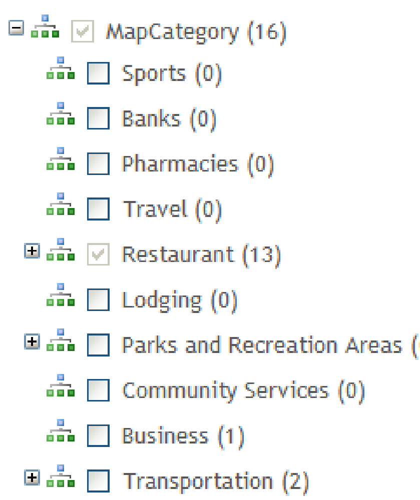


</td></tr>
</table>

Configuration	Result
	See Also:
Group	This taxonomy's categories can be assigned to community groups from the **Category** tab of the Edit Community Group screen. See example below.  If you do not check this box, users can only view taxonomy/category assignments on the **Category** tab. Whether or not this box is checked, you can assign taxonomy categories to community groups via the View All Categories of Taxonomy screen.

Numbers on the View Categories Screen

When editing content, when you choose the **Category** tab, you will see the Taxonomy that applies to this content. The number to the right of any taxonomy/category is a *cumulative* total of all items assigned to it *and its subcategories*. In the example below, the three subcategories have a total of 13 items (2 + 1 + 10).



Since the number to the right of the parent category equals the number assigned to all subcategories, you know that no items are assigned to the parent category.

Also, the number includes individual items plus all items in any assigned folders. So, for example, if one content item and one folder are assigned to a category, and the folder has five items, the category's number is six.

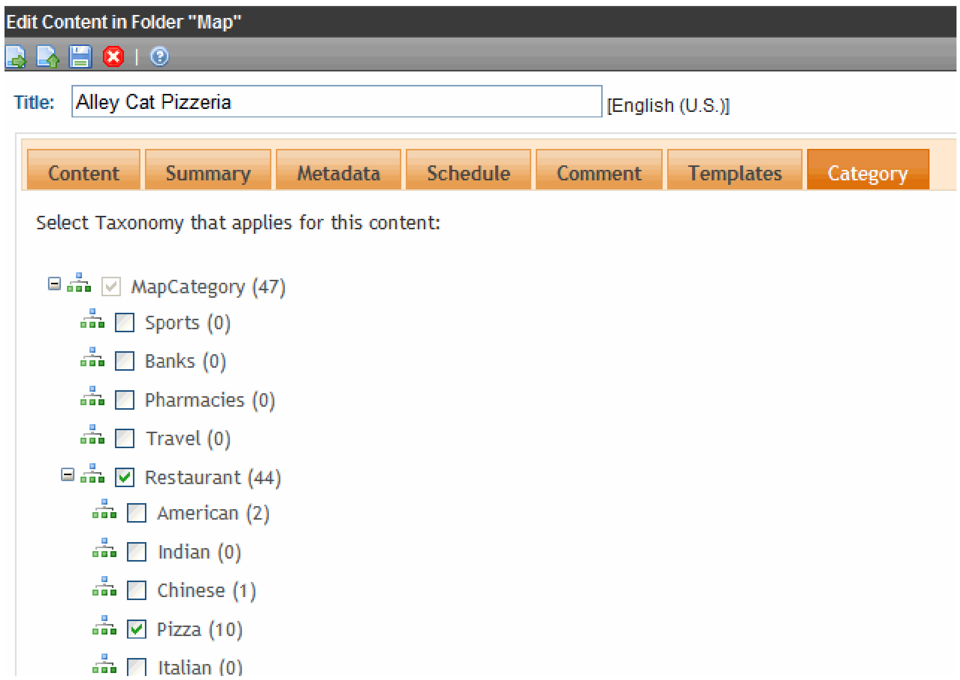
Assigning a Taxonomy/Category to Content or Users

There are three ways to assign a taxonomy or category to content or users.

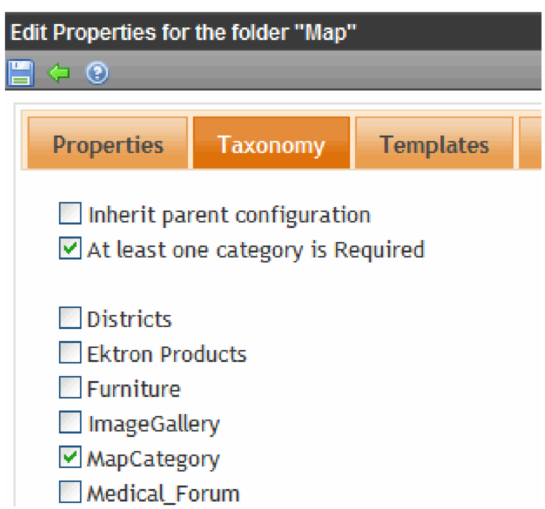
To assign a a taxonomy category to	Available methods	Prerequisites	For more information, see
Content Note: Regardless of the method you use to assign a taxonomy to content, the result is the same.	from the Edit Content in Folder screen	- Must be authorized to edit the folder's content - You can only select from taxonomies assigned to the content's folder	"Content Editor-Based Taxonomy Assignment" on page 9-213
	from the Content Tab > Taxonomy screen	Must be member of administrators group or Taxonomy administrator	"Administrator-Based Taxonomy Assignment" on page 9-216
Users	from a community group	Taxonomy's Configuration > Group check box is checked	"Assigning a Taxonomy or Category to Community Group via the Edit Community Group Screen" on page 9-220

Content Editor-Based Taxonomy Assignment

Ektron CMS400.NET lets content editors assign a taxonomy category to content. They do this by navigating to a content block, clicking its **Category** tab, opening a taxonomy, and checking the correct level.



However, all taxonomies may not be available to every content item. Use a folder property's **Taxonomy** area to control which taxonomies can be assigned to a content in that folder.



For example, a folder's content consists of restaurants, and you want to restrict users to the Restaurant taxonomy -- users cannot assign other categories to that folder's content.

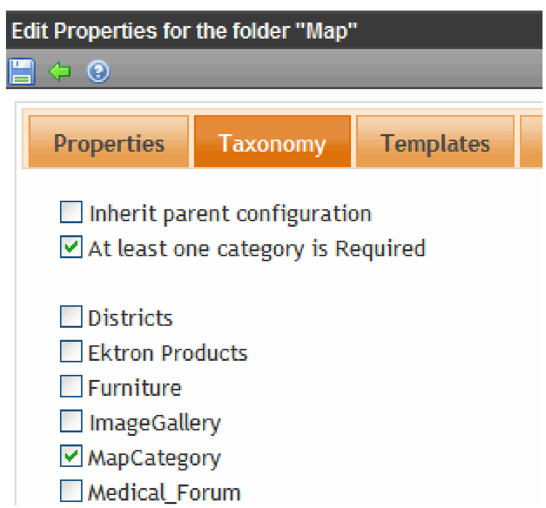
The following topics explain how administrators set up a folder's taxonomy properties, and how a user assigns taxonomy categories to content in that folder.

- "Assigning Taxonomies to a Folder" on page 9-214
- "Inheriting Taxonomies from a Parent Folder" on page 9-215
- "Requiring Content to Have at Least One Category Assigned" on page 9-215
- "Assigning a Taxonomy or Category to Content via the Edit Content Screen" on page 9-215

Assigning Taxonomies to a Folder

To make a taxonomy available to a folder, follow these steps.

1. Navigate to the folder by Clicking **Content> Folders**.
2. Choose **View** > **Properties**.
3. Click Edit ( ).
4. In the **Taxonomy** tab, uncheck the **Inherit Parent Taxonomy Configuration** checkbox. See Also: "Inheriting Taxonomies from a Parent Folder" on page 9-215
5. Check taxonomies that should be available to this folder.



6. From now on, users editing content in this folder can assign categories from the selected taxonomies.

Inheriting Taxonomies from a Parent Folder

Unlike some folder properties, Taxonomy settings are not inherited from a parent folder by default. But you can cause them to be inherited if that is appropriate.

If you are not working on the root folder and the appropriate set of Taxonomies is applied to a folder's parent folder, go to the folder's properties screen and check the **Inherit Parent Taxonomy Configuration** checkbox.

Requiring Content to Have at Least One Category Assigned

In the folder properties, you can require all content to be assigned at least one taxonomy category. If you do, when content in that folder is saved, Ektron CMS400.NET checks for at least one taxonomy category. If none is found, the user is notified that he must assign a taxonomy category before he can save the content.

To set a folder-level requirement for all content to be assigned a taxonomy category, follow these steps.

1. Navigate to the folder.
2. Choose **View** > **Properties**.
3. Choose the **Taxonomy Tab**.
4. Check the **Require at Least One Category Selection** checkbox.

Assigning a Taxonomy or Category to Content via the Edit Content Screen

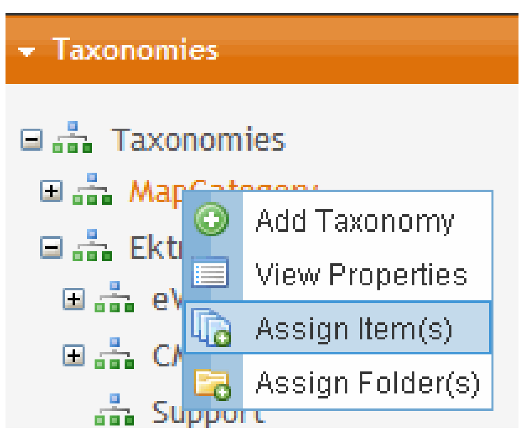
1. Select the content and Click the Edit button ( ).
2. Click the **Category Tab**.

3. Check the taxonomies or categories to apply.
4. Save the content.

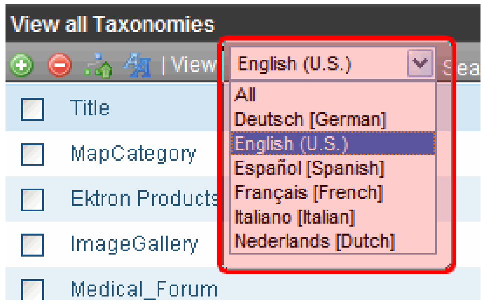
Administrator-Based Taxonomy Assignment

Assigning Content to a Taxonomy/Category

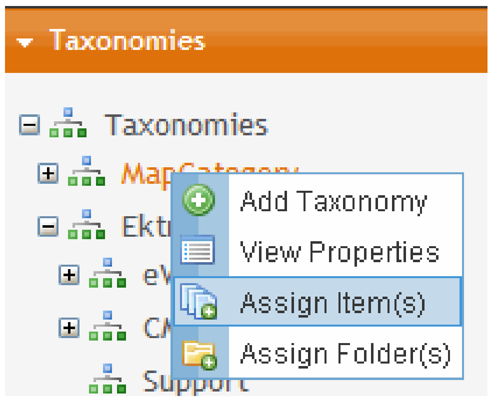
Members of the administrators group or taxonomy administrators can assign taxonomy categories to content via the View All Categories of Taxonomy screen. See Also: "Defining Roles" on page 15-32



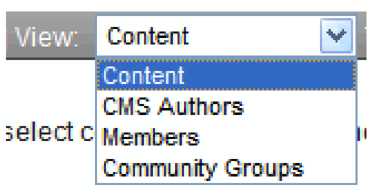
1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select a language whose taxonomies you want to work with (see image below). You can choose **All**.



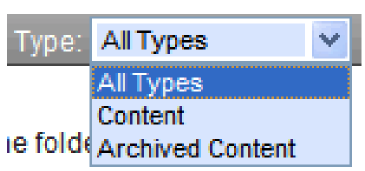
3. Select a taxonomy.
4. Select the category to which you want to assign content.
5. Right Click and choose **Assign Item(s)**.



6. Choose the object type of the item to associate.



7. If you selected **Content** as the object type, you can narrow down the type of content you wish to see via the **Type** pulldown.



- **All types** - both archived and active content
- **Content** - active content only

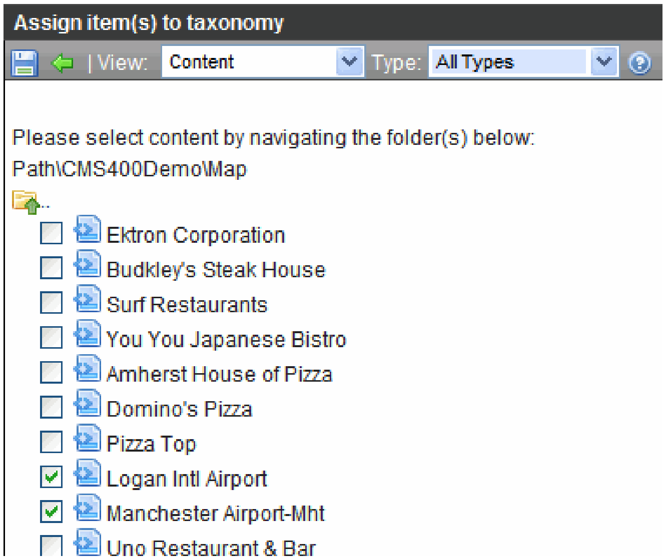
- **Archived Content** - only content that has been archived and set to remain on site. See Also: "Setting Archive Options" on page 7-198

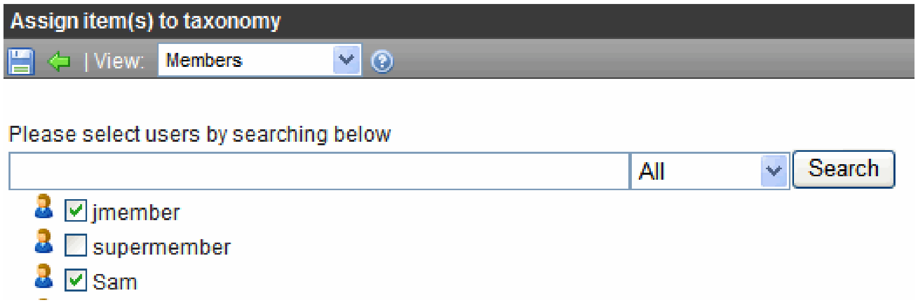
8. Navigate to the folder that contains the content you want to assign to the taxonomy or category.

   or

   Search for the user or community group to assign to the taxonomy or category.

Note: Folder content appears below the folder list (see below). Also, only content in the selected language appears.





9. Check the box to the left of content, user or community group you want to assign. You can assign all types of content, even blogs.

Assigning a Folder to a Taxonomy/Category

Note: If you assign a folder, the internal relationship is between the folder's content and a taxonomy category. The folder is merely a convenience for creating this relationship. There is no data connection between a folder and a taxonomy category.

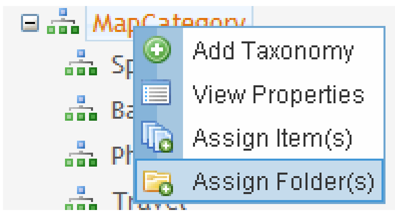
You can assign a folder to a taxonomy, thereby displaying published content in the folder *when the page is viewed*. As content is added to or removed from the folder, the taxonomy on the Web page changes dynamically.

For example, you have a "Top News Stories" folder, in which old news items are frequently replaced by newer ones. The taxonomy only shows the latest news items. The updating of the content is handled by the taxonomy automatically.

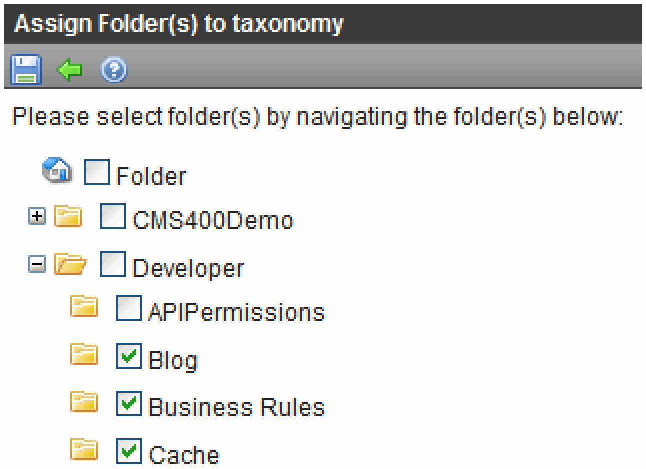
Note: Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

To assign a folder to a taxonomy category, follow these steps.

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select the language of the taxonomy on which to work.
3. Select the taxonomy or category under which you want to assign a folder.
4. Right Click and choose **Assign Folder(s)**.



5. Navigate to the folder you want to assign to the taxonomy or category.
6. Check the box to the left of all folders you want to assign.

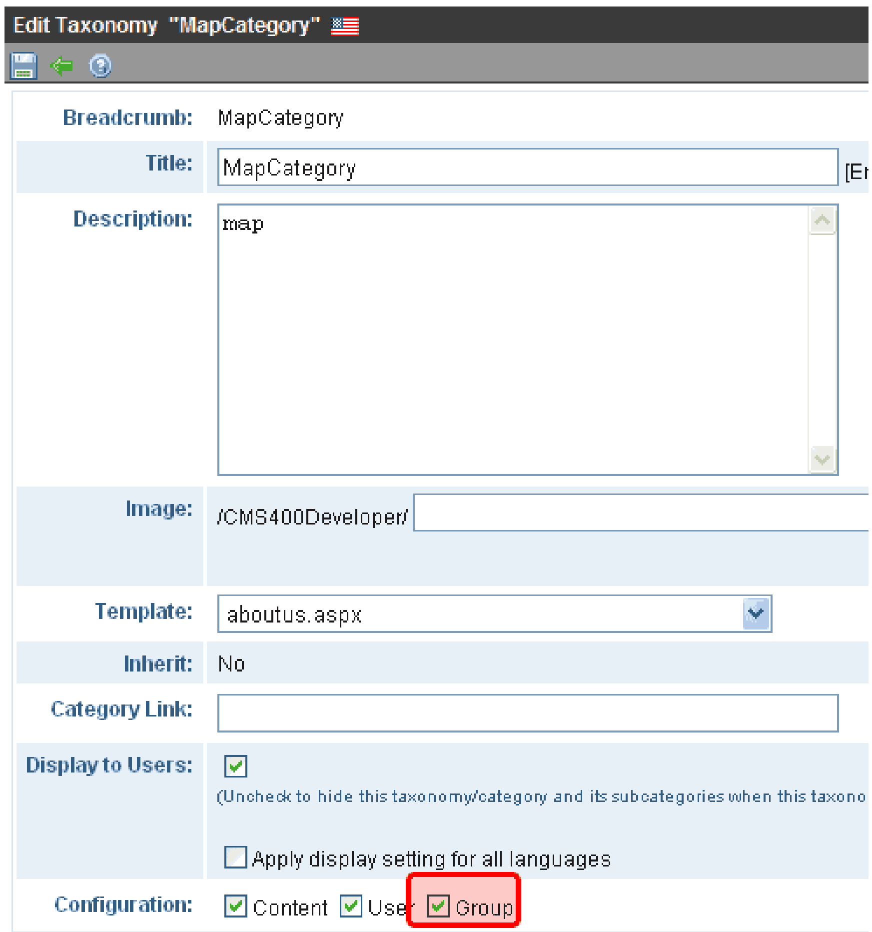


Warning! Only checked folders are assigned to the taxonomy/category. Checking a parent folder has no effect on its child folders.

Assigning a Taxonomy or Category to Community Group via the Edit Community Group Screen

Prerequisite

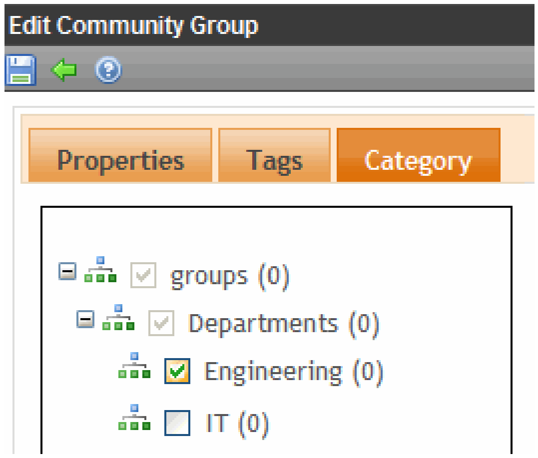
You can perform this procedure only if a taxonomy's **Configuration > Group** check box is checked.



If it is not checked, you can view the taxonomy categories assigned to a Community Group on the Edit Community Group Screen. And, you can assign Community Groups to a Taxonomy via the View all Categories of Taxonomy screen.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Select a community group.
3. Click the Edit button.

4. Select the **Category Tab**.



5. Check the taxonomies or categories to apply.
6. Click the Save button.

Additional Taxonomy/Category Tasks

The following sections explain additional tasks you can perform when working with a Taxonomy or its categories.

- "Viewing All Taxonomies" on page 9-221
- "Viewing a Taxonomy" on page 9-222
- "Edit a Taxonomy/Category's Fields" on page 9-226
- "Delete a Taxonomy/Category" on page 9-226
- "Add a Category to a Taxonomy/Category" on page 9-227
- "Remove Content from a Taxonomy/Category" on page 9-228
- "Remove Folder from a Taxonomy/Category" on page 9-229
- "Change Order of Categories Assigned to a Taxonomy/Category" on page 9-230
- "Change Order of Content Assigned to a Taxonomy/Category" on page 9-231
- "Importing and Exporting a Taxonomy" on page 9-232

Viewing All Taxonomies

The View All Taxonomies screen displays all taxonomies currently in Ektron CMS400.NET. The language pull down lets you filter the list by a language.

To work with any taxonomy, select it. When you do, it appears within the View All Categories of Taxonomy screen.

You can also use the View All Taxonomies screen to perform these tasks.

Button	Task	For more information, see
	Add new taxonomy	See "Creating a Taxonomy" on page 9-202
	Delete one or more taxonomies	"Deleting a Taxonomy from the View All Taxonomies Screen" on page 9-227
	Import a taxonomy	"Importing and Exporting a Taxonomy" on page 9-232
	Export for Translation	See "Exporting a Taxonomy" on page 9-233

Viewing a Taxonomy

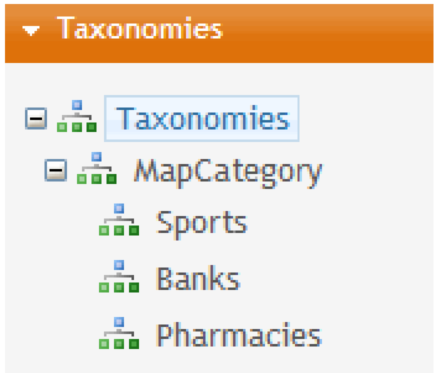
The View All Categories of Taxonomy screen exposes all categories in a selected taxonomy.

Use this screen to perform tasks on a taxonomy or one of its categories, such as adding new categories, assigning content to a category, and changing the order of items.

Note: On the View All Categories of Taxonomy screen, a box indicates the selected Taxonomy/category (see below).

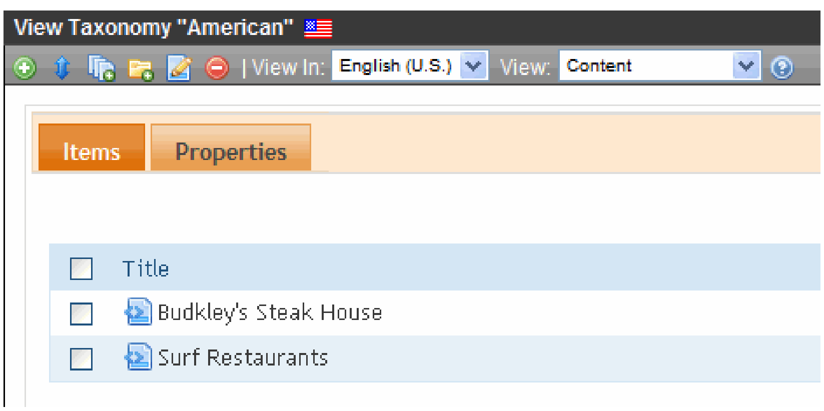
To access the View All Categories of Taxonomy screen, follow these steps.

1. From the Ektron CMS400.NET Workarea, go to **Content** > **Taxonomies** and Click on the top Taxonomy node to see all taxonomies.

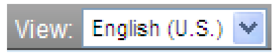
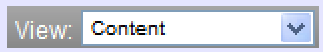


2. Use the language pull-down to select the language of the taxonomy you want to work with.

3. Click a taxonomy item. The View Taxonomy screen appears.

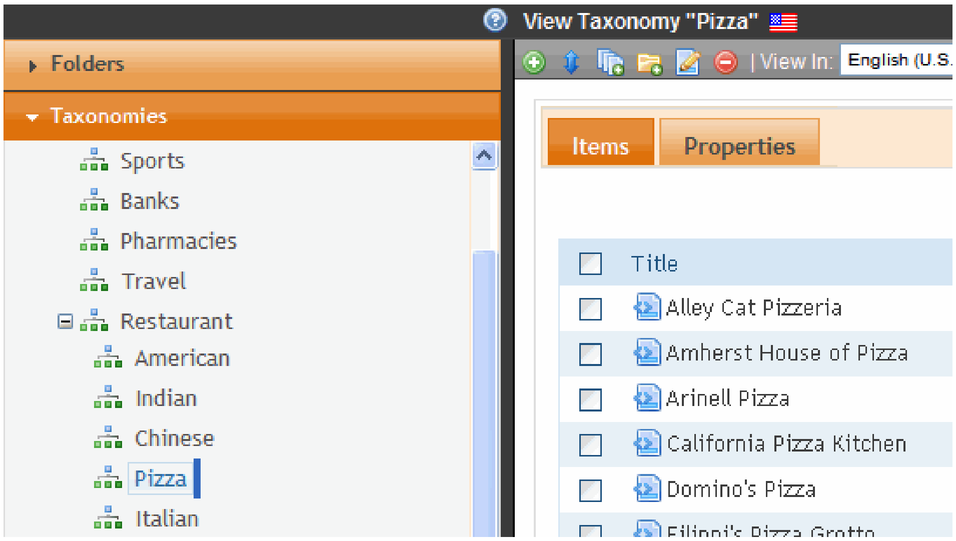


Tasks you can perform from this screen are listed below.

Task	How to initiate	For more information, see
View Languages	Choose from the drop down selector the language of the taxonomy you wish to view/change. 	
View Types	Choose from the drop down selector the type of taxonomy you wish to view/change. 	
Edit a taxonomy's fields and properties	Click Edit toolbar button ( )	
Delete a taxonomy or category	Click Delete toolbar button ( )	"Deleting a Taxonomy from the View All Taxonomies Screen" on page 9-227
Export a taxonomy	Click Export Taxonomy toolbar button ( )	"Exporting a Taxonomy" on page 9-233
Add a taxonomy category	1. Select the taxonomy/category under which the new category should appear. 2. Click the Add Category button( ).	
Change the order of items in a taxonomy/category	1. Select the taxonomy/category you wish to reorder 2. Click the Reorder button ( ) from the toolbar.	"Change Order of Categories Assigned to a Taxonomy/Category" on page 9-230
Assign content items to a category	1. Select the taxonomy/category to which you wish to add items. 2. Click **Assign Items ( )** from the toolbar.	
Assign folders to a category	1. Select the taxonomy/category to which you wish to assign folders. 2. Click Assign Folders ( ) from the toolbar.	

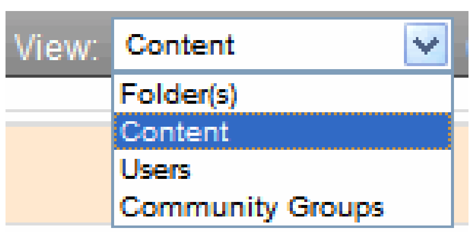
Viewing a Taxonomy or Category

To view any taxonomy or category, click it. The screen on the right shows all items associated with this category.



The View Taxonomy screen displays the Title of the items assigned to this taxonomy category. Additionally, the ID and Language ID are shown.

From the View Taxonomy screen, you can choose to filter the list by taxonomy type (Folders, Content, Users, Community Groups) by selecting the View dropdown.



From here, you can perform these tasks.

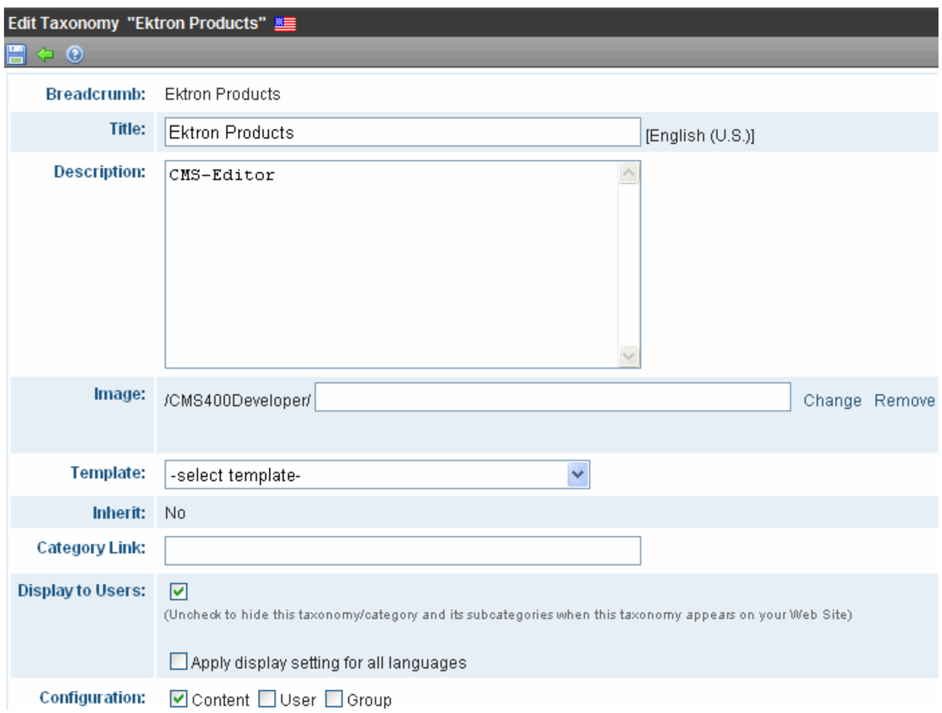
Task	Directions
Edit taxonomy/category fields (title, description, image, etc.)	See "Edit a Taxonomy/Category's Fields" on page 9-226.
Remove items (content, folders, users or community groups) from the taxonomy/category	See "Deleting a Category from the View All Categories of Taxonomy Screen" on page 9-227

Edit a Taxonomy/Category's Fields

To edit a Taxonomy's fields, follow these steps.

Note: Only administrators or users to whom the Taxonomy Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select the taxonomy from the list of taxonomies.
3. Click the Edit button ( ).



4. For a description of these fields, see

"Taxonomy Field Description" on page 9-205

Delete a Taxonomy/Category

There are two ways to delete a taxonomy or category.

- "Deleting a Taxonomy from the View All Taxonomies Screen" on page 9-227
- "Deleting a Category from the View All Categories of Taxonomy Screen" on page 9-227

After you delete a taxonomy, it can no longer be assigned to content and folders. Further, existing links to content (via the Category tab) are deleted. And, if the taxonomy was assigned to a folder (via the Folder Properties screen), it is no longer assigned.

See Also: "Deleting a Taxonomy in a Multi-Language Environment" on page 9-237

Deleting a Taxonomy from the View All Taxonomies Screen

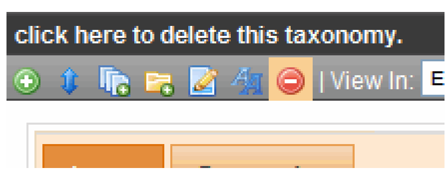
Note: Only administrators or users to whom the Taxonomy Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

1. From the Workarea, go to **Content> Taxonomies**.
2. From the View All Taxonomies Screen, check the box to the left taxonomy you want to delete.
3. Click the delete button ( ).

Note: The delete button does not appear if the language selector is set to **All**.

Deleting a Category from the View All Categories of Taxonomy Screen

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select the taxonomy from the list of taxonomies. The taxonomy items and properties will show on the right side of the screen.
3. To delete the taxonomy, Click on the Delete button ( ) and Click "Ok" on the pop-up screen.



4. A confirmation message appears. Click OK.

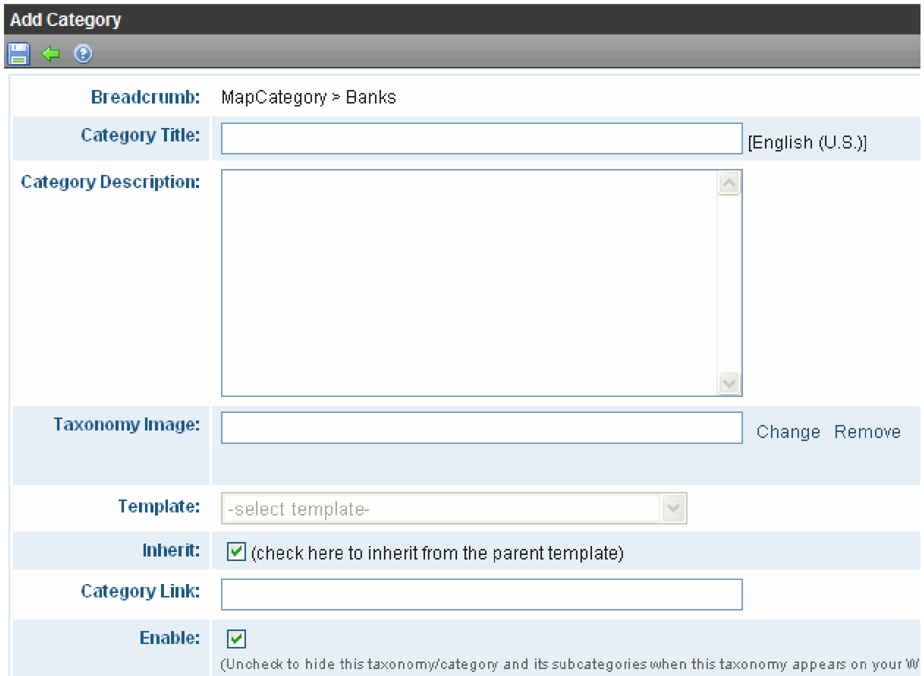
Add a Category to a Taxonomy/Category

Follow these steps to add a category to a taxonomy, or to add a subcategory to a category.

Note: Only administrators or users to whom the Taxonomy Administrator role has been assigned see the **Content > Taxonomies** option.See Also: "Defining Roles" on page 15-32

1. From the Workarea, go to **Content Tab** > **Taxonomy**.

2. Select the taxonomy or category under which you want to create a new category.
3. Click the Add button ( ) from the popup menu.
4. The Add Category screen appears.



5. Complete the fields for the new category. See Also: "Taxonomy Field Description" on page 9-205
6. Click the Save button ( ).

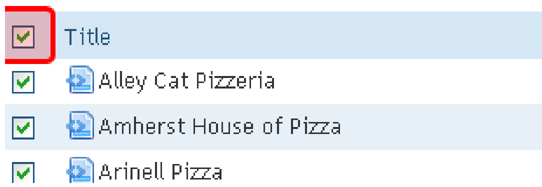
Remove Content from a Taxonomy/Category

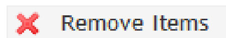
Note: Only administrators or users to whom the Taxonomy Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

See Also:

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select a taxonomy or category from the Taxonomies tree on the left side of the screen that you wish to change.
3. Check the box to the left of content you want to remove.

Tip!To remove all content, check the box in the title bar.



4. Click the Remove Items button (

).

Remove Folder from a Taxonomy/Category

Note: Only administrators or users to whom the Taxonomy Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

- "Background Information" on page 9-229
- "Steps for Removing a Folder from a Taxonomy" on page 9-229

Background Information

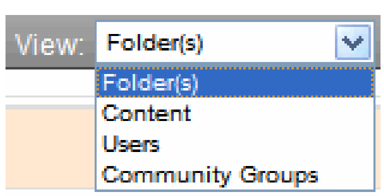
If you assign a content folder to a taxonomy category, the internal relationship is between the folder's content and a taxonomy category. A folder is merely a convenience for creating this relationship. There is no data connection between a folder and a taxonomy category.

Therefore, if you delete a content folder from a taxonomy category, all content in that folder remains assigned to it. To remove the folder's content from the category, see "Remove Content from a Taxonomy/Category" on page 9-228.

However, after deleting a content folder, the connection between the folder and taxonomy category is broken. So, content subsequently added to the folder is not assigned to the taxonomy.

Steps for Removing a Folder from a Taxonomy

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select the taxonomy or category that has the folder that you want to delete.
3. From the View dropdown, select **Folder(s)**.



4. Check the box to the left of folders you want to remove.

TIP!

Note: To remove all folders, check the box in the title bar.

5. Click the Remove Items button (Remove Items).

Change Order of Categories Assigned to a Taxonomy/Category

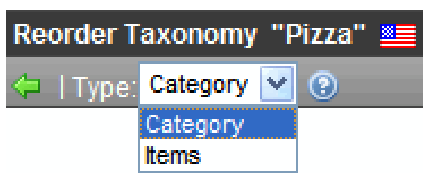
Note: Only administrators or users to whom the Taxonomy Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

You can reorder (that is, change the sequence of) the categories below a taxonomy or one of its categories. Reordered *subcategories* appear only within the Ektron CMS400.NET Workarea.

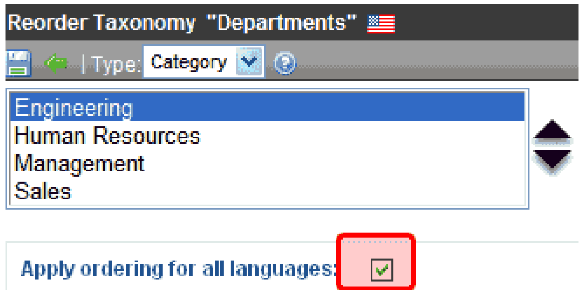
To reorder the categories assigned to a taxonomy or category, follow these steps.

See Also:

1. From the Workarea, go to **Content Tab** > **Taxonomy**.
2. Select the taxonomy or category that has the folder that you want to reorder.
3. Select the taxonomy or category that has content that you want to reorder.
4. Click the Reorder button( ).
5. Set the Type pull-down list to Category.



6. Select an item that you want to move up or down.
7. Click the up or down arrow to move the item in that direction.
8. Continue steps 6 and 7 until all content is in the desired order.
9. If there are several language versions of this taxonomy, you can automatically reorder all versions. To do that, check **Apply ordering for all languages**.



10. Click the Save button ( ).

Change Order of Content Assigned to a Taxonomy/Category

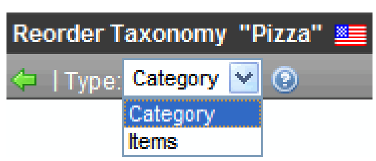
You can reorder (that is, change the sequence of) content within a category. Reordered *content* appears within the Ektron CMS400.NET Workarea and can appear on your Web site of the Directory server control's `ItemSortOrder` property is set to `taxonomy_item_display_order`.

To reorder the content assigned to a category, follow these steps.

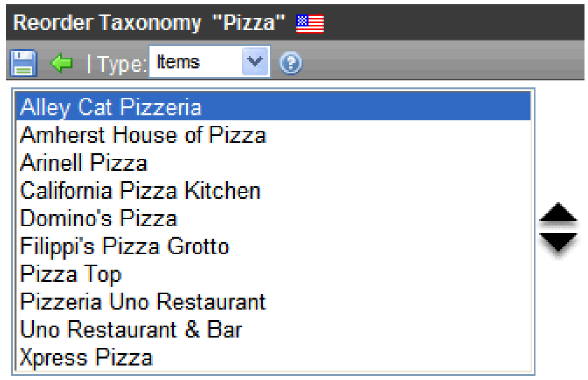
Note: Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Content > Taxonomies** option. See Also: "Defining Roles" on page 15-32

---

1. From the Workarea, go to **Content** > **Taxonomies**.
2. Select the taxonomy or category that has the folder that you want to reorder.
3. Click the **Reorder** button( ).
4. Set the reorder pull-down list to **items**.



5. All items assigned to the category appear.



6. Select a content block that you want to move up or down.
7. Click the up or down arrow to move the item in that direction.
8. Continue steps 7 and 8 until all content is in the desired order.
9. Click the Save button ( ).

Importing and Exporting a Taxonomy

You can *export* any taxonomy as an xml file. Then, you can reuse it or send it to someone else, who would *import* it in order to bring a copy of it onto their computer.

You can use the Export/Import feature like a "save as" feature. For example, you want to create a taxonomy that is similar to an existing one but has some differences. The easiest way to do this is to export an existing one, import it under a new name, and edit it.

Below is an example of part of a taxonomy saved as an XML document.

```
<?xml version="1.0" ?>
- <TaxonomyData xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
<TaxonomyName>MapCategory</TaxonomyName>
<TaxonomyDescription>map</TaxonomyDescription>
- <Taxonomy>
- <TaxonomyData>
<TaxonomyName>Sports</TaxonomyName>
<TaxonomyDescription>sports</TaxonomyDescription>
</TaxonomyData>
- <TaxonomyData>
<TaxonomyName>Banks</TaxonomyName>
<TaxonomyDescription>Banks</TaxonomyDescription>
</TaxonomyData>
- <TaxonomyData>
<TaxonomyName>Pharmacies</TaxonomyName>
<TaxonomyDescription>Pharmacies</TaxonomyDescription>
</TaxonomyData>
- <TaxonomyData>
<TaxonomyName>Travel</TaxonomyName>
<TaxonomyDescription>Travel</TaxonomyDescription>
</TaxonomyData>
- <TaxonomyData>
<TaxonomyName>Restaurant</TaxonomyName>
<TaxonomyDescription>Restaurant</TaxonomyDescription>
```

```
- <Taxonomy>
- <TaxonomyData>
<TaxonomyName>American</TaxonomyName>
<TaxonomyDescription>American</TaxonomyDescription>
</TaxonomyData>
- <TaxonomyData>
<TaxonomyName>Indian</TaxonomyName>
<TaxonomyDescription>Indian</TaxonomyDescription>
```

</TaxonomyData>

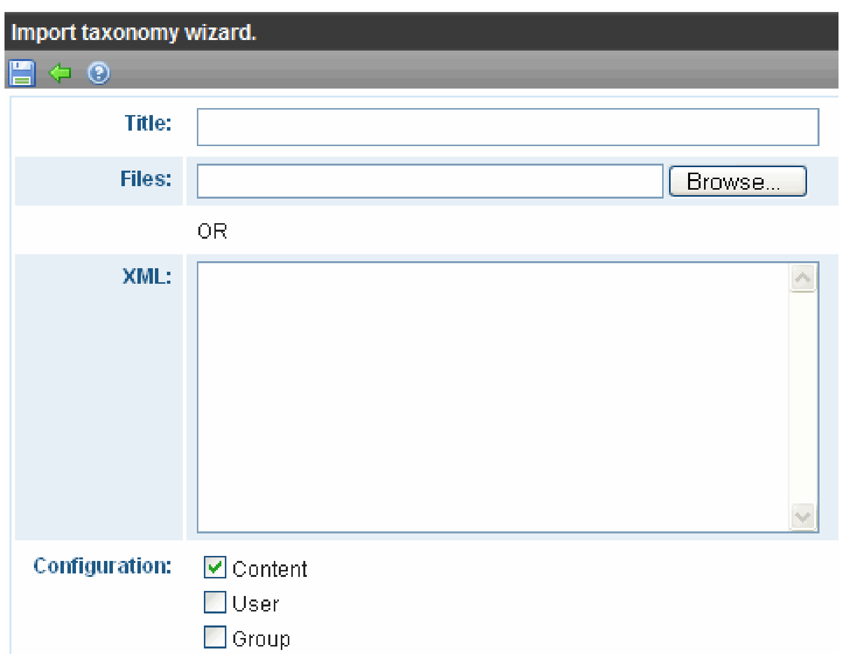
Exporting a Taxonomy

Exporting a taxonomy means saving it as an .xml file on your computer or network drive. To export a taxonomy, follow these steps.

1. From the Workarea, go to **Content > Taxonomies**.
2. Select the language of the taxonomy that you want to export.
3. All taxonomies in that language appear.
4. Click a taxonomy that you want to export.
5. Click the Export Taxonomy button ( ).
6. You are prompted to select a folder into which to save it.

Importing a Taxonomy

1. From the Workarea, go to **Content > Taxonomies**.
2. Click the Import Taxonomy button ( ).
3. The Import Taxonomy screen appears.



4. In the **Title** field, enter a name for your new taxonomy.
5. Click the **Browse** button.
6. Navigate to the taxonomy file you want to import.
7. The path appears in the **File** field.

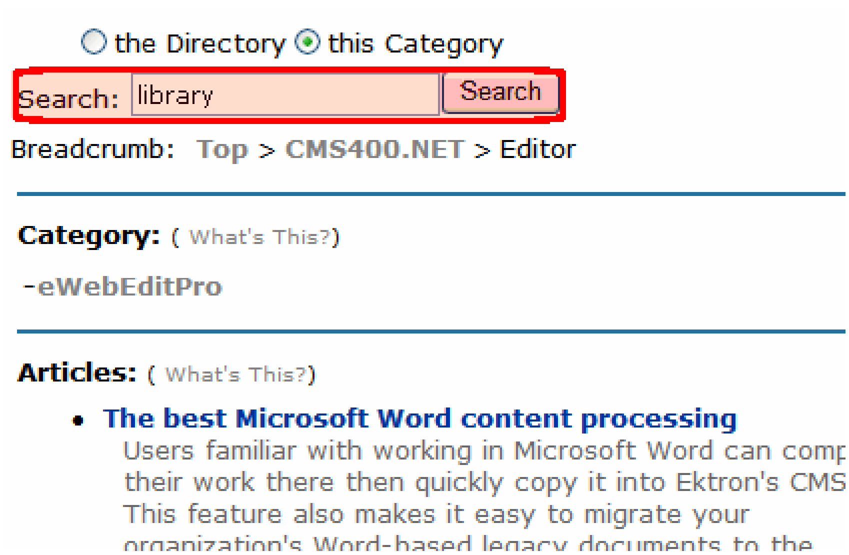
Note: Alternatively, you can enter or paste the xml into the **XML** box.

8. Determine the taxonomy's configuration.
9. Click the Save button ( ).

Note: If you assign a name that is already given to a taxonomy, Ektron CMS400.NET appends a number to the title, beginning with 1.

Displaying a Content Item Taxonomy Search on your Web Site

When your Web developer places a Directory server control on a Web page, he can use the **Enable Search** property to include a Search box with the taxonomy display (circled below). See Also: "EnableSearch" on page 9-243



The box helps site visitors find content by returning only items that include a search phrase *and* are assigned to a selected category.

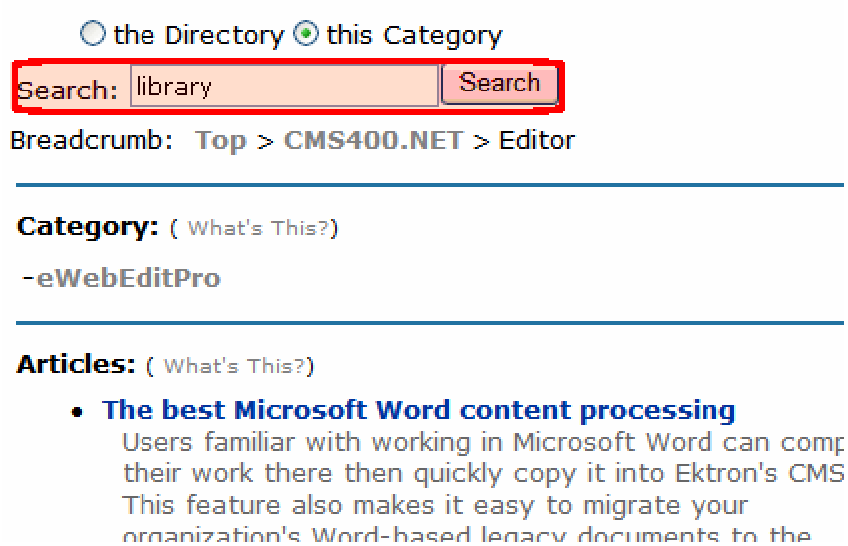
When placing a Directory server control, your Web developer defines a Taxonomy ID number. The ID determines the top level of the taxonomy that appears below the **Search** box, to the right of **Breadcrumb**. Below that are categories that exist directly below the Taxonomy ID.

Using the Taxonomy Search

To use the search, a site visitor enters a search term and clicks the **Directory** radio button (above the **Search** box). The screen may return links in two areas below **Breadcrumb**.

- **Category** - all *categories* below the selected level with content that includes the search term. Click a category to see a list of content that includes the search term in that taxonomy/category level or one of its subcategories.
- **Articles** - content within the *currently selected* taxonomy/category level that includes the search term

As illustrated below, within the **Editor** category, one *category* (**eWebEditPro**) includes content with the word **library**. And, one content block (**The best Microsoft Word content processing**) includes **library**.



Multi-Language Support for Taxonomies

This section explains of how Taxonomy is supported in a multi-language environment. It consists of the following topics.

Creating a Taxonomy in a Multi-Language Environment

When you create a new taxonomy, you select a language. At that point, a version of that taxonomy is also created for each enabled language.

For example, you create a taxonomy in English, and French and Spanish are also enabled (in the **Settings > Language Settings** screen). Ektron CMS400.NET now has versions of that taxonomy in English, French, and Spanish. The ID of each taxonomy is the same, but the language ID is different. You do not need to use all language versions.

The three versions now linked and cannot be unlinked. So, for example if you assign a category to the English taxonomy, that category is also assigned to the French and Spanish versions. Of course, since the text is English, it will probably have to be translated. See Also:

Upgrading and Multi-Language Taxonomy Support

As of version 7.6.5, any new taxonomies are synchronized. That is, if you create a taxonomy in English, one is created with the same taxonomy ID but a different language ID in all other enabled languages. And, if you add categories to one language taxonomy, those categories are automatically added to the other language versions of that taxonomy.

Previously, CMS400.NET allowed multiple language versions of a taxonomy, but changes to one language did not affect the language-related versions. If your Ektron CMS400.NET has such versions, the 7.6.5 upgrade does not synchronize your taxonomy. Furthermore, no additional versions of that taxonomy will be created in other enabled languages. Ektron assumes that, since taxonomies in those languages already exist, you want to keep them as they are. So, for example, assume you created a taxonomy in a previous version of Ektron CMS400.NET in English and Spanish. The upgrade does not synchronize them.

Enabling Taxonomy Synchronization for Taxonomies that Existed Prior to 7.6.5 Upgrade

Suppose that, after the 7.6.5 upgrade, you want to transform an unsynchronized taxonomy to a synchronized multi-language taxonomy, so that changes to one are automatically reflected in the others. To accomplish this, upgrade to 7.6.5 and delete the Spanish version. At that point, a version of that taxonomy will be created for every enabled language and synchronized with the English version. You now have the option of translating category names manually or exporting the taxonomy, translating it and then importing back in. See Also:

Deleting a Taxonomy in a Multi-Language Environment

If you delete a taxonomy, all related language versions are also deleted.

Enabling/Disabling a Language in a Multi-Language Environment

If you enable a new Workarea language, a version of every taxonomy created in version 7.6.5 and above is automatically created in that language.

If you disable a language, all of its taxonomies are deleted.

See Also: "Determining Which Languages are Available" on page 14-5

Taxonomy Properties in a Multi-Language Environment

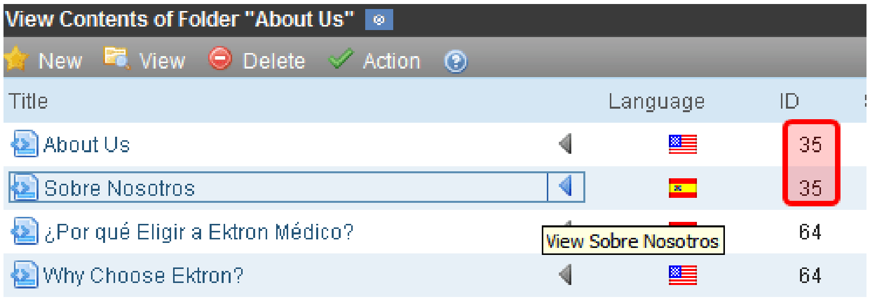
Initially, all related-language versions of a taxonomy take their properties from the original language version. For example, if you create a taxonomy in English and French is also enabled, the French Taxonomy description is the same as the English one, as are the taxonomy image, taxonomy template, value of **Display?** checkbox, etc.

However, after the initial creation of the multiple-language versions, changes to taxonomy properties affect the current language only -- they do not affect the related-language versions.

Exception - When you edit the taxonomy **Display?** property, you are prompted to apply the change to all languages *or* the current language only. See Also: "Display?" on page 9-206

Assigning Content to a Multi-Language Taxonomy

Ektron CMS400.NET supports multiple language versions of content, as shown below.



As you can see, Content ID=35 exists in English and Spanish.

When applying content to a taxonomy category, you can only apply content whose language matches the taxonomy language. If that content exists in other languages, the related-language version is also applied to the related-language taxonomy.

So, to continue the above example, assume there is a taxonomy in English and you apply content item ID=30, **Sample Content Block** to one of its categories. If that taxonomy exists in German, the content block titled **Ektron CMS400.NET Server Kontrollen** (also ID=30) is applied to the corresponding category in the related German taxonomy.

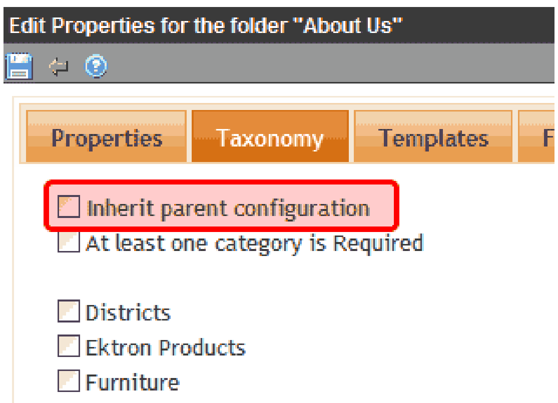
If there is no corresponding German content, nothing is applied to the German taxonomy category.

Removing Content from a Multi-Language Taxonomy

If you remove content from a taxonomy in any language, it is removed from all language-related taxonomies.

How a Folder's Taxonomy Properties are Affected by Multi-Language Support

If there are several language-related versions of a taxonomy and you select one of them then edit a folder's taxonomy properties, content in the related language inherits the taxonomy folder properties.



For example, assume I select English, then edit a folder's taxonomy properties and apply taxonomy categories. See Also:

If I later edit French content in that folder, the corresponding French taxonomy's categories are available to be assigned via the **Category** tab.

Further, the value of the **At least one category is Required** check box is also inherited. This means that if a category must be applied to English content, it is also required for French content.

Assigning Folders to a Multi-Language Taxonomy

When you assign a folder to a taxonomy category, you indicate that all folder content is assigned to that node. Ektron CMS400.NET folders are language-neutral, so the folder is also applied to the corresponding taxonomy category in every language. However, only folder content that matches the taxonomy's language is assigned to the taxonomy category.

So, for example, a folder has three content blocks.

Language	Content in folder in this language
English	100 101 102
German	100

If you apply that folder to a taxonomy, the English version of the taxonomy has three content blocks assigned, but the German version only gets one content block (ID 100).

If content is later added to the folder, new English content is assigned to the English taxonomy, and new German content is assigned to the German taxonomy.

TIP!

Note: If you apply a folder to a taxonomy, numbers on the View Taxonomy screen indicate how many content items are applied to it. Unless you have the same number of content items in each language, this number is different for every language.

Removing Folders from a Multi-Language Taxonomy

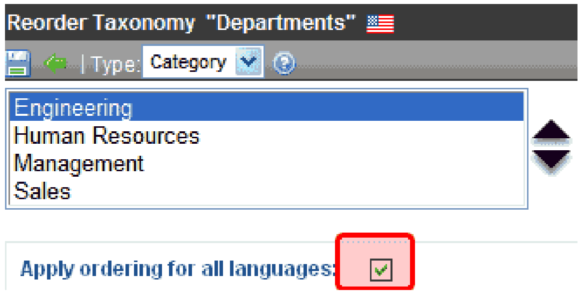
If you remove a folder from its assignment to a taxonomy category, the content in that folder is still applied. So, you must also remove all of its content, as described in "Removing Content from a Multi-Language Taxonomy" on page 9-238.

Reordering Content in a Multi-Language Taxonomy

If you reorder the content assigned to a taxonomy category, there is no change to corresponding categories in other languages. This is because there is no guarantee that content that exists in one language exists in the other languages.

Reordering Categories in a Multi-Language Taxonomy

If you reorder categories assigned to a Taxonomy/Category, you have the option of applying the changes to all language-related categories (see below).



Using Taxonomies with Social Networking

If you have a community or social networking Web site, you can assign users and community groups to a taxonomy. This allows site visitors to search for users and groups by category.

To enable a taxonomy-based search of users and community groups, a developer uses the following server controls on your site.

- **CommunityGroupBrowser control** - lets a site visitor browse a taxonomy category for community groups
- **CommunitySearch control** - lets a site visitor search for users and community groups based on selected criteria

See Also: "CommunitySearch Server Control" on page 16-301

Directory Server Control

The Directory server control lets you customize the behavior of the Taxonomy feature. You place this control on any Web form to display a taxonomy. For more information about the site visitor experience with Taxonomy, see "Taxonomy" on page 9-200.

Improving Taxonomy Performance

To minimize taxonomy's impact on the performance of your production server, follow these guidelines.

- Use the default page size (50). If you need to customize page size, use Ektron CMS400's API, but do not increase it above 800.
- For large databases, do not increase the value of the `TaxonomyDepth` property above 1. Changing this value dramatically slows down your production server's performance. However, you can increase depth on your staging server for testing purposes.

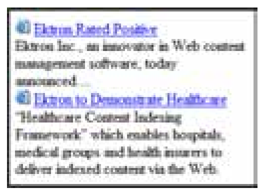
Directory Server Control Properties

The Directory server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

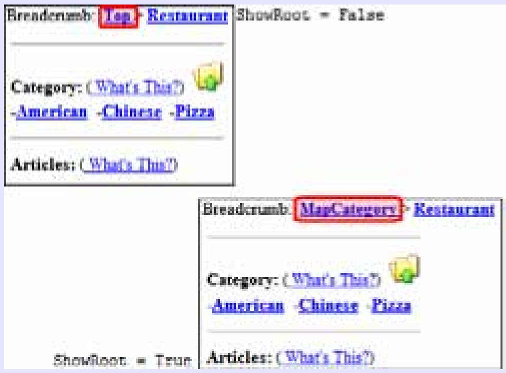
Property	Response	Data Type
AddItemFolderID	Define the Ektron CMS400.NET folder ID where content is stored when an item is added to the taxonomy via the Add Asset link or the Add Content link. To enable adding content items via the Directory server control, you must use an EkML file with the [$AddAsset] and [$AddArticle] variables. See Also: "taxonomy.ekml" on page 21-467	Long
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time, in seconds, the server control's data is cached. The default is 0 (zero). For example, to cache data for five minutes, set this property to 300. See Also: "Caching with Server Controls" on page 21-31 **Warning! Important!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.	Double
DisplayXslt	If you want to use an XSLT to control the display of the directory server control on this page, enter the path to the XSLT file. **Warning! Important!**: If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning! Important!** If you enter a valid EkML file at the `Mark-upLanguage` property, the `Displayxslt` property value is ignored.	String

Property	Response	Data Type
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically.	String
EnableAjax	Set to true to enable Ajax searches. When enabled, the `MaxResults` property determines the maximum number of results per page. **True** = Enable Ajax Search (default value) **False** = Original HTML Search	Boolean
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of taxonomy items while controlling the amount of screen space. To accomplish this, the taxonomy display is limited to the number set in the `MaxResults` property. If you set this property to **true** (the default), and the number of taxonomy items exceeds `MaxResults`, navigation aids appear below the last item. The site visitor uses them to view additional items. See example below.  So, for example, if a taxonomy has 9 items and `MaxResults` is set to 3, the screen displays only the first three items. When the site visitor clicks **[Next]**, he sees items 4, 5 and 6, etc. **Warning! Important!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.	Boolean
EnableSearch	Set to **true** if you want a search box (shown below) to appear above this taxonomy display. A site visitor can use the search to find content within a taxonomy/category that includes terms of interest. To suppress the search box, set to **false**.	Boolean

Property	Response	Data Type
		
Hide	Used to hide the directory control in design time and run time. **True** = Hide Sitemap trail **False** = Show Sitemap trail	Boolean
IncludeIcon	Choose whether to display icons next to the taxonomy's links. **Warning! Important**: This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True.  **True** = Show icons **False** = Hide icons	Boolean
ItemSortOrder	Specify the sort order of results. Choices are: **taxonomy_item_display_order** - the order of taxonomy items as set in the Workarea. For additional information, see "Change Order of Content Assigned to a Taxonomy/Category" on page 9-231. **content_title** - the content is listed in alphabetical order by title. **date_created** - content is listed in the order by which it was created. **last_edit_date** - content is listed in order by its last edit date. You can specify the direction of the items with the `SortDirection` property.	
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Response	Data Type
LinkTarget	Defines the way a link acts when it is clicked. The choices are: **_blank** - loads the link in a new blank window. This window is not named. **_self** - loads the link in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - loads the link in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - loads the link in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	ItemLinkTargets
MarkupLanguage	Identify the template markup file that controls the display of the taxonomy. For example, mytaxonomymarkup.ekml. If the .ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `..\workarea\customfiles\markup\mytaxonomymarkup.ekml` . This property is blank by default. If nothing is entered, the following EkML file is used: `\[site_ root]\workarea\template\taxonomy\taxonomy.ekml` See Also: "Ektron Markup Language" on page 21-414and "taxonomy.ekml" on page 21-467 Note: If you enter a valid EkML file, the `DisplayXslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.	String
MaxResults	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter zero (0). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, set the `EnablePaging` property to **true**. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below. Bill Lumbergh Bob Porter Bob Slydell Milton Waddams [First] [Previous] [Next] [Last]	Integer

Property	Response	Data Type
Recursive	Set to True to include child folders of the parent folder.	Boolean
ShowAllChecked	When set to True, a check box appears in the Show All check box.	Boolean
ShowCount	Indicates if the number of taxonomy items appears next to each category when displayed in the Web site. (See example below.) Default value is false.  	Boolean

Property	Response	Data Type
ShowRoot	Set to **False** if you want **Top** to represent the first node of the taxonomy path. Set to **True** if you want the *name* of the first node of the taxonomy path to appear instead of **Top**. 	Boolean
SortDirection	Select the direction of the `ItemSortOrder` property. Choose Ascending or Descending.	String
TaxonomyCols	Enter the number of columns in which this taxonomy/category will appear on the page.	Integer
TaxonomyDepth	Enter the number of taxonomy levels to retrieve below each taxonomy/category if you are accessing a taxonomy's XML using code behind. For example, if the taxonomy is **Businesses > Restaurants > Pizza**, and you set **Taxonomy Depth** to **2**, only Business and Restaurants are available in code behind. This setting has no effect on the display generated by the Directory server control, which always displays only one level below the current. To retrieve all categories for a taxonomy recursively, enter -1. The default value is 1. **Warning! Important!** - For a live site, Ektron strongly recommends leaving this value at **1**. Increasing this value can slow down your live Web server. However, for testing on a staging server, you can increase the depth.	Integer
TaxonomyId	Enter the ID number of the taxonomy or category to appear in this server control. If you don't know the number, click the button and navigate to the taxonomy or category.	Long
TaxonomyItemCols	Enter the number of columns in which this taxonomy/category items (articles) will appear on the page.	Integer

Property	Response	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Map Server Control

The Map server control displays a map that flags locations of interest to your site visitors. Each location is a CMS content item to which map information was added. For example, if your site hosts a school district, each map location could represent one school in the district.

A visitor can zoom the map in and out, get directions to any location, and narrow the list of locations using a text search. For example, if your map initially flags all schools in a geographic area, the visitor can redraw the map to show only schools with a gym.

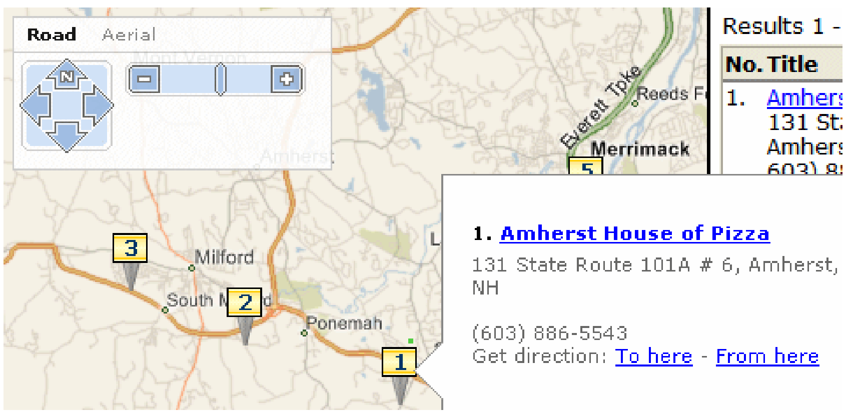
If you want the map to show events, you can apply dates to Ektron CMS400.NET content. If you do, a site visitor using the map can search by date as well as location to find events of interest.

Warning! As a map's location boundaries change, only locations within the boundaries appear. Likewise, if a date is assigned to content, only content within the selected date range appears.

If a map has at least one flagged location, a box can appear to its right with information about each flagged location. The locations are sorted by distance to starting location. From this box, you can

- view the content to which the location is assigned
- find the distance to a location
- center the map on a location
- get directions to a location

If you click any flagged location, a box appears showing a link to that content in Ektron CMS400.NET, additional information about the item, and a link to directions.



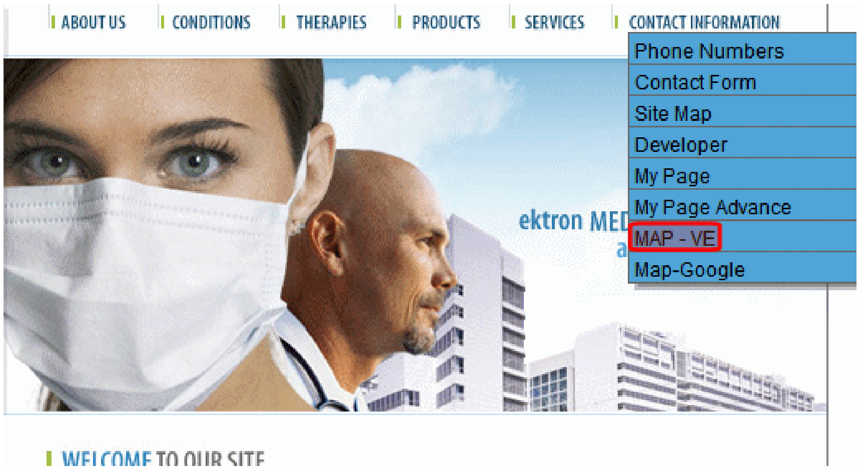
This section explains how site visitors can use the map's features, as well as how you can control the map's operation through the following sections.

- "Using Maps on the Sample Site" on page 9-249
- "Controlling the Visitor Experience with Maps" on page 9-256
- "Map Server Control Properties" on page 9-260

Using Maps on the Sample Site

You can view maps on Ektron CMS400.NET's sample site. To do so, open the home page (http://*your server address*/*siteroot*/default.aspx). Then, click **Contact Information > Map VE** or **Contact Information > Map Google**.

Note: If you want to work with these maps in VisualStudio.NET, the Bing Maps for Enterprise map is on the map.aspx page. The Google map is on mapgoogle.aspx.



Note: Ektron CMS400.NET provides a Google map key that you can use for testing on localhost. But, if you want to use Google map with your production server, you must install a license key. See "Obtaining a License to Use Google Maps" on page 9-249.

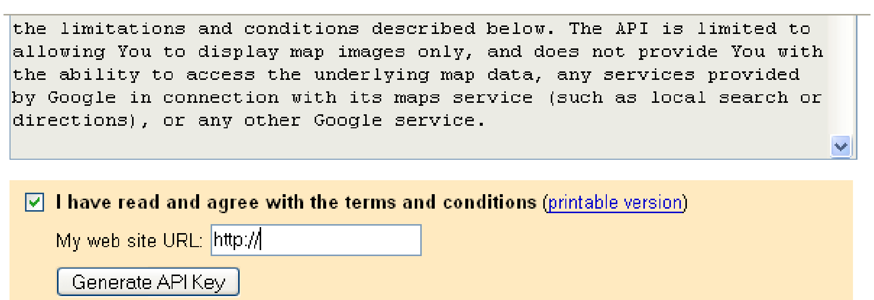
Obtaining a License to Use Google Maps

Before your production server can use Google's map feature, follow these steps to obtain and install a license key. For Google Map's terms and conditions, see http://code.google.com/apis/maps/terms.html

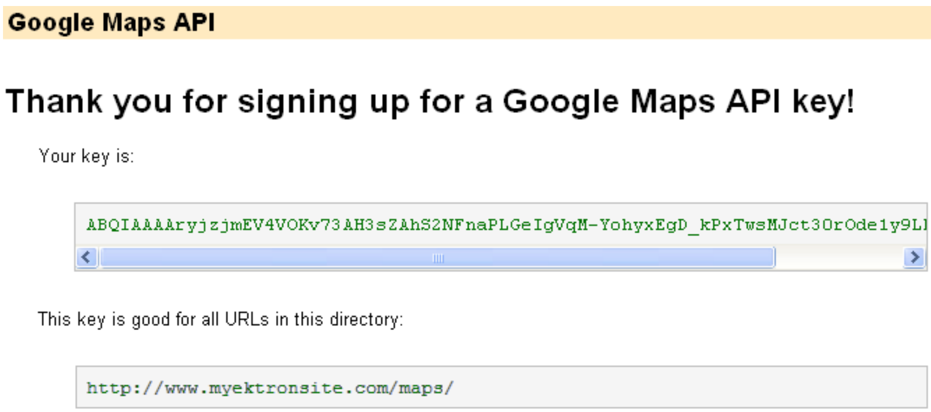
1. Go to http://www.google.com/apis/maps.
2. Click **Sign up for a Google Maps API key**.
3. Read the terms and conditions. At the bottom of the page, check the box next to **I have read and agree with the terms and conditions**.
4. Enter your URL in the **My web site URL:** field. For example, `http://www.example.com/maps`.

Warning! A single Maps API key is valid for a single "directory" on your web server. If you sign up for the URL http://www.example.com/maps, the key you get is good for all URLs in the http://www.example.com/maps/ directory.

5. Click the **Generate API Key** button.



6. You are asked to sign in to Google. If you don't have an account, create one.
7. A new page appears with your license key at the top. Copy the key.



8. Without closing that page, open the *web site root*/`web.config` file.
9. Go to the line that begins `<add key="GoogleMap"`.
10. Within that line, replace the localhost key (shown below) with the one copied in Step 7

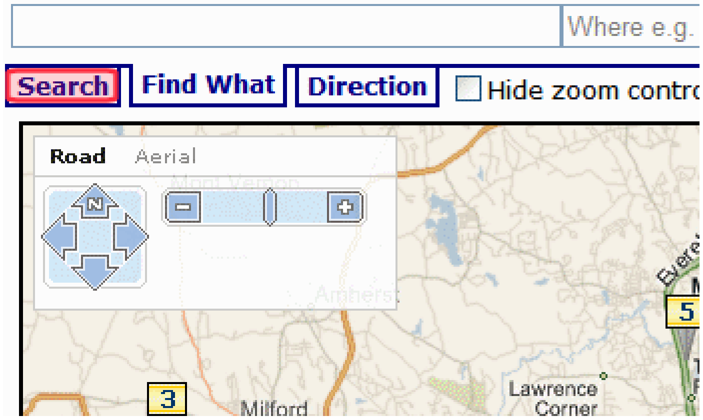
```
key=ABQIAAAAKS0eaO74jIASu1UolJlxPRQAPC5zwhKxdscXMmLMOnW7z2LmSRQrVhfXVp1hq2cv_
ZsOvqP4GQ69eg"/>
```

Changing the Map's Zoom Level

If the map has a zoom control, the site visitor can use it to zoom in and out. As the map's boundaries change, flagged locations may appear or disappear. This is because the map only shows content whose location lies within the map's boundaries. See Also: "Controlling the Visitor Experience with Maps" on page 9-256

Using the Search Tab to Recenter the Map

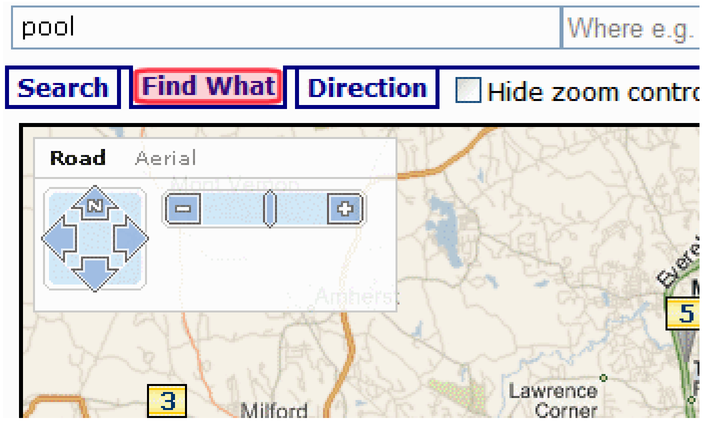
The **Search** tab lets a site visitor recenter the map on a location. He can enter any combination of street address, city, state and zip code.



When he does and presses **Search**, only content within that geographic area which satisfies other search criteria appears.

Using the Find What Tab to Find Locations with a Search Term

The site visitor can use the **Find What** tab to find only locations that include a search term. For example, if a map flags hotels, the visitor can click the **Find What** tab then insert **pool** in the text box above to view only hotels with a pool.

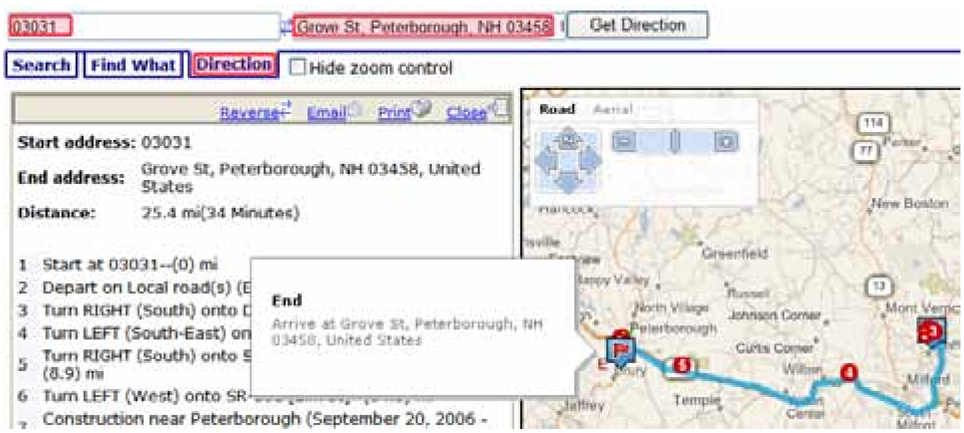


The **Find What** tab uses the same logic used in the Web Search to find content on your site. This is described in" "Searching Your Web Site" on page 9-4.

Using the Directions Tab

The site visitor can use the **Directions** tab to get directions between any two locations. Simply enter any combination of street address, city, state, and zip code into both text boxes above the tabs (circled below).

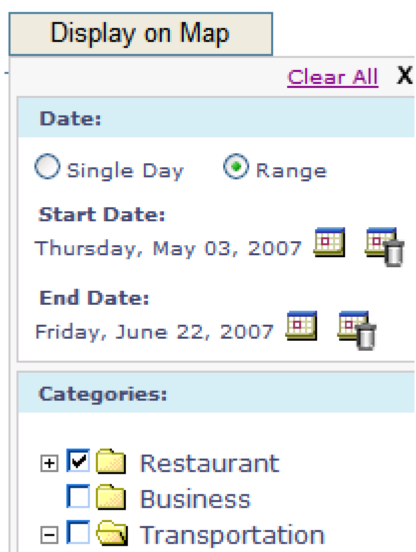
When you do this and press **Get Directions**, the map screen displays text directions on the left, and a map of the directions on the right.



The Display on Map Button

If you use Ektron CMS400.NET's Taxonomy feature to classify mapped content, a site visitor can click the **Display on Map** button to restrict the map's locations to content in your categories.

Note: The popup window also prompts the site visitor select one or a range of dates, and only retrieves content to which one of the selected dates is assigned. See "DateSearch" on page 9-262.



A good example is presented in Ektron CMS400.NET's sample site. Here, the Taxonomy "Map Category" has the following categories.

Notice that the category **Restaurant** has five subcategories.

When a site visitor is using the map, he can click the **Display on Map** button, see your content's categories, and select those of interest. When he does, the map updates to show content in selected categories only.

Note: While an OR logical relationship among selected categories is the most intuitive and common, you can alternatively set up an AND or NOT logical relationship among selected categories. See "SelectedCategoryLogicalType" on page 9-266.

To learn about assigning taxonomy categories to content, see "Taxonomy" on page 9-200.

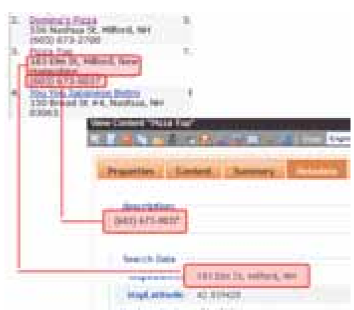
Displaying Icons on the Category Popup Screen

See "CustomIcon" on page 9-261.

Text Box

The text box appears to the right of the map if at least one location is flagged.

The text box’s columns are described below.

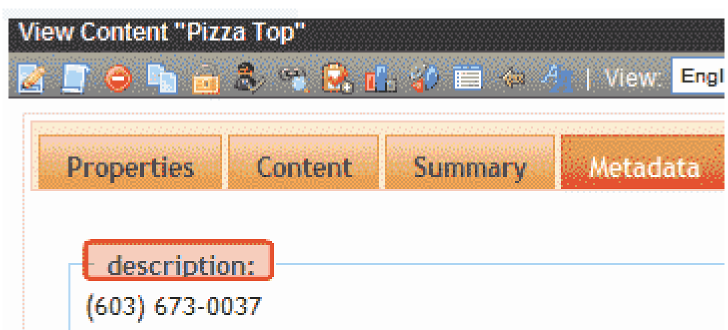
Column Header	Description
No.	Map item’s number. The lowest numbered item is closest to the map’s center.
Title	The content item that corresponds to the numbered map location. The site visitor can click the title to proceed to that content on your Web site. The text below the title is the Metadata **Map Address** field, followed by the Metadata **Description** field (see illustration below).
	
Distance	Distance from the map’s center to this content location.
Map	Click icon to recenter map on this content’s location.
Directions	Click icon to select the **Directions** tab and paste this content location’s address into the end location box. The site visitor could then enter a starting location to get directions to this location.

Bubble Text

When a site visitor hovers the cursor over a numbered map location, a text “bubble” appears.

The bubble shows the following information.

- Title - The content item that corresponds to the numbered map location. The site visitor can click the title to proceed to that content on your Web site.
- Summary - Whatever is entered into the content item's **Summary** tab.
- Metadata description - Whatever is entered into the content item's **Metadata Description** field.



- Get Directions - Click **To Here** or **From Here** to select the **Directions** tab and paste this location's address into the To or From location box. The site visitor would then supply the missing (starting or ending) location to get directions between the locations.

Controlling the Visitor Experience with Maps

Tip!

Warning! Within Visual Studio, you cannot see the map in design mode. But, you can right click the mouse and select **View in Browser** to see the effect of changing properties in a browser.

This section explains how to customize the following elements of the map display.

- "Displaying/Suppressing Map Elements" on page 9-256

- "Determining a Map's Initial Boundaries" on page 9-257
- "Determining which Content is Found by a Map" on page 9-258

For information on customizing the display using the Ektron Markup Language, see "map.ekml" on page 21-451.

Displaying/Suppressing Map Elements

You can use Map server control properties to display or suppress the following map elements.

Screen Area	Use this Map server control property to display or suppress
Tabs/Search box	GeoControl
Text box	DisplayTextResult
Zoom/direction	ZoomControl Note: For Bing Maps for Enterprise maps, this property also controls the Map type selection.
Map type (road, satellite, combination)	TypeControl Note: Only affects Google maps.

Determining a Map's Initial Boundaries

Because the map only displays content whose address lies within the map's boundaries, focus the initial display on your businesses/locations. Map server control properties let you specify a beginning address (or longitude/latitude) and a starting zoom level. All content with address data within that area is flagged on the map.

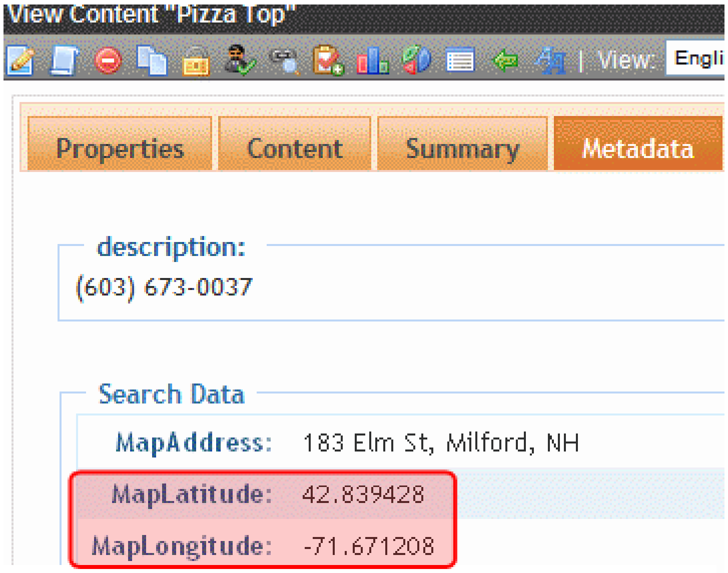
If your locations are too spread out to appear on a single map, create several regional maps. Each map server control must appear on a separate web form.

Warning! You cannot place more than one map server control on a Web form.

Determining which Content is Found by a Map

Preparing CMS Content to Appear on a Map

Whether you use Google or Bing Maps for Enterprise maps, content must have latitude and longitude values in order to appear on a map.

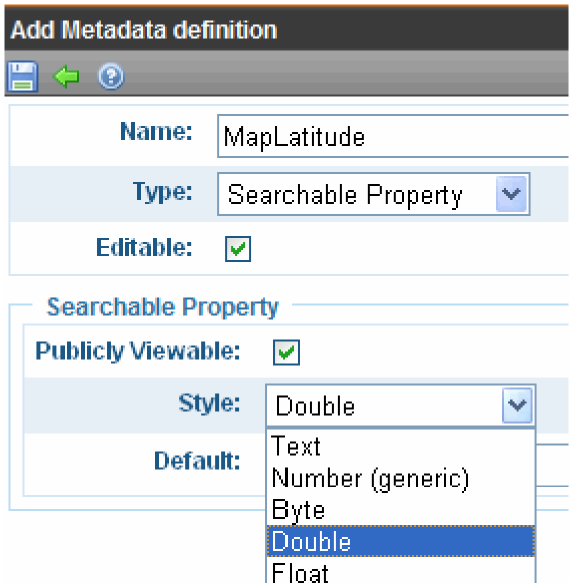


Google maps provides a service that takes the address of content and returns its latitude and longitude.

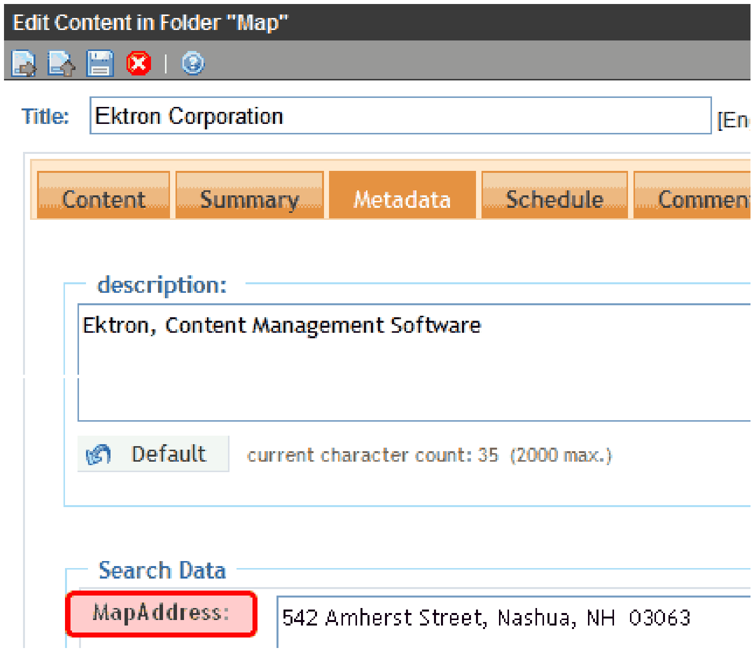
Note: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually. To do so, open the content item, go to its metadata, and enter the latitude and longitude values under **Search Data**.

To automatically obtain latitude and longitude information for any content item, follow these steps.

Warning! The following procedure assumes you are using Ektron CMS400.NET's sample site. If you are using the Min site, you must create searchable metadata definitions for **Map Address**, **Map Latitude** and **Map Longitude**. When defining **Map Latitude** and **Map Longitude**, set their **Style** to **Double**. If you are using dates with metadata, set **MapDate**'s style to **Date**.



1. Obtain a Google maps license key. See "Obtaining a License to Use Google Maps" on page 9-249
2. Create the content if necessary. On the content's **Metadata** tab, under **Search Data**, enter a **MapAddress** (that is, any combination of street, city, state, and zip code).



If you enter only a zip code, the latitude and longitude are set to that post office.

3. Publish the content. This action creates the Web Service call to Google maps, which retrieves the latitude and longitude for each address.

If Google maps cannot find a latitude and longitude (usually due to insufficient or conflicting information), it writes failure information to your server. You can view this under Windows Event Viewer > EktronLog. Any event's properties explain why the retrieval of latitude and longitude failed.

Restricting Content for a Particular Map

You may want a map to show a subset of all content with a latitude and longitude. For example, your business includes restaurants and bakeries, and you want a map to show only bakeries.

To accomplish this, place content for restaurants in one folder, and bakeries in another. Then, in the map server control that shows bakeries only, at the `FolderID` property, identify the bakeries folder.

If you want another map to show both restaurants and bakeries, create the restaurant and bakery folders under a parent folder. Then, in that map server control's `FolderID` property, identify the parent folder, and set the `Recursive` property to **true**.

Map Server Control Properties

Warning! You cannot place more than one map server control on a form.

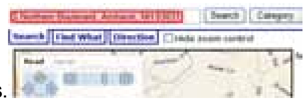
Tip!

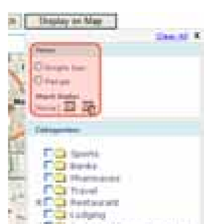
Warning! Within Visual Studio, you cannot see the map in design mode. However, you can right mouse click the mouse and select **View in Browser** to see the effect of changing the properties.

The following table explains the Map server control properties.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Note: Do not use a percentage value to set the native .NET properties `Height` and `Width`. Percentages do not work with these properties.

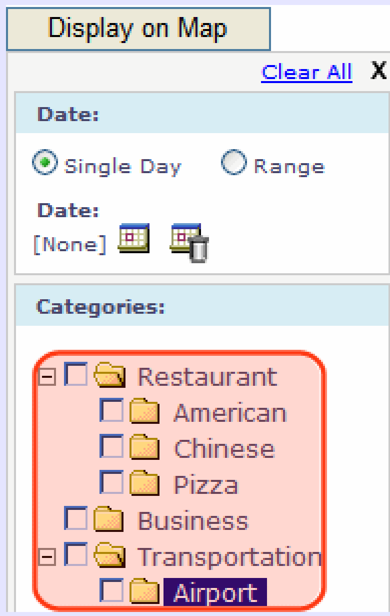
Property	Value	Data Type
Address	To set a default map center, enter its address here. If you only enter a zip code, the map centers on its post office. The address appears in the **Search** field when the map first displays.  If you enter an address, the `latitude` and `longitude` properties are ignored.	String
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to content and a Taxonomy. If you are not logged it but want to, change the value to **true**. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Boolean
ContentId	Use this field in conjunction with the **EnableSearchResult** field to limit the map to a single content item. Here, you identify the content item to be mapped. See Also: "EnableSearchResult" on page 9-263 As explained in "Preparing CMS Content to Appear on a Map" on page 9-258, content *must* have latitude and longitude values in order to appear on a map.	Long

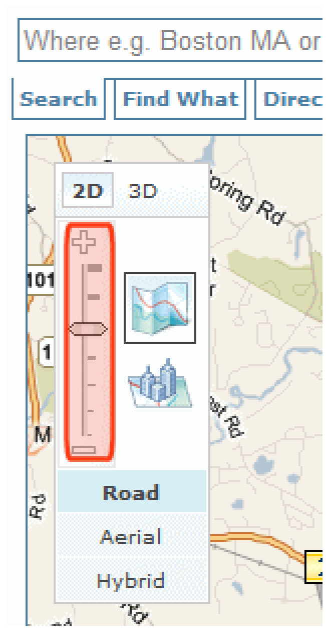
Property	Value	Data Type
CustomIcon	Use this field if you want the Category popup box to display an icon to the left of each category, as shown below.  **Prerequisite** To use this value, open the *webroot*/Workarea/images/application/maps/tree folder. In that folder, create a new folder whose name is the same as the Taxonomy category assigned to the Map server control at the MapCategory property. In the sample site, this Taxonomy's name is MapCategory. Then, place the icons in that folder by category title name with a .png extension. Use an underscore (_) to separate taxonomy levels. For example, the image for the category Restaurant > American must be named Restaurant_American.png.	Boolean
DateSearch	If you want to assign a date to content so that site visitors can select by date, enter **true**. This feature is helpful for date-related content, such as concerts, meetings, or sporting events. The site visitor can filter what appears on the map by date. If you set this property to true, assign a date to date-related content using the **MapDate** standard metadata field. Then, publish the content. When a site visitor clicks a map's **Display on Map** button, the popup screen includes date criteria, as shown below. See Also: "The Display on Map Button" on page 9-252  The site visitor can select map items by a single date or a range of dates. If he does, only content to which one of the selected dates is assigned appears.	Boolean
DisplayTextResult	If you want the site visitor to see a box of information about each map item to the right of a map, enter **true**. To suppress the text box, enter **false**. See Also: "Displaying/Suppressing Map Elements" on page 9-256	Boolean

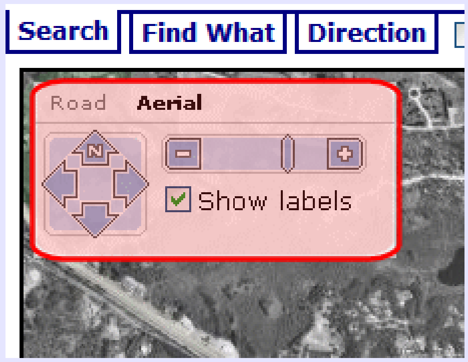
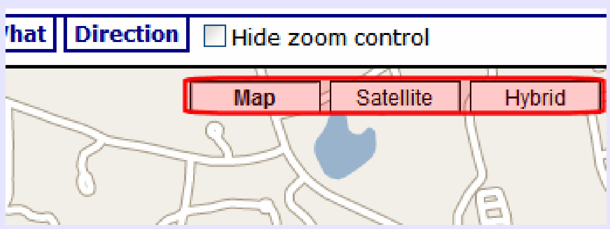
Property	Value	Data Type
DistanceUnit	Enter the units of distance on the map. Choices are miles and kilometers. The default value is miles.	Unit
EnableSearchResult	Use to determine if the Map server control accesses the CMS search to return results. **True** is the default value. You would change it to **False** if you want to display a map with only one content item, that is, a single location. Specify this item at the `ContentID` property. In this case, the map does not find other CMS content whose longitude and latitude are within the map's boundaries. Site visitors viewing the map can still use the **Search** and **Directions** tabs to get directions to the location. See Also: "Using the Search Tab to Recenter the Map" on page 9-251; "Using the Directions Tab" on page 9-252 For example, your site features homes for sale, and you want a map to show a featured home of the week. To do so, set this property to **False**, and enter the content block that describes that home in the **ContentID** field. See Also: "ContentId" on page 9-261	Boolean
FolderId	Enter the ID number of the folder whose content is searched on this map. If the `recursive` property is true, folders below this folder are also searched.	Long
ForceCategory	When set to true, this property causes the map to only show content associated with the taxonomy category defined in the `MapCategory` property. When set to false, the map shows all content within the map's boundaries. For example, if you have five content blocks that appear on a map and three of them are associated with a taxonomy, set this property to True and the `MapCategory` property to the ID of the taxonomy. When a user views the map, it will only display the three content items associated with the taxonomy. See Also: "MapCategory" on page 9-264	Boolean
GeoControl	If you want the site visitor to see a search box with tabs above a map, enter **true**. To suppress the text box, enter f**alse**. See Also: "Displaying/Suppressing Map Elements" on page 9-256	Boolean
Hide	Used to hide the map server control in design time and run time. **True** = Hide map server control **False** = Show map server control	Boolean

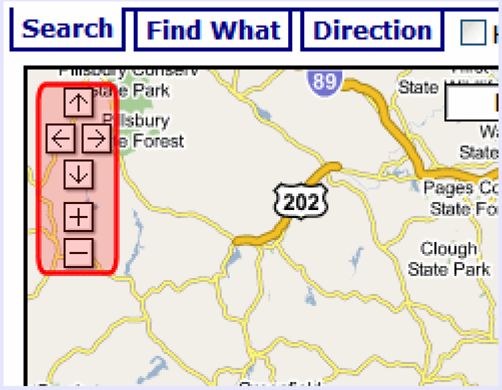
Property	Value	Data Type
Language	Set a language for the Map server control. To allow the language to be set dynamically, enter zero (0). This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Latitude	To set a default map center via latitude and longitude (as opposed to an address), enter the latitude here.	Decimal
Longitude	To set a default map center via latitude and longitude (as opposed to an address), enter the longitude here.	Decimal
MapCategory	Enter the ID number of the taxonomy whose categories appear when a site visitor clicks this map's **Display on Map** button. When a map first appears, all eligible content appears. If a site visitor clicks the **Display on Map** button, he can choose one or more categories and limit the map to items assigned to them. For example, the user could view restaurants only (as shown below). As another example, your map could display all campuses in your state's college system. A site visitor could use the **Display on Map** popup window to limit the map to community colleges. Note: While an OR logical relationship among selected categories is the most intuitive and common, you can alternatively set up an AND or NOT logical relationship among selected categories. See "SelectedCategoryLogicalType" on page 9-266. To learn more about Taxonomy, see "Taxonomy" on page 9-200. 	Long
MapProvider	Select the service that provides the map, either Google or Bing Maps for Enterprise.	Provider
MapStyle	Enter the map's display mode: Road, Satellite or Hybrid. Note: This setting only affects Bing Maps for Enterprise maps.	Style

Property	Value	Data Type
Markup Language	Enter the template markup file that is used to control the display of the map page. For example, mymapmarkup.ekml. If you enter no EkML file, the default one at `Workarea\Template\map\map.ekml` is used. If the *.ekml file is located in the `\workarea\template\map` folder, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\workarea\customfiles\markup\mymapmarkup.ekml`. See Also: "Ektron Markup Language" on page 21-414 and "map.ekml" on page 21-451	String
MinZoomLevel	If you want to set a map zoom level below which map locations will not appear, enter that value. The default value is 4. Possible values are between 1 (most detailed) and 19.	Integer
PageSize	Enter the number of locations that can appear on one page of the text box after a search is executed. See Also: "Displaying/Suppressing Map Elements" on page 9-256 If more than this number of locations are available, the site visitor sees **[First] [Previous] [Next] [Last]** at the bottom of the page. He can use the navigation aids to view additional locations. 	Integer
Recursive	In the `FolderID` property, you specify a folder whose content is searched on this map. To extend the search to all folders below this folder, set this property to **true**.	Boolean

Property	Value	Data Type
SelectedCategoryLogicalType	Use this property to determine the logical relationship among several categories on the Display on Map tab. (See "The Display on Map Button" on page 9-252). There are three choices: OR, AND, and NOT.  By default, an OR relationship exists among the site visitor's selections. So, for example, if all three Restaurant categories are checked, then any restaurant that is defined as American, Chinese or Pizza appears on the map. If you change this property's value to AND, only content to which *all* selected categories apply appear on the map. In the above example, only restaurants defined as American *and* Chinese *and* Pizza appear on the map. Alternatively, you can set the property's value to NOT. In this case, only content to which the selected categories are not applied appear on the map. To continue the above example, if the site visitor selects **Chinese**, only restaurants that are not assigned the Chinese category appear on the map.	LogicalType

Property	Value	Data Type
StartZoomLevel	Enter the zoom level at which the map initially appears. See Also: "Determining a Map's Initial Boundaries" on page 9-257 Zoom level 1 is the least detailed, showing the entire world map. Zoom level 19 is the most detailed, showing the smallest streets. By default, maps in the sample site have a zoom level of 12, which shows an area of about 10 miles (16 kilometers). A site visitor viewing the map can adjust the zoom level using the zoom control (circled below). 	Integer
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags **False** - Allow wrap tags	Boolean
TemplateParamName	Sets a QueryString parameter for the ID of users that are returned in the search results. This parameter is passed to the template page defined in the `TemplateUserProfile` property when a user clicks the Location (map) icon associated with a user.	String

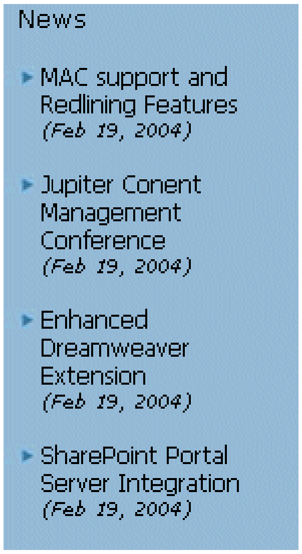
Property	Value	Data Type
TemplateUserProfile	The URL path of the user profile template. This path can be relative or absolute.	String
TypeControl	If this map uses Bing Maps for Enterprise maps, this property enables or disables the zoom/direction/type control (highlighted below). It lets a site visitor zoom the map in and out, move the center in any direction, and change the display style (Road or Aerial).  If this map uses Google Earth maps, this property enables or disables the type control (highlighted below). It lets the site visitor change the display style (Map, Satellite, or Hybrid). Use the `ZoomControl` property to display or suppress Google Earth's zoom and direction controls. 	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Property	Value	Data Type
ZoomControl	Use this property to display or suppress the Google map zoom control (highlighted below).  For Bing Maps for Enterprise maps, the display of the zoom control is determined by the `TypeControl` property.	Boolean

ListSummary Server Control

The ListSummary server control is used to display, on a Web page, a list of content blocks in a selected folder. Optionally, the display can include content in all subfolders of the selected folder.

When added to a template and visited, a List Summary looks like this.



It displays each content block's title and summary information. You can modify the display to suit your needs by modifying its properties.

This subsection contains the following topics:

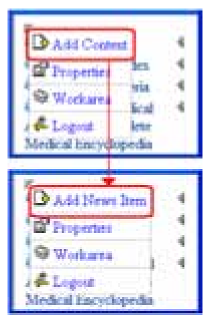
- "ListSummary Server Control Properties" on page 9-271
- "OrderKey Property" on page 9-276
- "Retrieving the XML Structure of a List Summary" on page 9-277

Note: In contrast to a List Summary, a ContentList server control displays selected content items from any CMS400.NET folder. See Also: "ContentList Server Control" on page 7-210

ListSummary Server Control Properties

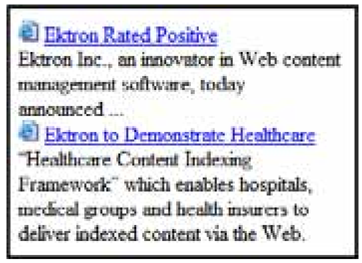
The ListSummary server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
AddText	Override the control's default text for the Add Content menu item. For example, If you have a News Web site, you could change **Add Content** to **Add News Item**. 	String
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to the folder needed for the `FolderID` property. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31 **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.	Double
ContentParameter	Checks the QueryString for this value and replaces the list summary with a content block when specified. Leave blank to always display the list summary.	String

Property	Description	Data Type
ContentType	Determines the type of content that appears in the list summary. The default is Content. Choices are: **AllTypes** - displays all of the content types for the given folder **Content** - displays a list of content items. Content items consist of HTML content, PageBuilder pages, XML Smart Forms and Blogs **Forms** - forms appear in the list summary **Archive_Content** - archived content blocks appear in the list summary **Archive_Forms** - archived forms appear in the list summary **Assets** - assets, such as offices documents, appear in the list summary **Archive_Assets** - archived assets appear in the list summary **LibraryItem** - library items appear in the list summary **Multimedia** - multimedia items appear in the list summary **Archive_Media** - archived multimedia items appear in the list summary **NonLibraryContent** - all types of content appear in the list summary except for library items. **DiscussionTopic** - forum topics appear in the list summary. **CatalogEntry** - displays all of catalog entries (products) for a specified catalog.	String
DisplayXslt	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every content block in the folder See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Displayxslt` property value is ignored.	String

Property	Description	Data Type
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of List Summary items while controlling the amount of screen space. To accomplish this, the List Summary display is limited to the number set in the `MaxResults` property. If you set this property to **true**, and the number of List Summary items exceeds the `MaxResults` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below.  So, for example, if a List Summary has 9 items and the `MaxResults` property is set to 3, the screen displays only the first three items. When the site visitor clicks **[Next]**, he sees items 4, 5 and 6, etc. **True** = Use paging feature **False** = Ignore paging feature **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.	Boolean
FolderID	The folder that contains the items which appear in the list summary. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9 The `Recursive` property determines whether content blocks in this folder's child folders also appear.	Long
GetHtml	Set to **True** if you want to retrieve and display content (that is, the HTML body) for all content in the list summary. For example, to display content inside a Web server control such as a GridView. **True** = Get and display HTML for each content block in the list summary **False** = Do not get and display HTML.	Boolean
Hide	Used to hide output of the list summary in design time and run time. **True** = Hide results **False** = show results	Boolean

Property	Description	Data Type
IncludeIcons	Choose whether to display icons next to the list summary's links. **Warning! Important**: This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. See Also: st. "Ektron Markup Language" on page 21-414 	Boolean
Language	Set a language for viewing the list summary. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	String
MarkupLanguage	Identify the template markup file that controls the display of the list summary. For example, `mylistsummary.ekml`. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to page hosting this control. For example, `..\CMS400Developer\workarea\customfiles\markup\mylistsummary.ekml` . See Also: "Ektron Markup Language" on page 21-414 and "listsummary.ekml" on page 21-447 **Note**: If you enter a valid EkML file, the `DisplayXslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.	String

Property	Description	Data Type
MaxResults	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter 0 (zero). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, set the `EnablePaging` property to **true**. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below. 	Integer
OrderbyDirection	How to order the hyperlinks on the list. The sort field is determined by the `OrderKey` property. **ascending** - they are arranged A, B, C or 1,2,3. **descending** - they are arranged. Z, Y, X or 3,2,1 If sorting by date, descending puts the most recent first. Data Type: Ektron.Cms.Controls.CmsWebService.OrderByDirection.	
OrderKey	Sort the list by one of the values. Title DateModified DateCreated LastEditorFname LastEditorLname See Also: "OrderKey Property" on page 9-276 Data Type: Ektron.Cms.Controls.CmsWebService.TeasersOrderBy	
Random	Set to **True** if you want to randomly display one content block in the specified folder. The content changes each time a user views the page. **True** - randomly display one content block. **False** - display the list summary normally. Note: If you use a custom XSLT or EkML file, the type of content displayed can be manipulated. For example, if you use an EkML file that has the [$Html] variable in it, the actual content is displayed instead of a link. See Also: "Ektron Markup Language" on page 21-414 and "[$Html]" on page 21-429	Boolean

Property	Description	Data Type
Recursive	Determines if the display includes content blocks in child folders of the selected folder. **True** - include content blocks from child folders. **False** - do not include content blocks from child folders.	Boolean
SelTaxonomyID	Set the ID of the taxonomy that content will be associated with when a logged in site visitor uses the Silver Access Point's **Add HTML Content** to add content to a list summary server control.	Integer
SuppressWrapperTags	This property is set to **false** because Ajax uses `<div>` tags to rewrite the region around the tag. You *cannot* change the value to true.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

OrderKey Property

The `OrderKey` property determines the order of the content in the list summary based on the value chosen.

Value	Sorts by
DateModified	Date content last modified
DateCreated	Date content created
LastEditorFname	First name of user who last edited content
LastEditorLnames	Last name of user who last edited content

Retrieving the XML Structure of a List Summary

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a ListSummary server control onto it.
3. Set the `FolderID` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to MultiLine.

Note: Ektron recommends setting the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = ListSummary1.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.
9. The list summary's XML structure appears in the textbox.

For an additional example, see the ListSummary XML page on the CMS400Developer samples page. It is located at:

In a browser:

```
http://<site root>/CMS400Developer/Developer/ListSummary/ListSummaryXML.aspx
```

In the source code:

```
<site root>/CMS400Developer/Developer/ListSummary/ListSummaryXML.aspx and
ListSummaryXML.aspx.vb
```

Breadcrumbs

A breadcrumb is display of the trail a site visitor took to arrive at the page. Breadcrumbs are commonly found on Web sites to help navigate the site. For example, a simple text breadcrumb such as **Products->Monitors->Flat Panel** shows that you arrived at this page by clicking **Products**, then **Monitors**, then **Flat Panel**.

Sitemap Breadcrumbs versus History Breadcrumbs

Ektron CMS400.NET provides two kinds of breadcrumbs:

- sitemap
- history

Sitemap breadcrumbs display the path through the sitemap to the current page, like the path shown in a Yahoo! directory listing. Sitemap breadcrumbs always show the same path to a page, regardless of how it is reached. To use a sitemap breadcrumb, see "Creating SiteMap Breadcrumbs" on page 9-278.

History breadcrumbs more accurately fulfill the breadcrumb trail metaphor. They display a history of links to the most recently visited pages. The BreadCrumb server control displays history breadcrumbs. Site visitors can use a breadcrumb trail to jump to previously visited pages. To user history breadcrumbs, see "BreadCrumb Server Control" on page 9-285.

Creating SiteMap Breadcrumbs

Use the Breadcrumb tab to define a folder’s site map or to inherit one from the parent folder. Below is an example.

The following topics explain how to create and manage sitemap Breadcrumbs within the Workarea. "BreadCrumb Server Control" on page 9-285 explains how to place them on a Web page.

- "Inheritance and Breadcrumbs" on page 9-279
- "Adding a Breadcrumb" on page 9-279
- "Reordering Breadcrumb Items" on page 9-282
- "Editing a Breadcrumb Item" on page 9-283
- "Removing a Breadcrumb Item" on page 9-284

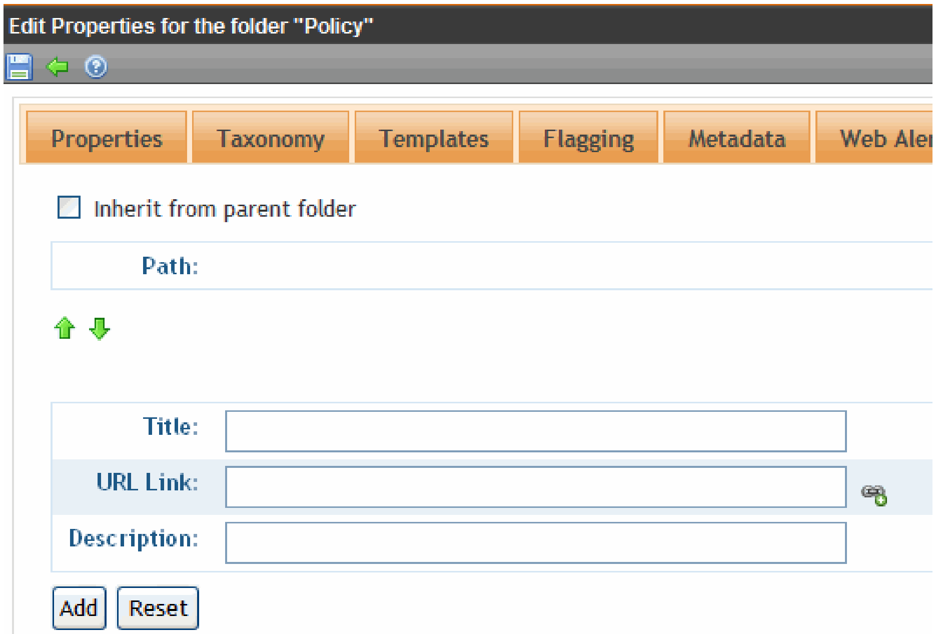
Inheritance and Breadcrumbs

A folder's breadcrumbs can be inherited from the parent folder, or you can break inheritance and assign a path of breadcrumbs. Use the Folder Properties screen's **Inherit Parent Configuration** checkbox to retain or break inheritance.

Adding a Breadcrumb

The example below adds three breadcrumbs to the trail.

1. Navigate to the folder for which you want to add the breadcrumbs.
2. On the View Contents of Folder screen, click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.



6. In the **Add New Item** section of the screen, add the following information.

- **Title** - the name of the breadcrumb as you want it to appear in the breadcrumb trail
- **URL Link** - the URL path to the breadcrumb's destination, typically a Ektron CMS400.NET content item. For example, default.aspx.

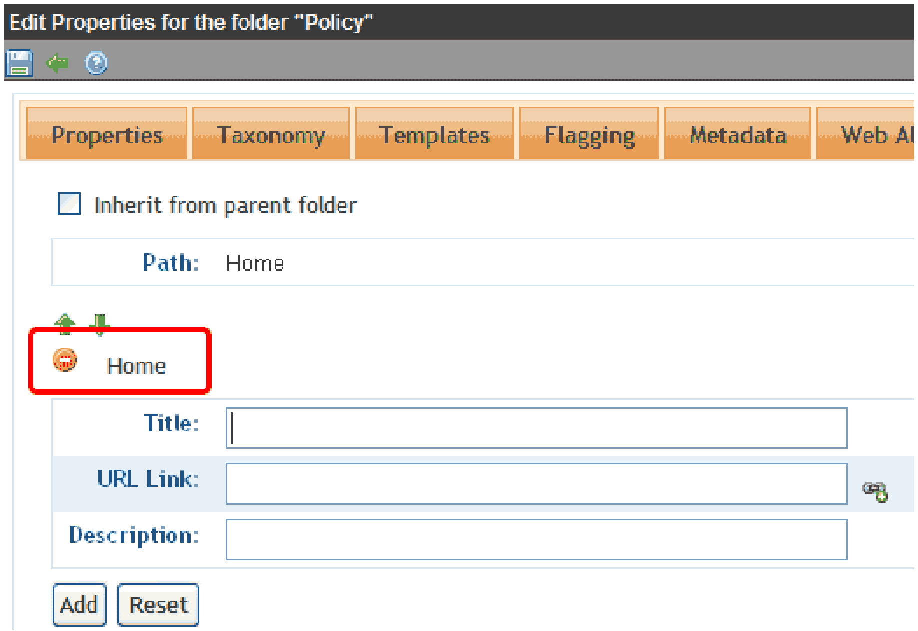
If you are not sure what the file's name is, click the Binoculars ( ), and the library for quick-links appears. Select the content item to add to the breadcrumb.

You can also enter a URL, for example, `www.example.com`.

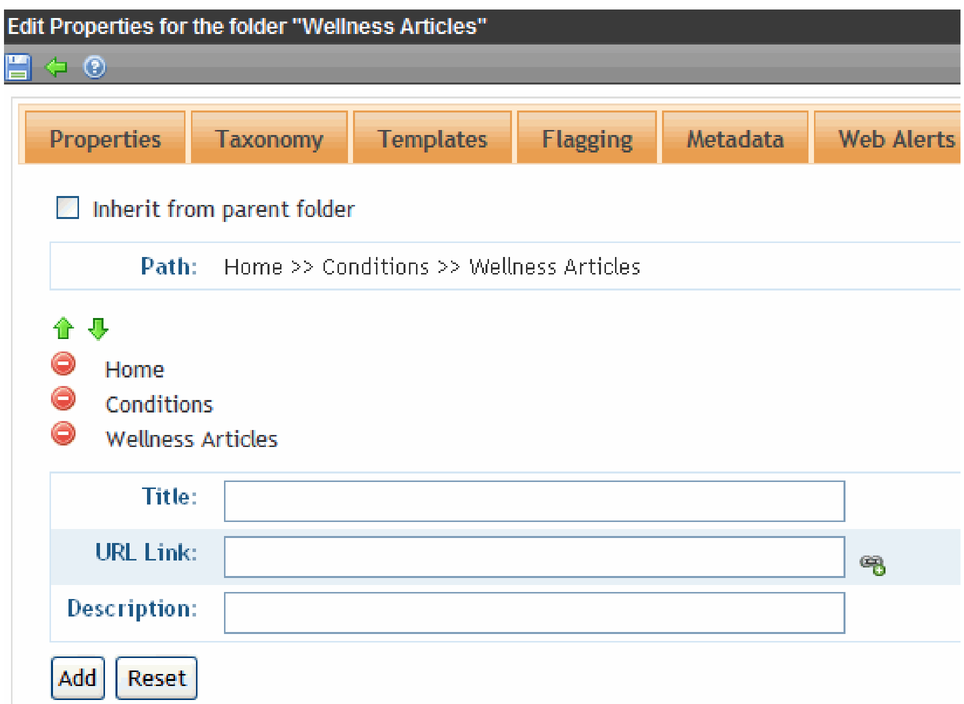
- **Description** - add a description for the breadcrumb

7. Click the Add button.
8. The first item in the breadcrumb path appears.

.



9. Repeat steps 6 and 7 for each item in the breadcrumb path.
10. The items in the breadcrumb now appear like this.

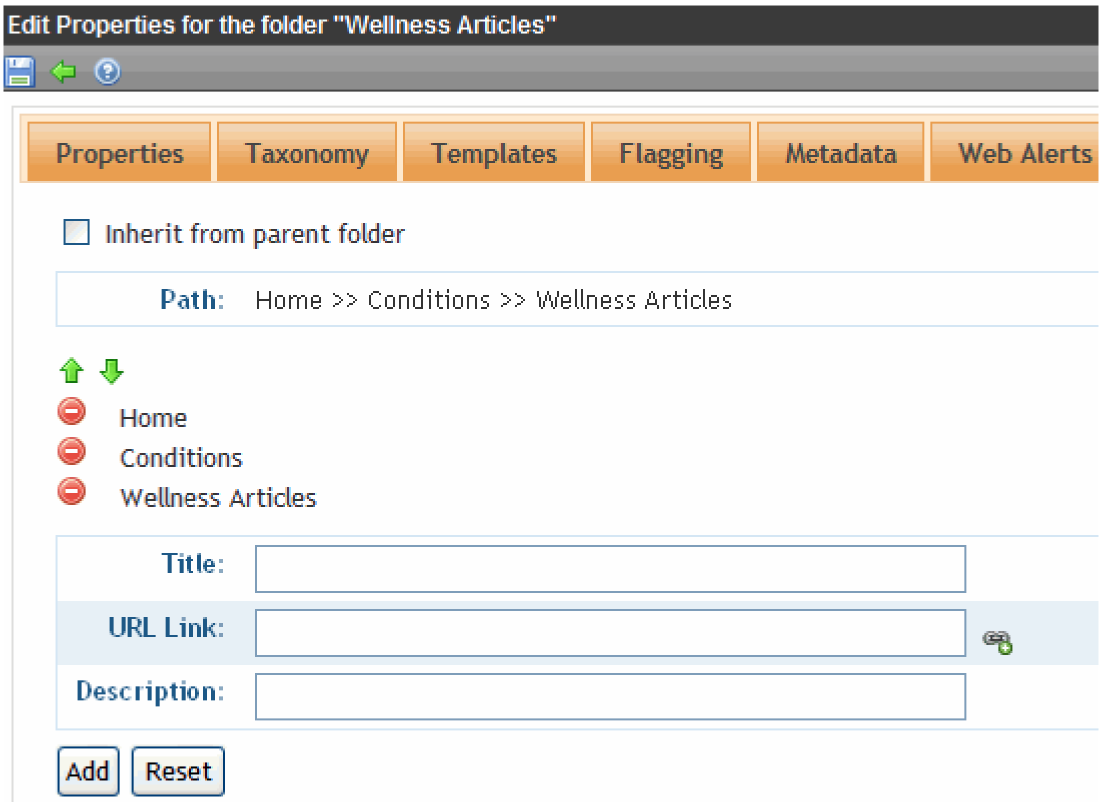


11. Click the Save button ( ).

Reordering Breadcrumb Items

1. Navigate to the folder for which you want to reorder breadcrumbs.
2. On the View Contents of Folder screen, click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.

.



6. Click a breadcrumb item.

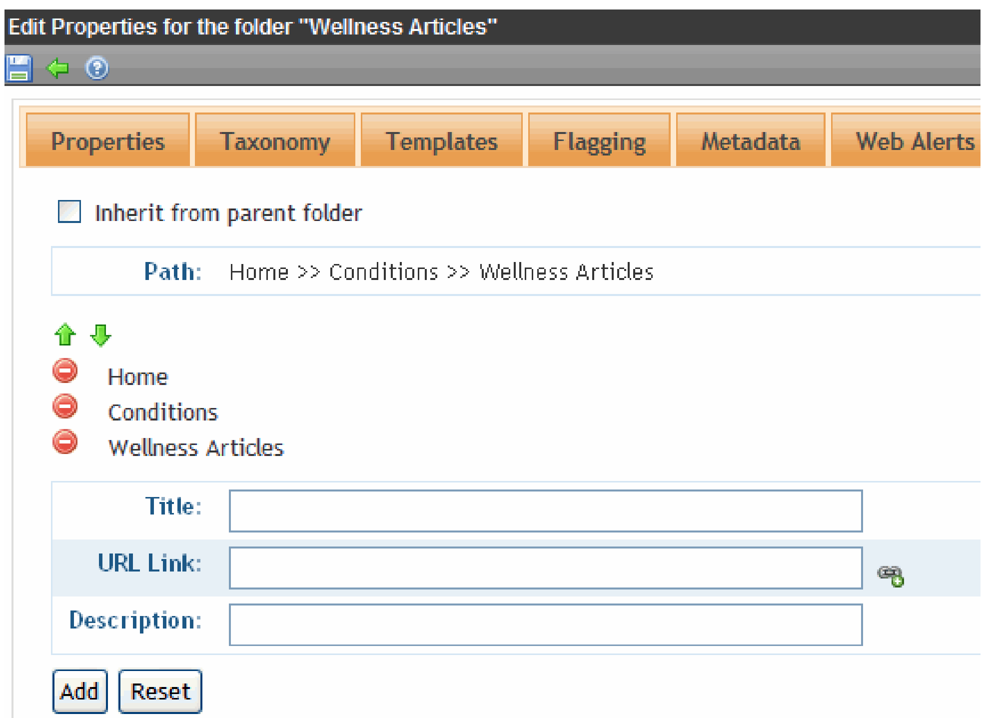
Warning! Clicking the Remove button deletes the breadcrumb item. See Also: "Removing a Breadcrumb Item" on page 9-284.

7. Click the green Up and Down buttons to move the item around in the list.
8. Click the Save button ( ).

Editing a Breadcrumb Item

1. Navigate to the folder for which you want to edit breadcrumbs.
2. On the View Contents of Folder screen, click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.

.



6. Click a breadcrumb item.

Warning! Clicking the Remove button deletes the breadcrumb item. See Also: "Removing a Breadcrumb Item" on page 9-284.

7. Edit the Title, URL Link and Description information.
8. Click the Save button (Save).

Removing a Breadcrumb Item

1. Navigate to the folder for which you want to remove a breadcrumb.
2. On the View Contents of Folder screen, click **View** > **Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.

.

6. Click the Remove button ( ) next to the breadcrumb item you want to remove.
7. The breadcrumb item is deleted.
8. Click the Save button ( ).

BreadCrumb Server Control

The Trail Created by the Breadcrumb Server Control

The breadcrumb trail can appear vertically or horizontally on a Web page. In addition, you can define how many breadcrumbs are left for site visitors to navigate back. You can also use an image and Alt text instead of, or in addition to, text to display the breadcrumb trail. These variations are illustrated below.

Note: If a site visitor revisits a page that is in the breadcrumb trail already, the breadcrumb trail reverts back to that point in the trail. For example, if you visit the following pages Dev > FAQ > WebForm > PR, and then return to FAQ, the breadcrumb trail looks like this: **Dev > FAQ**.

Breadcrumb Trail Type	Example
Horizontal; text only	Dev > WebForm > pr > FAQ > Meta*

Breadcrumb Trail Type	Example
Horizontal with images	
Horizontal with images and Alt text	
Vertical; text only	
Vertical with images	
Vertical with images and Alt text	

You should add a BreadCrumb server control to every Web form in your site. Doing this ensures that a breadcrumb trail is created for each Web page.

This subsection contains the following topics:

BreadCrumb Properties Apply to Web Forms, Not Web Pages

Keep in mind that your Web site is made up of Web forms. Each page depends on a form to determine much of its appearance. Forms and pages have a parent > child relationship. That is, any form can be associated with any number of pages.

When defining breadcrumb properties, you define them for a *form*. All pages that use that form inherit its breadcrumb properties.

Assume, for example, that a Web form is used for the Human Resources section of your Web site. You might use the title **Human Resources** to identify the form in the BreadCrumb server control. Whenever a page is visited that uses that form, **Human Resources** appears on the breadcrumb trail -- that is, the form title appears, not the individual page.

Types of BreadCrumb Server Control Properties

BreadCrumb server control properties are divided into two categories:

- "Properties that Determine a Breadcrumb Trail's Appearance" on page 9-287
- "Properties that Determine How Pages Associated with the Form Appear on a Breadcrumb Trail" on page 9-288

Properties that Determine a Breadcrumb Trail's Appearance

For each Web form, you can customize the breadcrumb trail. For example, you might want the breadcrumb trail to appear horizontally on one Web form and vertically on another.

Property	Determines this aspect of the breadcrumb trail's appearance on this form	For more information, see
CurrentPageIndicator	Symbols or characters to identify the current page	"CurrentPageIndicator" on page 9-289
DisplayStyle	Whether it appears horizontally or vertically	"DisplayStyle" on page 9-289
LinkLastItem	Whether the last item is a hyperlink	"LinkLastItem" on page 9-290
LinkTarget	The type of window that appears when a user clicks an item	"LinkTarget" on page 9-290

Property	Determines this aspect of the breadcrumb trail’s appearance on this form	For more information, see
MaxItems	The maximum number of items	"MaxItems" on page 9-291
Mode	whether the breadcrumb trail appears as hyperlinked text or plain text.	"Mode" on page 9-291
Separator	Symbols or characters used to separate items	"Separator" on page 9-291

Properties that Determine How Pages Associated with the Form Appear on a Breadcrumb Trail

Use these properties define how any page that uses this form appears within a breadcrumb trail. It does not matter where the trail appears.

Note that you can use text, an image, or both to describe the form within the breadcrumb trail. If you use both, the image appears first, followed by the text.

Property	Determines this aspect of Web form when it appears on breadcrumb trail	For more information, see
DisplayTitle	Text to describe it	"DisplayTitle" on page 9-289
IconAlt	“Alt” text associated with image specified in IconPath property	"IconAlt" on page 9-290
IconPath	Image to define it	"IconPath" on page 9-290

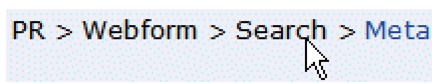
BreadCrumb Server Control Properties

The BreadCrumb server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

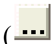
Property	Response	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CurrentPageIndicator	If desired, enter one or more symbols or characters that identify the current page in the breadcrumb trail. See example below. Dev > WebForm > pr > FAQ > Meta* These characters appear *after* the image or title that identifies the current page in the breadcrumb trail.	String
DefaultContentID	Gets or Sets the ContentID for the BreadCrumb display title.	Long
DisplayStyle	Indicate how to display the breadcrumb trail: horizontally or vertically. The default is Horizontal. See Also: "Breadcrumb Trail Type" on page 9-285	String
DisplayTitle	Enter text to describe this Web form when it appears in the breadcrumb trail. For example, if the Web form's properties you are defining is used for all Human Resources pages on your site, enter **Human Resources**. See Also: "BreadCrumb Properties Apply to Web Forms, Not Web Pages" on page 9-287 If you define an image in the `IconPath` property below, the image appears in the trail, followed by this text. **Warning! Important**: This property is for code behind only. It cannot be set in design time.	String
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically.	String
Hide	Used to hide the breadcrumb trail in design time and run time. **True** = Hide breadcrumb trail **False** = Show breadcrumb trail	Boolean

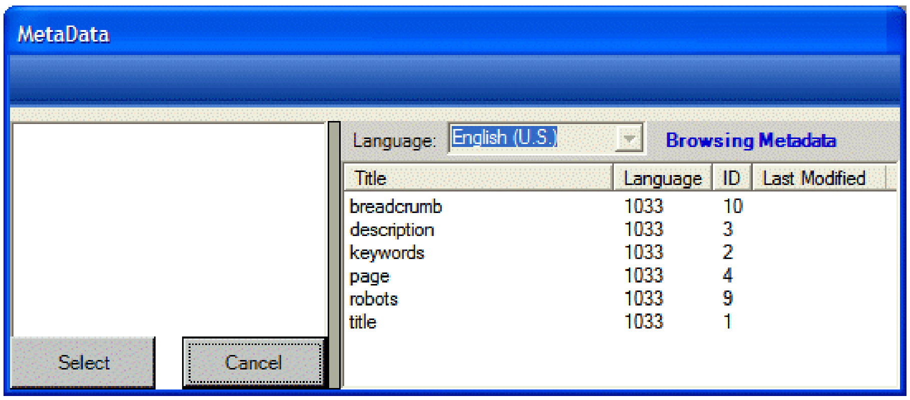
Property	Response	Data Type
IconAlt	If you define an image in the `IconPath` property, enter any "Alt" text that should appear when a site visitor hovers the cursor over that image. Here is an example.  	String
IconPath	If you want the breadcrumb trail to display an image to identify this Web form, enter the path to the image. **Warning! Important:** The image location must be relative to the Web root. For example: `\CMS400Developer\Workarea\Images\bc_meta_icon.gif` On the breadcrumb trail, the image precedes any text defined in the `DisplayTitle` property.	String
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkLastItem	Use this property to determine whether the last breadcrumb item appears as a hyperlink on this Web form. If this property is set to **true**, and a user clicks the item, the current page reappears. **True** = last item is a hyperlink **False** = last item is an image and/or text only; the user cannot click on it	Boolean
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the breadcrumb trail. The default is **_self**. **_Self** -opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	String

Property	Response	Data Type
MaxItems	Enter the maximum number of items in the breadcrumb trail on this Web form. The default is **5**. If you set a value of 1 or greater and the user navigates beyond that number of pages, only the most recent pages appear. The older pages disappear from the trail. **To allows an unlimited number of breadcrumb trail items on this Web form, enter zero (0).**	Integer
MetadataName	Specify the name of a Metadata Type that you want to associate with the page. For more information, see "BreadCrumb Metadata Type" on page 9-292	String
Mode	Allows you to make the breadcrumb trail appear as non-hyperlinked plain text. The default is **Normal**. **Normal** = breadcrumb trail is hyperlinked  **DisplayOnly** = breadcrumb trail is plain text 	String
Separator	Enter one or more characters to separate the items in a breadcrumb trail on this Web form. The default character is the greater than sign (**>**). 	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

BreadCrumb Metadata Type

To associate a Metadata Type with the BreadCrumb server control, follow these steps.

1. In the properties window for the BreadCrumb server control, click on the **MetadataName** property.
2. Click the Ellipses button ().
   If you are not logged in, log in now using the CMS Explorer window.
3. The Browsing Metadata screen appears.



4. Select a Metadata Type to apply to the BreadCrumb server control.
5. Set the DynamicParameter to ID. This allows the metadata to reflect what ever content block appears on the page.

Using the BreadCrumb Server Control

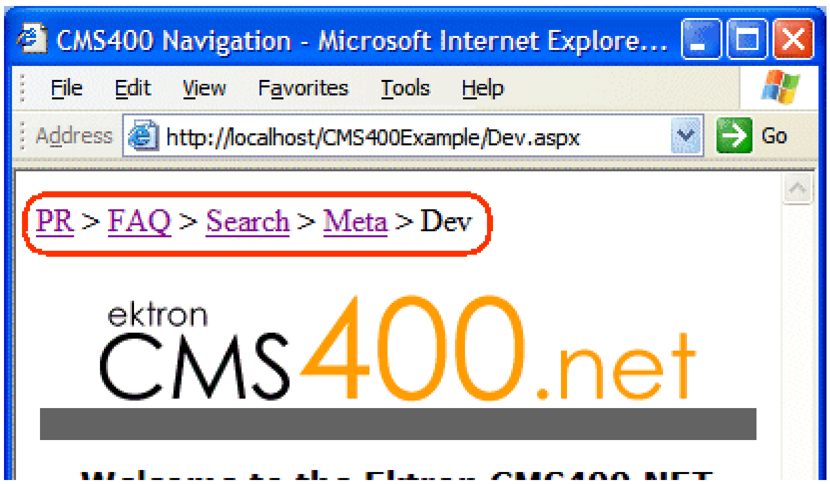
Add the BreadCrumb server control to each Web form for which you want to create a breadcrumb trail. Follow these steps to use the BreadCrumb server control.

Warning! It is recommended that you do not add a BreadCrumb server control to a Web form that contains a Calendar server control. When both server controls appear on the same page and a site visitor clicks on different months, the BreadCrumb trail could look like this: Calendar > Calendar > Calendar > Calendar > Calendar. This happens because each time a site visitor clicks on a month, you are in effect opening a new Web form.

1. Open a Web form for which you want to create a breadcrumb trail.
2. Drag and drop the BreadCrumb server control onto an appropriate location of the Web form.
3. Set the `DisplayTitle` property. See "DisplayTitle" on page 9-289.

Note: To customize the look of your breadcrumb trail, configure the other properties. For more information, see"BreadCrumb Server Control Properties" on page 9-288.

4. Save the Web form.
5. Repeat steps one through four for all Web forms to be included in the breadcrumb trail.
6. Open a browser.
7. View a Web page with a BreadCrumb server control in it.
8. Navigate to the rest of the Web pages that contain BreadCrumb server controls.
9. As you move around, the pages are added to the breadcrumb trail.



Making a Content Block's Title Appear in the Breadcrumb Trail

By adding a line or two of code, the breadcrumb trail can display the title of a content block. You can add a line of code to each Web form or if your content is dynamic, add the code once and each time a new piece of content is called dynamically a new breadcrumb is created.

Only one content block per Web form can be used with the breadcrumb. If you have multiple content blocks on a page, select the one that describes the overall page best.

Steps to Use a Content Block's Title as a Breadcrumb

1. Drag and drop a **ContentBlock server control** on a Web form.
2. Choose a **DefaultContentID** for the content block.
3. Drag and drop a **BreadCrumb server control** on the same form.
4. Remove the word **Title** from the `DisplayTitle` property.
5. Add the following line code to the page load event code behind:

```
BreadCrumb1.DisplayTitle = ContentBlock1.EkItem.Title
```

6. Build the project.
7. View the Web form in a Web browser.

The following is an example content block titles used as breadcrumbs:

The word Title appears in the breadcrumb trail when the `DisplayTitle` property is left empty. Even with the added code, if the breadcrumb loads before the content block, the breadcrumb has no information in the `DisplayTitle` property and therefore displays the word title by default.

If the word Title appears in the breadcrumb trail, check to make sure the word Title does not appear in the `DisplayTitle` property. Next, if Title still appears, add the following line of code to the page load event of the code behind:

```
ContentBlock1.Fill()
```

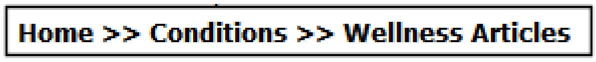
The code in the page load event should now look like this:

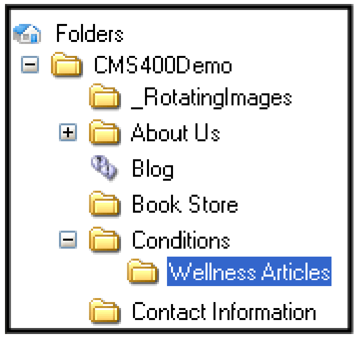
```
ContentBlock1.Fill()
BreadCrumb1.DisplayTitle = ContentBlock1.EkItem.Title
```

This ensures that the content block information is loaded first.

FolderBreadcrumb Server Control

The FolderBreadcrumb server control displays sitemap breadcrumbs. This trail typically consists of the current content's folder path. For example, the FolderBreadcrumb below matches the content's folder structure.





The FolderBreadcrumb server control does not simply read your folder structure and display its path. Instead, administrators define a folder's breadcrumb trail on the content's folder properties > **Breadcrumb** tab.

See Also: "Creating SiteMap Breadcrumbs" on page 9-278; "The Trail Created by the Breadcrumb Server Control " on page 9-285

This subsection contains the following topics:

BreadCrumb Server Control Properties

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
DefaultContentID	Display the breadcrumb trail for the folder in which the given content ID resides. To use this property, breadcrumb information for a folder must be defined in the Workarea > [Specified Folder] > Folder properties > Breadcrumb tab.	Long

Property	Description	Data Type
DefaultFolderID	The folder ID for which you want the breadcrumb trail to display. If a DefaultContentID is given, it overrides this property. To use this property, breadcrumb information for a folder must be defined in the Workarea > [Specified Folder] > Folder properties > Breadcrumb tab.	Long
DisplayStyle	Indicate how to display the breadcrumb trail: horizontally or vertically. The default is Horizontal.	DisplayStyles
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically.	String
Hide	Used to hide the breadcrumb trail in design time and run time. **True** = Hide breadcrumb trail **False** = Show breadcrumb trail	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the breadcrumb trail. The default is **_self**. **_Self** -opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinktargets
Mode	Allows you to make the breadcrumb trail appear as non-hyperlinked plain text. The default is **Normal**. **Normal** = breadcrumb trail is hyperlinked **DisplayOnly** = breadcrumb trail is plain text	Modes
Separator	Enter one or more characters to separate the items in a breadcrumb trail on this Web form. The default character is the greater than sign (**>**).	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Description	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Using the BreadCrumb Server Control

Add the FolderBreadcrumb server control to each Web form for which you want to create a breadcrumb sitemap. Follow these steps to use the FolderBreadcrumb server control.

1. In the CMS400.NET Workarea, define breadcrumb information for a folder. See "Adding a Breadcrumb" on page 9-279.
2. Open a Web form for which you want to create a folder breadcrumb map.
3. Drag and drop the FolderBreadcrumb server control onto an appropriate location of the Web form.
4. Set the `DefaultContentID` **or** `DefaultFolderID` property. If using `DefaultContentID`, make sure the content is in a folder where breadcrumb information has been defined. If using `DefaultFolderID`, make sure breadcrumb information has been defined for that folder.
5. Save the Web form.
6. Open a browser.
7. View a Web page with the FolderBreadCrumb server control in it.
8. The FolderBreadcrumb now appears on your site as a sitemap breadcrumb.

SiteMap Server Control

The Sitemap server control utilizes the folder breadcrumb information in the Workarea to display a sitemap of your site. By choosing the starting point of the sitemap, the max levels to display and applying a style class, you can customize the sitemap. The sitemap is displayed as indented list when viewed on a Web page.

The contents of the sitemap are defined on the Breadcrumb tab located in the Workarea folder properties. See Also: "Breadcrumbs" on page 9-278

This subsection contains the following topics:

Sitemap Server Control Properties

The Sitemap server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Response	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
ClassName	The style sheet class name used to format the HTML. Leave blank to use the default. To use a new class, add it to the following file: `webroot\siteroot\Workarea\csslib\sitemap.css` Then, add the class name to the property.	String
DisplayXslt (Code behind only)	Specify an external XSLT file to render the control. **Warning! Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.	String
FlatTopLevel	When set to **True**, include site nodes from the parent folder but not their items. Set to **False** to include all nodes and items.	Boolean
FolderID	The folder ID for the starting point of the sitemap. To choose the root folder, enter 0 (zero).	Long
Hide	Used to hide the Sitemap in design time and run time. **True** = Hide Sitemap trail **False** = Show Sitemap trail	Boolean
Language	Set a language for viewing content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxLevel	Set the maximum amount of levels to show. Set it to 0 (zero) for unlimited.	Integer
StartingLevel	Set to the starting level of the site map. If set to 0 (zero), starts from the root.	Integer

Property	Response	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Using the Sitemap Server Control

Note: Make sure you have added the sitemap information to your folders' Breadcrumb tab in the CMS400.NET Workarea.

Follow these steps to use the Site server control.

1. Open a Web form for which you want to create a sitemap.
2. Drag and drop the Sitemap server control onto an appropriate location of the Web form.
3. Add the starting folder's ID to the `FolderID` property.
4. Set any of the other properties. See Also: "Sitemap Server Control Properties" on page 9-298.
5. Save the Web form.
6. Open a browser.
7. View a Web page with the Sitemap server control in it.
8. The sitemap now appears on your site.

Retrieving the XML Structure of a Site Map

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a SiteMap server control onto it.
3. Set the `FolderID` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to **MultiLine**.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = SiteMap1.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.

The XML structure of the Site Map appears in the textbox.

For an additional example, see the XML Site Map page in the CMS400Developer samples page. It is located at:

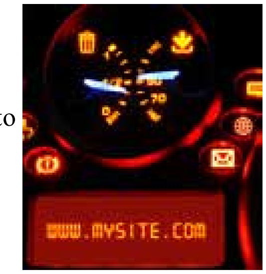
In a browser:

```
http://<site root>/CMS400Developer/Developer/Sitemap/SiteMapXML.aspx
```

In the source code:

```
<site root>/CMS400Developer/Developer/Sitemap/SiteMapXML.aspx and SiteMapXML.aspx.vb
```

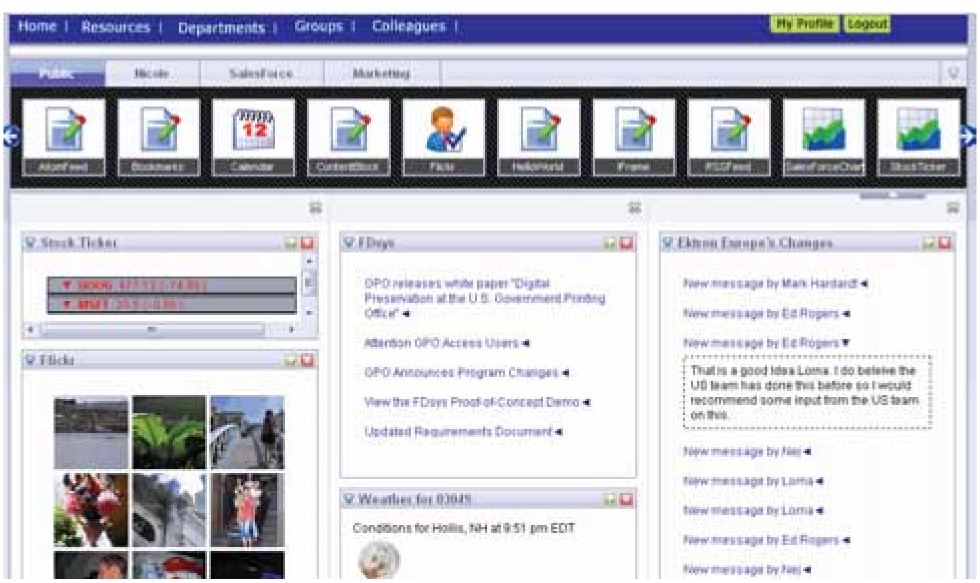
Personalizing a Web Page



Personalization is fast becoming an integral part of Web sites like iGoogle and Facebook, and organizations see personalization as a way to make their sites stickier and more engaging.

The following video introduces Personalization: http://www.ektron.com/personalization/

Ektron CMS400.NET provides tools to let membership users personalize their experience on your site, bringing relevant information to their fingertips. By letting users add widgets, applications, and feeds to a Web site, CMS400.NET provides a framework on which to easily build true, personalized portals.



Make Your Site, Their Site with CMS400.NET

When membership users can choose and organize content on their digital dashboard, your site becomes their site. Everyone has different needs and preferences, and CMS400.NET's portal functionality lets you create a more interactive, engaging experience by giving power to the user.

How Personalization Works

On an Ektron CMS400.NET Web site, personalized areas can have multiple tabs, letting users organize content by subject – think of tabbed browsing. Users can easily add new tabs, switch between them, and define each one as public or private. For example, a tab that displays personal financial information can be private, so only that user can see it. Each tab can have multiple columns, to further customize the view.

Ektron CMS400.NET *widgets* can be dragged and dropped into each tab. These widgets can range from RSS feeds to applets to Ektron server controls. They make it possible for a site visitor to access all information from one location, rather than using many mouse clicks to log into separate Web sites or applications.

Developers can give users access to any pre-built Ektron CMS400.NET widgets, and even build their own widgets that talk to third-party systems to customize the way site visitors are engaged. See Also: "Creating Your Own Widgets" on page 21-386 and "Standard Widgets" on page 21-404

Empower your Intranet ...

Building personalization into your intranet empowers employees with customization that fits their work and personal life. Widgets can range from photos, local weather, and updated news to a personal work calendar, a sales time line and tracker, or a feed to a discussion board about a new product release.

Managers can use widgets to enhance their access to their team's information. A human resources department can update job postings on a weekly basis via a widget rather than navigating to the company's careers site.

... and Public Facing Web Sites

Personalization revolutionizes the way visitors interact with sites, and Ektron CMS400.NET provides the tools to make that happen. See what some organizations can do with personalization.

- Healthcare portals have regular site visitors who desire the same information each time they visit. Enable visitors to receive allergy, fitness, nutrition, and appointment information whenever they log in – your site visitors may even save recipes to their nutrition tab.
- Clothing store customers are fashion-minded individuals who like to view the latest styles on these Web sites. Let them view the department they always go to first with the click of a button. Clothing widgets can show what's available in their size. This personalization will increase site traffic and sales.
- Banking sites can allow users to access personal account widgets, and separate it from their business financial information. Calculator widgets can keep them on the site as they make financial decisions.
- Schools personalize their Web site for each student and parent. Personalized portals let students have widgets such as school e-mail, personalized school calendars (with their homework, project due dates and social events), feeds linked directly to their grades, a school library search tool, and more to keep them connected and informed.

Personalization enables membership users to access information they want with the click of a button. No longer do they have to navigate all over a Web site (or sites) to find content. Ektron CMS400.NET's personalization functionality lets organizations create iGoogle-like interfaces integrated within content management, so that they can serve their customers and members in a more powerful and personal way, building user adoption and increasing site traffic.

The following topics explain personalization in more detail.

- "Personalization versus PageBuilder Pages" on page 9-305
- "Individual versus Group Personalization Pages" on page 9-305
- "Sample Personalization Pages" on page 9-306
- "Creating an Individual Personalization Page" on page 9-306
- "How a Membership User Interacts with an Individual Personalization Page" on page 9-311
- "Creating a Community Group Personalization Page" on page 9-313
- "How a User Interacts with a Community Group Personalization Page" on page 9-316

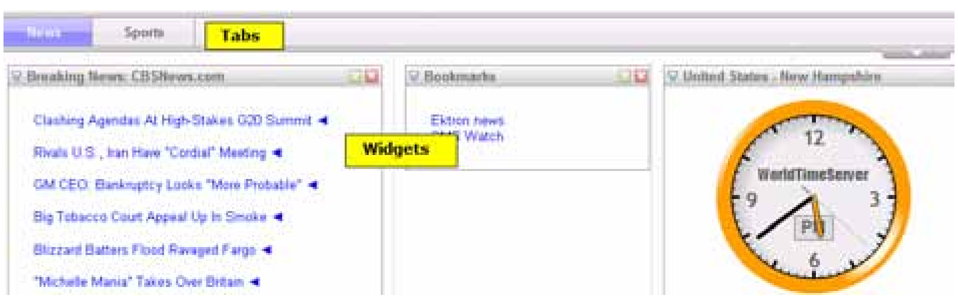
Personalization versus PageBuilder Pages

Personalization lets a *membership user* or *community group member* customize a single page on your site for their own use. A PageBuilder page, on the other hand, lets an Ektron CMS400.NET *user* create pages that make up your Web site.

Both page types use widgets. See Also: "Standard Widgets" on page 21-404

Individual versus Group Personalization Pages

An *individual* personalization page is used by a membership or an Ektron CMS400.NET user to personalize a page on your Web site. A page consists of tabs, and each tab can contain several widgets.



If a tab is *private*, only that user can view and edit it. If the tab is *public*, anyone can view it but only the signed-in user can create and edit the content.

A *group* personalization page is used by group members to set up a portal page that addresses that group's unique needs. Any group member can view and create or edit the page's content.

If a tab on a group page is *private*, only group members can view and create or edit it. If the tab is *public*, anyone can view it but only the group members can create and edit the content.

Sample Personalization Pages

You can find examples of personalization pages in these Ektron sample sites. You can copy and edit the samples as needed to build your personalization pages.

To download sample sites, go to http://www.ektron.com/solutions/startersites/.

Individual Personalization Pages

- Technology site > Login > My Profile > Dashboard
- Intranet Site > Login > My Profile > Dashboard
- Developer Sample site > Personalization

Group Personalization Pages

- Technology site > Login > Community > Community Groups > *select group, such as Ektron Tech Web Design* > Dashboard
- Intranet Site > Login > Groups > *select group* > Dashboard

Creating an Individual Personalization Page

Follow these steps to create a personalization page from scratch. After you create the page, place a link to it on your site. Then, any authenticated membership user can use the page to create his own personal portal.

This section consists of the following subtopics.

- "Widget Spaces" on page 9-307
- "Steps for Creating a Personalization Page" on page 9-307
- "Verify that the User is Authenticated" on page 9-310

Widget Spaces

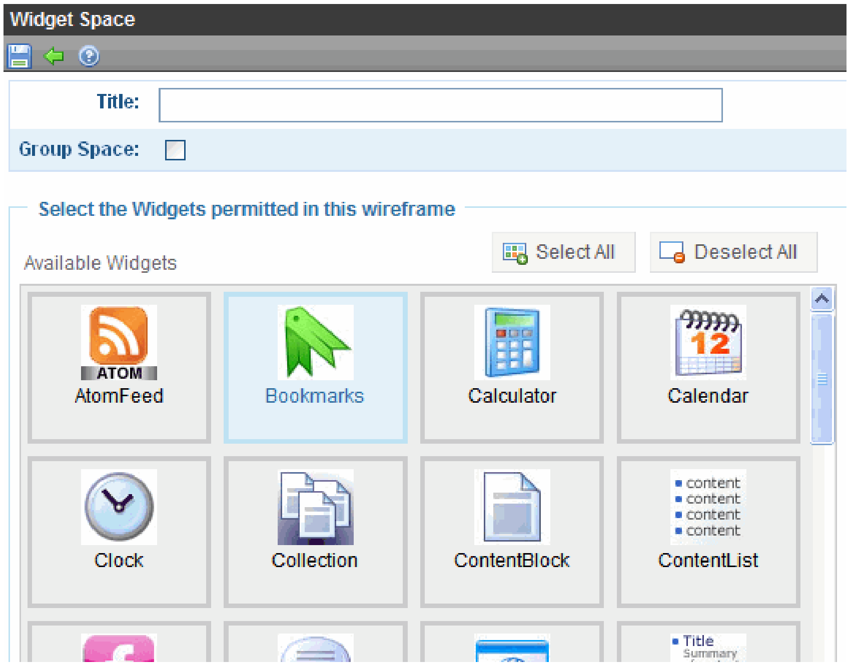
A widget space is a mechanism that lets you determine which widgets individual users or a community group can drop onto a personalization page.

For example, one group of users should only be allowed to drop weather and news feed widgets onto their personalization page. In this case, you would

- Create a widget space.
- Select only weather and news feed widgets.
- Sign on to Visual Studio to create the .aspx page.
- Drop a Personalization user control onto the page.
- In the control's `widgetspaceID` property, identify the widget space you created in bullet 1.

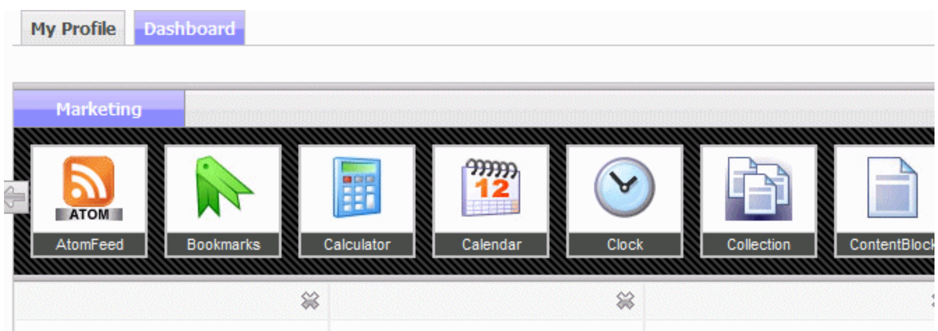
Steps for Creating a Personalization Page

1. Go to Ektron CMS400.NET **Workarea** > **Settings** > **Configuration** > **Personalization** > **Widgets**. See Also: "Standard Widgets" on page 21-404
2. Click the Sync button ( ) make sure all widgets are available.
3. Go to **Settings** > **Configuration** > **Personalization** > **Widget Space**.
4. Click the add button ( ).
5. Enter a **Title**.
6. Only check the **Group Space** checkbox if this widget space will be used for a community group personalization page.
7. Select widgets that authorized users will be able to drop onto a page.



As you select a widget, its background color changes.

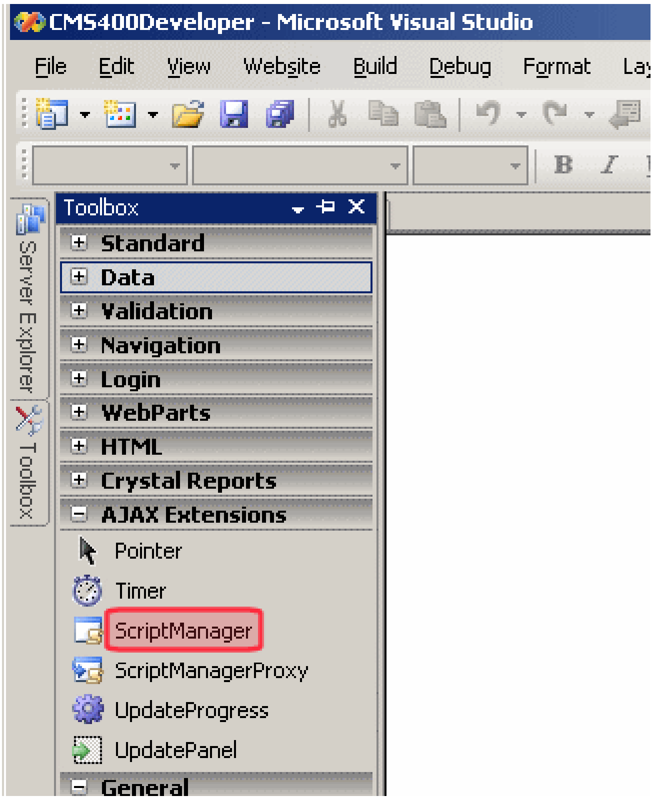
These widgets appear in the personalization screen's widget tray (shown below) when a membership user is personalizing a page.



8. Click the Save button ( ).

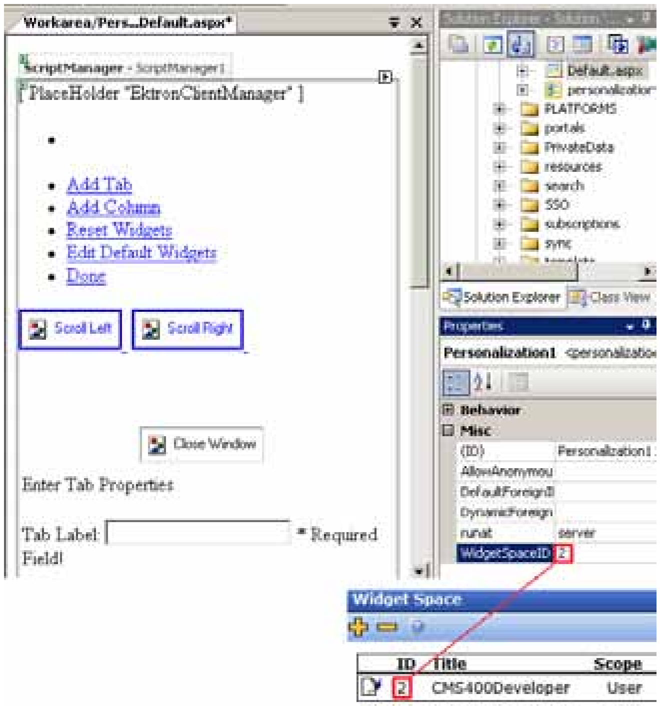
Note: Remember your widget space's ID number. You need it when setting up the Personalization user control.

9. Open Visual Studio.
10. Create a new Web Form.
11. Switch to design view.
12. From the Toolbox, drag and drop an **Ajax Extensions** > **Script Manager** control.



If you do not see a Script Manager control, install the Microsoft AJAX Library 3.5. To do this, go to http://www.asp.net/ajax/downloads/.

13. In the Visual Studio folder browser, open the `workarea/personalization/` folder.
14. Drag and drop a Personalization user control (personalization.ascx).
15. Set the control's `widgetspaceid` property (circled below) to the ID number of the widget space you added in Step 6.



16. Save the Web Form.

Verify that the User is Authenticated

Your page should redirect the user to the personalization page, or use an ASP.NET panel to verify that user is authenticated.

Note: The asp.net panels are implemented in eIntranet and ektron Tech site.

Here is sample code you can use.

Aspx.cs

```
// To check if user is logged in or not
Ektron.Cms.CommonApi IsUserLoggedIn = new Ektron.Cms.CommonApi();
if (IsUserLoggedIn.IsLoggedIn)
{
Response.Redirect("dashboard.aspx");
Or
pnlDashboard.Visible= true;
}
Else
{
pnlDashboard.Visible=false;

}
```

Aspx

```
<asp:Panel ID="pnlDashboard" runat="server" Visible="False">
<asp:ScriptManager ID="ScriptManager1" runat="server"
EnablePartialRendering="true"></asp:ScriptManager>
<ucEktron:Personalization ID="widgetSpace" WidgetSpaceID="1"
DynamicForeignIDParameter="id" runat="server" />
```

</asp:Panel>

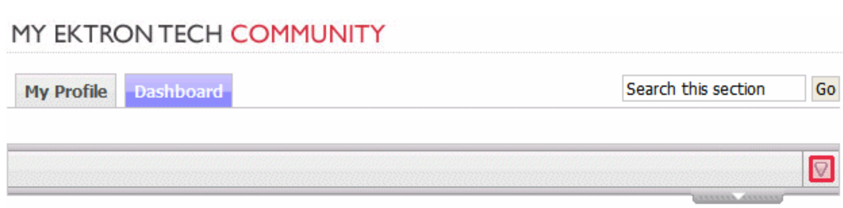
The Synchronize Widgets Screen

This screen helps you synchronize widgets in your Web site's `site root/widgets` folder with those in your Ektron CMS400.NET Workarea. So, for example, you recently created two new widgets. To make them available within the Workarea, click this screen's Synchronize button ().

After you click the button, you see new widgets on this screen and other Workarea screens that let you select widgets. Conversely, clicking this button removes any widgets that you delete from the `site root/widgets` folder.

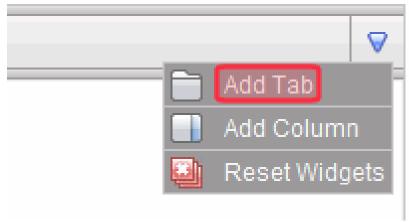
How a Membership User Interacts with an Individual Personalization Page

To access a personalization page, a membership user logs in then clicks **My profile** > **Dashboard**. Initially, the dashboard looks like this.



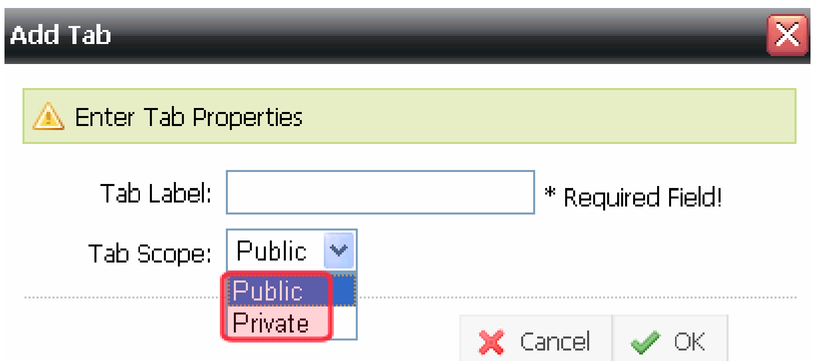
Inserting a Tab and Column

The user adds a tab by clicking the down arrow circled above and choosing **Add Tab**.



Public vs. Private Tab

When creating a tab, the user must decide if it is *public* or *private*.

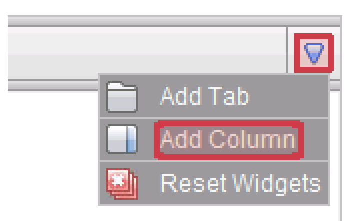


Any logged-in user can see a user's *public* tab by visiting his profile and clicking **Dashboard**.

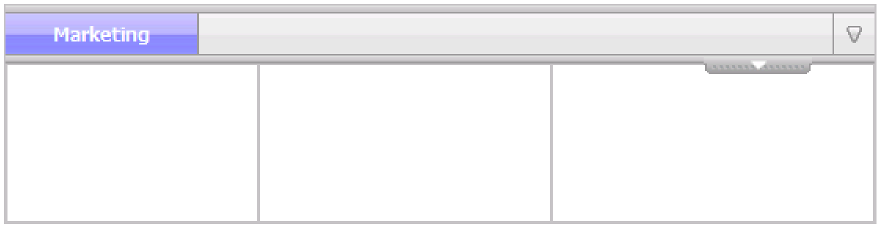
A *private* tab is visible only to the user who created it.

Adding Columns

Next, the user must add at least one column. To do this, he clicks the down arrow circled below and chooses **Add Column**.

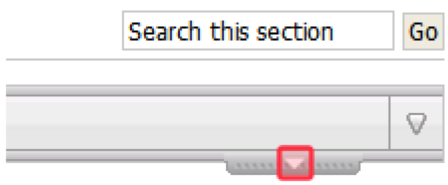


Here is an example of a tab with three columns.



Adding Widgets

To add a widget, the user clicks the other down arrow (circled below), then drags and drops the desired widgets.



The selection of widgets was determined when the widget space was created. See Also: "How a Membership User Interacts with an Individual Personalization Page" on page 9-311

Creating a Community Group Personalization Page

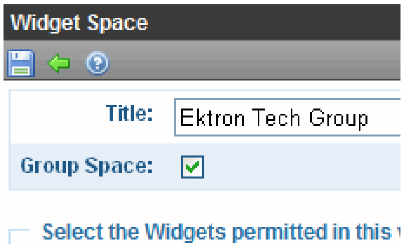
A community group personalization page is similar to an individual page. It lets group members customize a page's content by dropping widgets. For an introduction to these concepts, see

- "Personalizing a Web Page" on page 9-302
- "Individual versus Group Personalization Pages" on page 9-305
- "Sample Personalization Pages" on page 9-306
- "Creating an Individual Personalization Page" on page 9-306
- "How a Membership User Interacts with an Individual Personalization Page" on page 9-311.

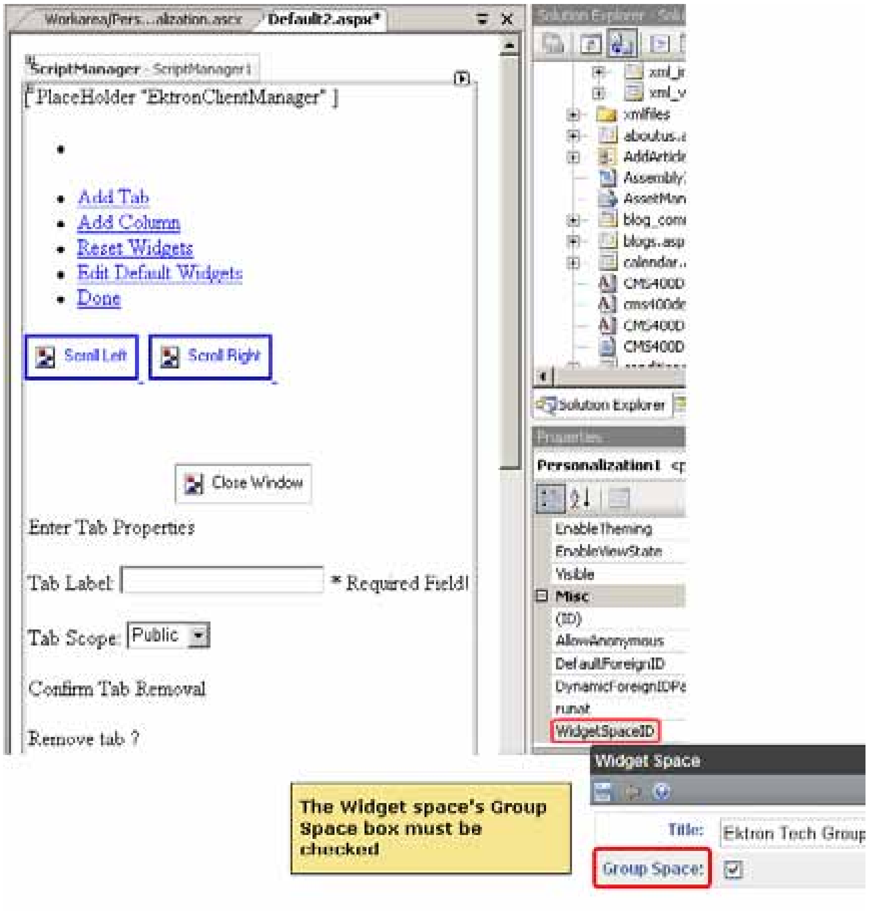
Setting up a Community Group Personalization Page

To create a Community Group personalization page, follow the instructions in "Creating an Individual Personalization Page" on page 9-306, with the following differences

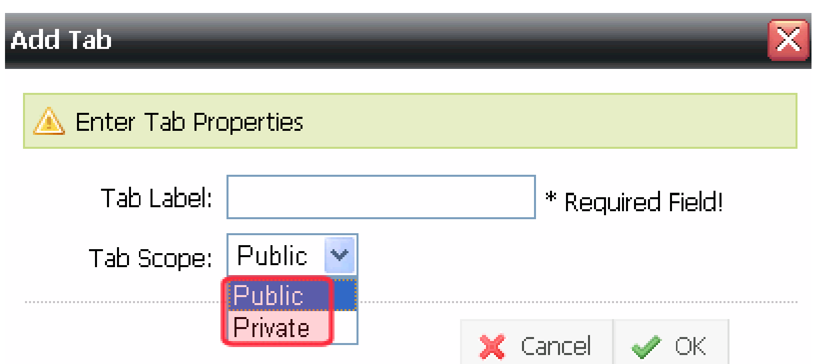
- When creating a Widget space, check the **Group Space** checkbox.



- When a developer creates an .aspx page and drops a personalization control, the selected Widget space must be one whose **Group Space** box is checked.



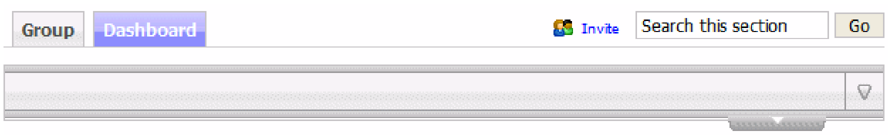
- A private tab is visible only to *group* members.



How a User Interacts with a Community Group Personalization Page

To access a Community Group personalization page, a membership or Ektron CMS400.NET user group member logs in then navigates to the group's personalization page. See Also: "Group Personalization Pages" on page 9-306

Initially, a group personalization page looks like this.



Community group members work with a personalization page in the same way they work with individual personalization pages. See "Inserting a Tab and Column" on page 9-311 and "Adding Widgets" on page 9-313.

Chapter 10

URL Aliasing

Search engine optimization (SEO) plays a key role in every Web marketing strategy. Ektron CMS400.NET's URL aliasing makes it easy to create descriptive, meaningful and SEO-friendly URL aliases consistently, maximizing your Web site's placement in search results.

For a video introduction to Ektron CMS400.NET's Aliasing feature, go to:

http://media.ektron.com/flash/urlaliasing/480x360/ektronaliasing/ektronaliasing.html

There are four important aspects of URL Aliasing.

- **Automatic Aliasing** - Normally-generated URLs are barely human readable, let alone search engine-friendly. With search engines using the text in a URL to define where a page shows up on a search return, it has never been more important to have descriptive URLs. While you can manually create aliases that will do the job, CMS400.NET gives you the tools you need to generate them automatically, with consistent structure.

These human-readable URLs are predicable and scalable, following consistent patterns that can apply to all of your sites. The use of words and phrases that actually define the page itself increases these aliases' search engine rankings. By following a pattern, they are scalable, and that pattern can be used across your sites as they grow.

Sites that are currently built migrate easily to CMS400.NET, adopting the new aliasing scheme. No longer do you have to make changes to the web.config, and aliasing can keep old links valid. Once the URL aliasing function is configured and enabled, all content inherits the new aliasing structure.

URL aliases generated by CMS400.NET don't require an extension of how the page is built; search engines find "real" words. Web site performance affects search engine returns as well, and Ektron's URL aliasing takes this into account: these aliases are cached, improving performance.

- **Taxonomy-Based Alias** - URL aliases can be auto-created by Ektron CMS400.NET based on the taxonomy of your Web site. It uses the levels of the taxonomy plus the title of the page itself to produce an alias. Search engines will find those words, increasing the page's relevancy in any search for them. And because it is based on the taxonomy (which lets content be established in one-to-many relationships), multiple aliases can be created that will have relevancy to multiple search criteria.
- **Folder-Based Alias** - Ektron CMS400.NET can also automate the creation of folder-based URL aliases. Similar to taxonomy-based aliases, deriving an alias from the folder structure produces one that is relevant to the content's actual location. With descriptive folder names and good organization, this produces SEO-friendly addresses comprised of folder structure plus title of page.
- **Manual & RegEx Based Alias** - For some pages with content that follows a pattern, Regex aliasing may be the answer. It looks for a pattern in the current URL, and then replaces it with a different pattern to create a relevant alias. For example, a blog site may be best served by Regex aliases that rely on entry date.

Manual aliasing is also available in Ektron CMS400.NET. By enabling it, you can define the pages very specifically, including adding metadata to further improve SEO for that page.

Effects of Aliasing Content

Once your content is aliased, a site visitor can enter either the original URL or the alias into the browser to view the page. Also, if someone selects a content link on your Web page, the alias frequently replaces the original URL in the browser.

Also, when an Ektron CMS400.NET user is editing content and inserts a quicklink whose content has several aliases, a screen appears, and he must select one of the aliases. (If only one alias is assigned to the content, it is applied to the quicklink.)

This chapter explains how to alias Ektron CMS400.NET content through the following topics.

- "Upgrading from Previous Releases" on page 10-44
- "Assigning an Alias to Multi-Language Content " on page 10-45
- "Using Classic ASP with Windows 2008 Server 64 Bit" on page 10-46

Benefits of Aliasing

Here are some examples of why you'd want to alias Ektron CMS400.NET pages.

- To provide shorter, more user-friendly URLs, which map to longer paths. For example, `www.ektron.com/training/` may be preferable for marketing materials.
- If you have a PHP site, you can alias all php pages and use the same query string names to pass needed information to the new .aspx pages.

Note: Any query strings appended to an aliased page pass to the .aspx page and may be used if necessary.

- If you have a static Web site (for example, all HTML pages) that is indexed in a search engine, you can alias your site and retain complete content management without affecting your search engine ranking.
- Some search engines work better without the URL parameters that make up an Ektron CMS400.NET Web page name. URL Aliasing creates page names that search engines might more easily recognize.

Types of URL Aliasing

There are three types of URL aliasing, described below.

- **Automatic Aliasing** - can automatically change the page name format of a group of content blocks. You determine the group by selecting a taxonomy or a top-level Ektron CMS400.NET folder.

For example, you might choose a folder and alias its content using the content title followed by slash (/). So, while the original URL might be `www.example.com/Human_resources/Post-ings/hr.aspx?id=8745`, the aliased one might be `www.example.com/jobs/`.

For more information, see "Automatic URL Aliasing" on page 10-19.

- **Manual Aliasing** - You can manually alias any content block using whatever unique name you wish. For example, you can alias your technical support page as `www.example.com/help.htm`, even though its real name is `www.example.com/help.aspx?id=27`.

You can assign several manual aliases to content then decide which one is the primary. For more information, see "Manual Aliasing" on page 10-27.

If both alias types are provided for a content item, a user can enter any alias into the browser address field to access that content. If someone hovers the cursor over (or clicks) a link to aliased content, the primary manual alias appears.

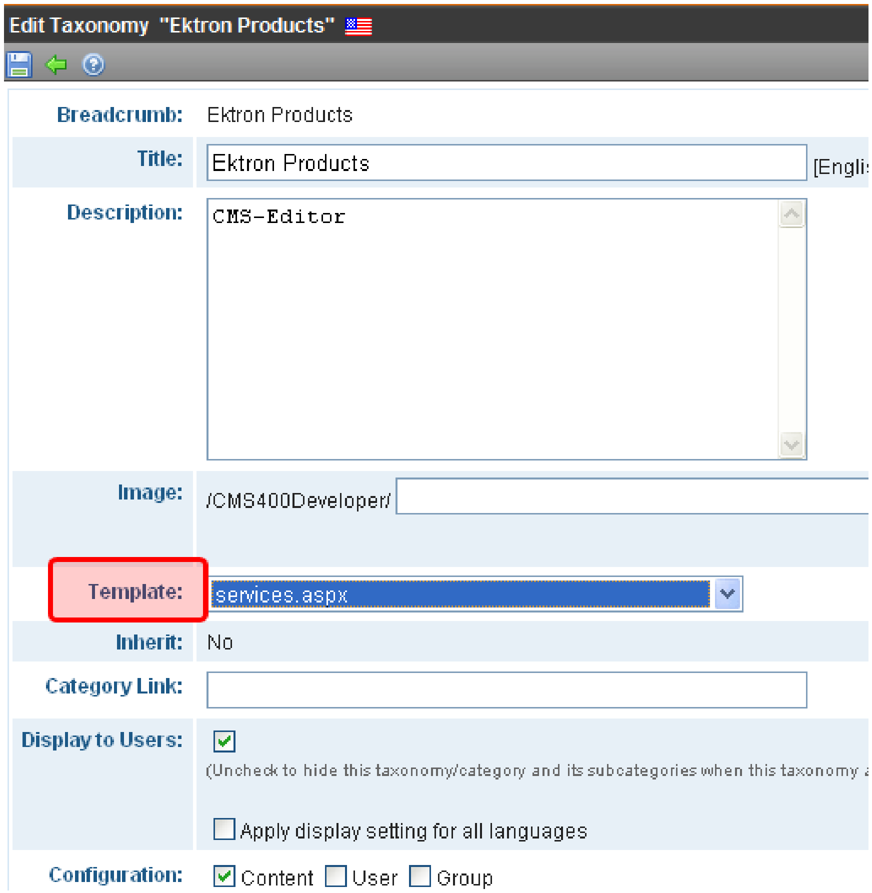
- **Site Aliasing** - If your site supports the multi-site feature, you can enter aliases for any site. For example, your company's name just changed from Bionics to NewGen. You could use the site aliasing feature to resolve the url `www.bionics.com` to `www.newgen.com`. For more information, see "Site Aliasing" on page 10-42.

Example of an Alias in the Browser

Features Not Supported by Aliasing

Aliasing is not supported in the following areas of Ektron CMS400.NET.

- search results
- images
- content in root folder * (cannot be automatically aliased, although you can alias it manually and by taxonomy)
- forums (discussion boards) * (links within forum posts can be aliased)
- forms/polls/surveys *- the form is aliased but the postback screen is not (for a workaround, see http://weblogs.asp.net/scottgu/archive/2007/02/26/tip-trick-url-rewriting-with-asp-net.aspx > "Handling ASP.NET PostBacks with URL Rewriting")
- a link to an HTML form
- content links within the directory server control
- If a template is assigned to a taxonomy (see below), the template takes precedence over an alias for content found by a directory server control



* - looking to support in future release

- eCommerce - items in a Shopping Cart control use an alias *unless* you assign an .aspx page in the control's `TemplateProduct` property. If you assign a page there, that page is used in the product's URL, not the alias.

- If you enable .asp as an extension, the alias does not appear when a site visitor hovers the cursor over an *asset*. Instead, the actual file name appears. See Also: "Extension" on page 10-11

If a site visitor hovers the cursor over HTML content, the alias does appear.

- The alias does not appear when a site visitor viewing an RSS page hovers the cursor over an *asset*. Instead, the actual file name appears.

Aliasing and Relative Links

After you enable Aliasing, any relative links embedded in your Web pages that are not preceded by a slash (/) may demonstrate symptoms such as:

- Runtime error notifications
- Broken images (you see a red X where the image should be)
- Missing text styling

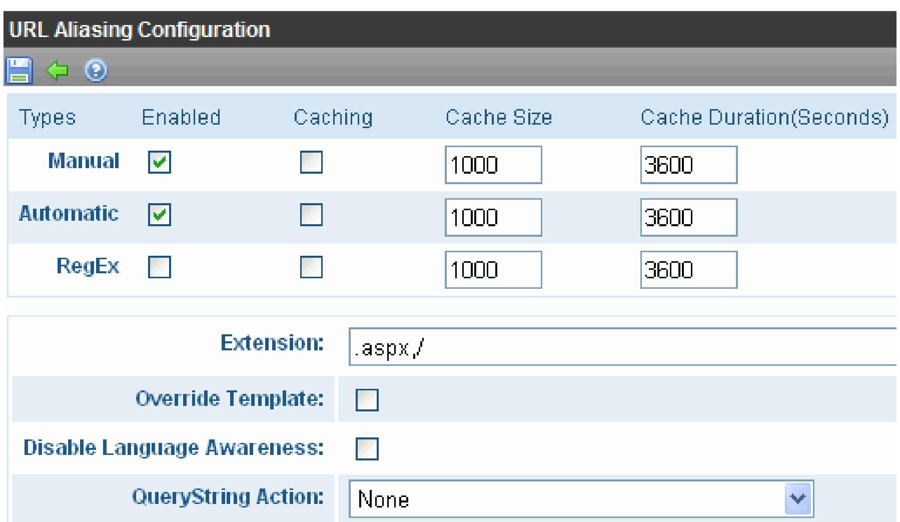
The following Ektron CMS400.NET Knowledge Base article analyzes this problem and presents solutions: http://dev.ektron.com/kb_article.aspx?id=19254.

Configuring URL Aliasing

Before you can set up aliases, you must enable the features using the URL Aliasing Configuration screen (shown below).

See Also:

- "Manually Clearing the Cache" on page 10-17
- "Setting Default Documents" on page 10-18



Warning! If you performed a database sync and the site being synched uses URL aliasing, you must go to its URL Aliasing Configuration screen and click the Refresh button ( ) to update its aliasing information.

To edit the Aliasing Configuration screen, go to Ektron CMS400.NET **Workarea** > **Settings** > **Configuration** > **URL Aliasing** > **Settings**. Then, click the Edit button ( ).

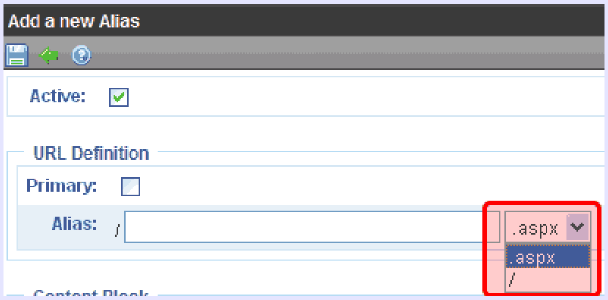
Note: After changing the configuration screen, if your Ektron CMS400.NET supports multsite configurations, you must log into each site, navigate to the URL Aliasing Configuration screen, and click the Refresh button ( ).

Use the following table to complete the screen.

See Also: "URL Aliasing" on page 10-1

Field	Description
Manual	
Enabled	Check this box to enable manual aliasing. See Also: "Manual Aliasing" on page 10-27
Caching	Check this box to improve your server's performance. It minimizes the number of database hits by placing all manual aliasing information in your server's memory. Note: A developer might want to uncheck this box while developing a site, to make sure that everything is coming out of the database.
Cache Size	If you checked the **Manual Caching** box, enter the maximum number of manual aliases that your server will cache. By default, this is set to 1000. An alias is cached whenever anyone uses it. It remains in the cache for the number of seconds set in the **Cache Duration** field. If more than this number of aliases needs to be added to the cache, Ektron CMS400.NET makes room for new ones by removing aliases that have been in the cache for the longest time. If you increase the number, it is possible that your performance will improve. But at some point, the size of the cache may degrade your server's performance. See Also: "Manually Clearing the Cache" on page 10-17
Cache Duration (Seconds)	Enter the number of seconds for which any alias is retained in the server's cache. After this number of seconds has passed, the alias is flushed from the cache. See Also: "Manually Clearing the Cache" on page 10-17 Note: If your Ektron CMS400.NET supports multi-site configurations, this setting only affects the site to which you are logged on. To set a cache duration for other sites, sign in to each site's **Workarea > Settings > Url Aliasing > Settings**, then set its cache duration values.

Field	Description
Automatic	
Enabled	Check this box to enable automatic aliasing. See Also: "Automatic URL Aliasing" on page 10-19
Caching	Check this box to improve your server's performance. It minimizes the number of database hits by placing the most frequently used automatic aliases in your server's memory. You set the number of cached automatic aliases at the **Automatic Alias Cache Size** field.
Cache Size	If you checked the **Automatic Caching** box, enter the maximum number of automatic aliases that your server will cache. By default, this is set to 1000. An alias is cached whenever anyone uses it. It remains in the cache for the number of seconds set in the **Cache Duration** field. If more than this number of aliases needs to be added to the cache, Ektron CMS400.NET makes room for new ones by removing aliases that have been in the cache for the longest time. If you increase the number, it is possible that your performance will improve. But at some point, the size of the cache may degrade your server's performance. See Also: "Manually Clearing the Cache" on page 10-17
Cache Duration (Seconds)	Enter the number of seconds for which any alias is retained in the server's cache. After this number of seconds has passed, the alias is flushed from the cache. See Also: "Manually Clearing the Cache" on page 10-17
RegEx	
Enabled	Check this box to enable the RegEx feature. See Also: "Using RegEx Expressions" on page 10-37
Caching	Check this box to improve your server's performance. It minimizes the number of database hits by placing the most frequently used RegEx aliases in your server's memory. You set the number of cached aliases at the **RegEx Cache Size** field.
Cache Size	If you checked the **RegEx Caching** box, enter the maximum number of RegEx aliases that your server will cache. By default, this is set to 1000. An alias is cached whenever anyone uses it. It remains in the cache for the number of seconds set in the **Cache Duration** field. If more than this number of aliases needs to be added to the cache, Ektron CMS400.NET makes room for new ones by removing aliases that have been in the cache for the longest time. If you increase the number, it is possible that your performance will improve. But at some point, the size of the cache may degrade your server's performance. See Also: "Manually Clearing the Cache" on page 10-17

Field	Description
Cache Duration (Seconds)	Enter the number of seconds for which any alias is retained in the server's cache. After this number of seconds has passed, the alias is flushed from the cache. See Also: "Manually Clearing the Cache" on page 10-17
Extension	Enter file extensions of pages for which aliases can be created. Begin each extension with a period (.), and separate them with a comma (,). By default, Ektron CMS400.NET supplies the following extensions. - .aspx - / (the slash is actually the lack of an extension at the end of a page's name) If you are editing this screen and delete an extension, all aliases that use it are immediately disabled. **Where Extensions Appear** The values in this field appear as dropdowns in the Add a New Manual Alias and Add a New Automatic Alias screens.  See Also: "Restrictions on Extensions" on page 10-12
Override Template	A template and an alias can have the same name, for example, www.example.com/dynamic.aspx. If this happens, and a site visitor types such an address into the browser, this check box determines if the template page or the alias appears. If this box is checked, the alias appears instead of the template. Note: The template must be defined within the Workarea Settings > Template Configuration screen.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Disable Language Awareness</td><td>Use this check box to determine what happens under the following conditions:
1. A site visitor browses to content using an alias.
2. The site visitor changes the site language.
If this box is checked - If the content exists in the new language, it appears. If not the content appears in the original language.
If this box is unchecked - Site visitor sees a 404 error.

Examples if box is checked and a site visitor browses to content using an alias.
Content ID 33 exists in both English and Spanish. Site visitor views this content in English then switches the site language to Spanish. The Spanish version of content ID 33 appears.
(Assume English is the default language). Content ID does not exist in German. Site visitor views this content in English then switches the site language to German. The English content appears.</td></tr>
<tr><td>Query String Action</td><td>Use this field to set up a rule to handle an alias’s query string parameters. You can set one rule for your entire site (via this field), and separate ones that override the system-wide rule for specific manual aliases (using the Manual Aliased Page Name Maintenance screen).
Four options are available.
None - If an aliased URL has a query string, it is ignored. Any query string on the target URL is used.
Resolve matched parameters within alias - Ektron CMS400.NET tries to resolve matching parameters (it is case sensitive). If a match is found, the alias’s query string parameter takes precedence. Example:
<code>alias’s query string parameter:
http://www.example.com/Contact.aspx?id=84
Target: http://www.example.com/aboutus.aspx?id=35&UserId=10
Result: http://www.example.com/aboutus.aspx?id=84&UserId=10</code>
(id=35 is replaced by id=84 since it matched the query string parameter. UserId=10 was not affected because it did not match the alias query string parameter.)
Replace all parameters within alias - Ektron CMS400.NET replaces all of a target’s query parameters with the alias’ s query parameter. Example:
<code>alias’s query string parameter:
http://www.ektron.com/Contact.aspx?id=84
Target: http://www.ektron.com/aboutus.aspx?id=35&Userid=1
Result: http://www.ektron.com/aboutus.aspx?id=84</code>
(The target parameters id=35&Userid=1 are replaced by the alias parameter id=84)
Append parameters to alias - Ektron CMS400.NET appends the alias’s parameters to the target URL. Example:
<code>Alias: http://www.ektron.com/Contact.aspx?id=84&lang=1033
Target: http://www.ektron.com/aboutus.aspx?id=35&Userid=1
Result: http://www.ektron.com/aboutus.aspx?id=35&Userid=1 & id=84&lang=1033</code></td></tr>
</table>

Field	Description
	(The parameter from the alias is appended to the target)

Restrictions on Extensions

The following restrictions only apply if your server runs IIS7.

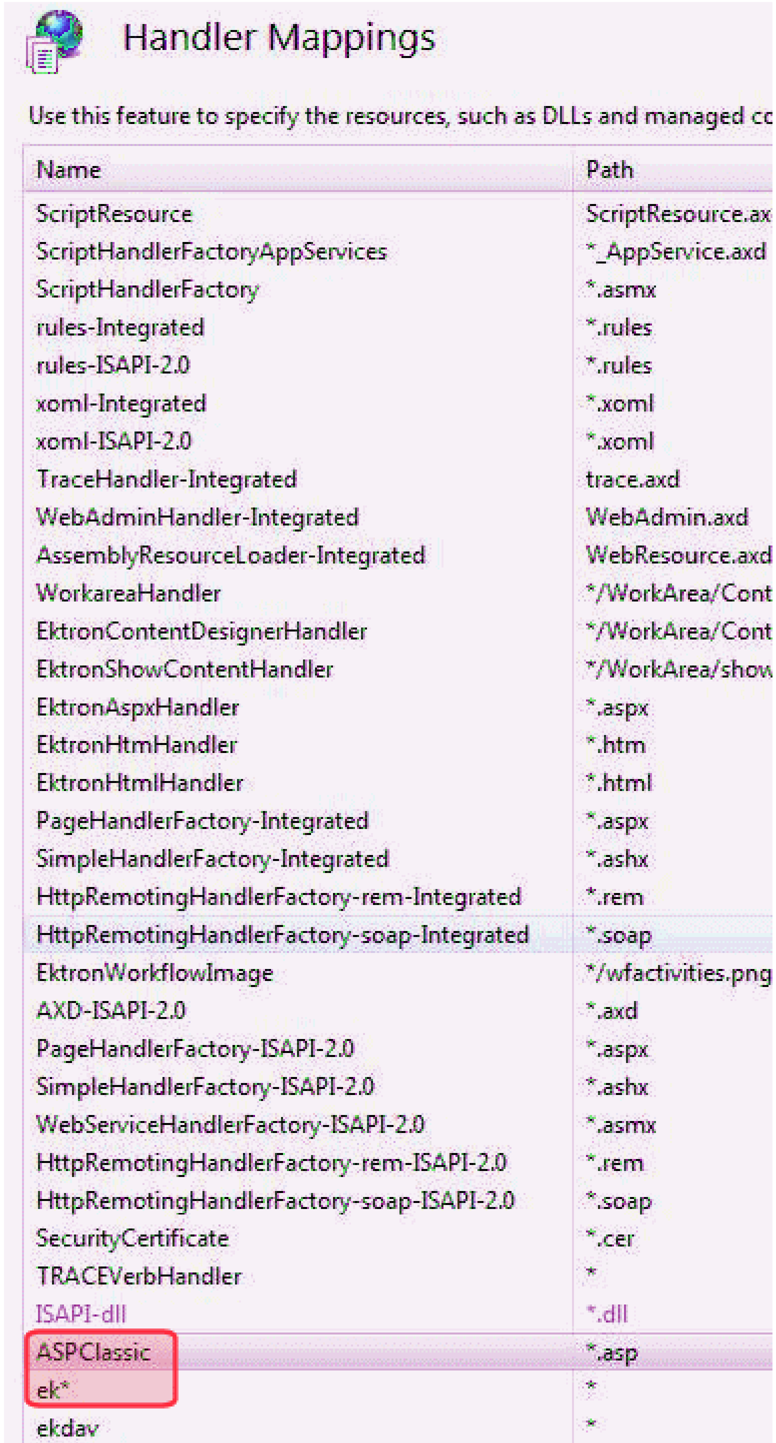
This section explains how IIS7 handles Web page extensions other than .aspx. There are two scenarios.

- Some of your site's pages have non-.aspx extensions. So, IIS7 needs to handle requests for those pages. See "Your Site Has non-aspx Pages" on page 10-13.
- You site previously had non-.aspx pages but no longer does. You want to set up aliases for these pages, so site visitors' bookmarks will still work. See "You Want to Set up Aliases for non-aspx Pages" on page 10-14.

Your Site Has non-aspx Pages

If any of your site's pages have extensions other than .aspx (for example, .asp, .php, .cfm), follow these steps to move them above ek* in the Handler Mappings list. (Extensions below **ek*** are handled by aliasing.)

1. Open IIS7.
2. Right click your Web site.
3. Click **Handler Mappings**.
4. Click **View Ordered List**.
5. Move non-aspx extensions used on your site above **ek***. For example, if your site uses .asp pages, move **ASPclassic** above **ek***. See below.



Handler Mappings

Use this feature to specify the resources, such as DLLs and managed cc

Name	Path
ScriptResource	ScriptResource.ax
ScriptHandlerFactoryAppServices	*_AppService.axd
ScriptHandlerFactory	*.asmx
rules-Integrated	*.rules
rules-ISAPI-2.0	*.rules
xoml-Integrated	*.xoml
xoml-ISAPI-2.0	*.xoml
TraceHandler-Integrated	trace.axd
WebAdminHandler-Integrated	WebAdmin.axd
AssemblyResourceLoader-Integrated	WebResource.axd
WorkareaHandler	*/WorkArea/Cont
EktronContentDesignerHandler	*/WorkArea/Cont
EktronShowContentHandler	*/WorkArea/show
EktronAspxHandler	*.aspx
EktronHtmHandler	*.htm
EktronHtmlHandler	*.html
PageHandlerFactory-Integrated	*.aspx
SimpleHandlerFactory-Integrated	*.ashx
HttpRemotingHandlerFactory-rem-Integrated	*.rem
HttpRemotingHandlerFactory-soap-Integrated	*.soap
EktronWorkflowImage	*/wfactivities.png
AXD-ISAPI-2.0	*.axd
PageHandlerFactory-ISAPI-2.0	*.aspx
SimpleHandlerFactory-ISAPI-2.0	*.ashx
WebServiceHandlerFactory-ISAPI-2.0	*.asmx
HttpRemotingHandlerFactory-rem-ISAPI-2.0	*.rem
HttpRemotingHandlerFactory-soap-ISAPI-2.0	*.soap
SecurityCertificate	*.cer
TRACEVerbHandler	*
ISAPI-dll	*.dll
ASPClassic	*.asp
ek*	*
ekdav	*

Once you do this, you *cannot* use these extensions as part of an alias. So, do *not* enter them into the **Extension** field of the URL Aliasing Configuration screen.

You Want to Set up Aliases for non-aspx Pages

If you want to use extensions other than .aspx for aliasing Web pages, follow these steps.

1. Open IIS7.
2. Right click your Web site.
3. Click **Handler Mappings**.
4. Click **View Ordered List**.
5. On the Handler Mappings screen, move non-aspx extensions that you want to alias below **ek***. For example, if your site uses .asp pages, move **ASPclassic** below **ek***.
6. Enter the extensions in the **Extension** field of the URL Aliasing Configuration screen. See Also: "Configuring URL Aliasing" on page 10-8

Activating Custom Extensions

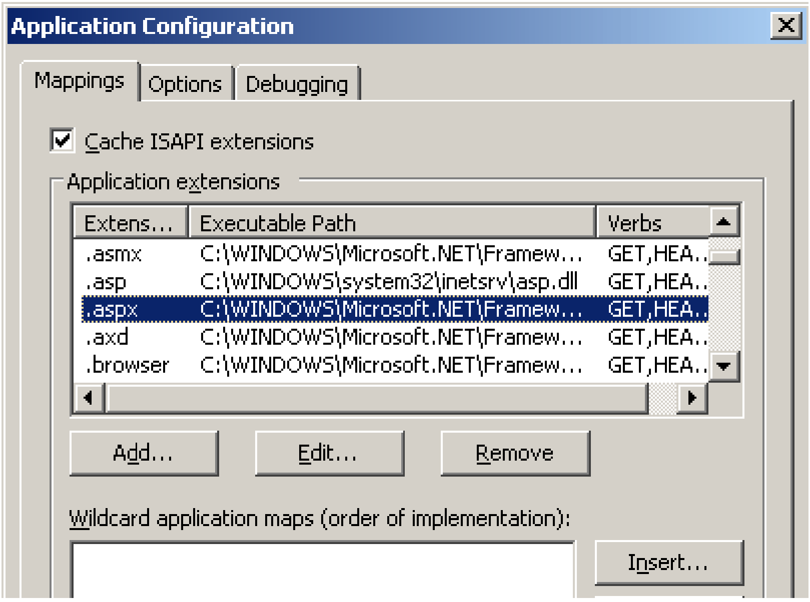
By default, Ektron CMS400.NET supplies the following extensions.

- .aspx
- / (the slash is actually the lack of an extension at the end of a page's name)

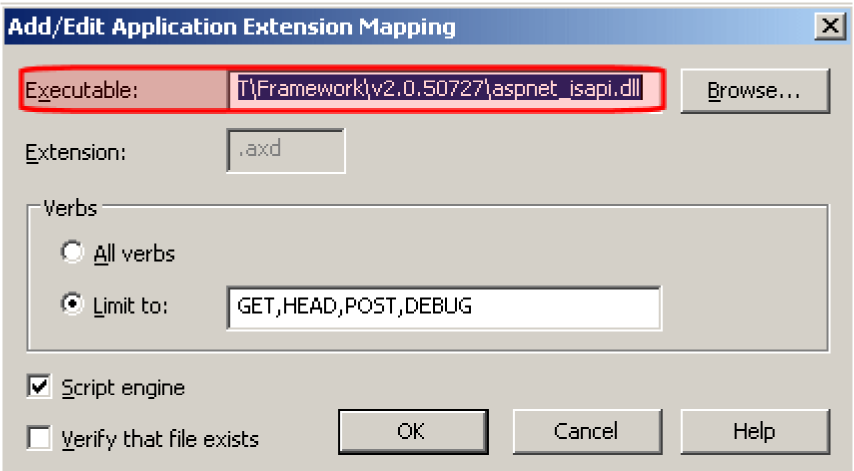
If you want to enable other extensions, follow these steps.

1. Go to the **Ektron CMS400.NET Workarea > Settings > Configuration > URL Aliasing > Settings** screen.
2. Enter the new extension into the **Extension** field and click Save ( ). See Also: "Extension" on page 10-11
3. If Wildcard Mapping in IIS is turned on, you are done.

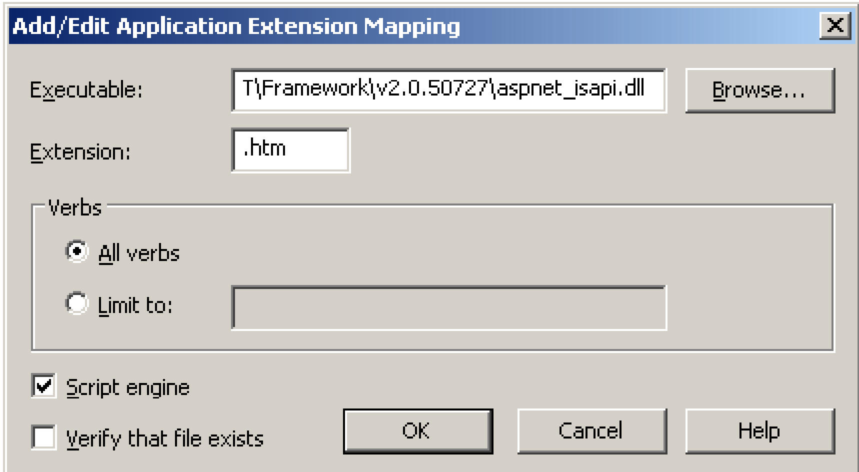
   If Wildcard Mapping in IIS is turned off, you must enter the new extension into IIS. To do this, go to the Windows **Start** button > **Administrative Tools > IIS manager**.
4. Open the **Web Sites** folder, right click your Web site then choose **Properties**.
5. Click the **Home Directory** tab.
6. Click the **Configuration** button.
7. Scroll down to and double click the .aspx extension.



8. Copy the path to aspnet_isapi.dll. (The path is found in the Executable field.)



9. On the Application Configuration window, click **Add**.
10. The Add/Edit Application Extension Mapping screen appears.
11. In the **Executable** field, paste the path to aspnet_isapi.dll (which you copied in Step 8).
12. In the **Extension** field, enter the extension that you are activating. See example below.



13. Uncheck the **Verify that file exists** checkbox.
14. Click **OK**.

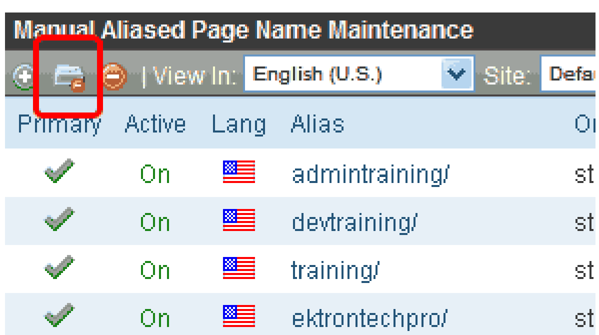
Manually Clearing the Cache

Each aliasing type (Automatic, Manual, and RegEx) has **Cache Size** and **Cache Duration** fields, which let you determine conditions that automatically clear each cache. However, you can manually clear a cache at any time. To do so, follow these steps.

Warning! If your Ektron CMS400.NET supports multi-site configurations, you must sign in to each site's Work-area, then manually clear its cache.

---

1. Click the appropriate **Settings** > **URL Aliasing** screen. For example, to clear the Manual Aliasing cache, click **Settings** > **URL Aliasing** > **Manual**.

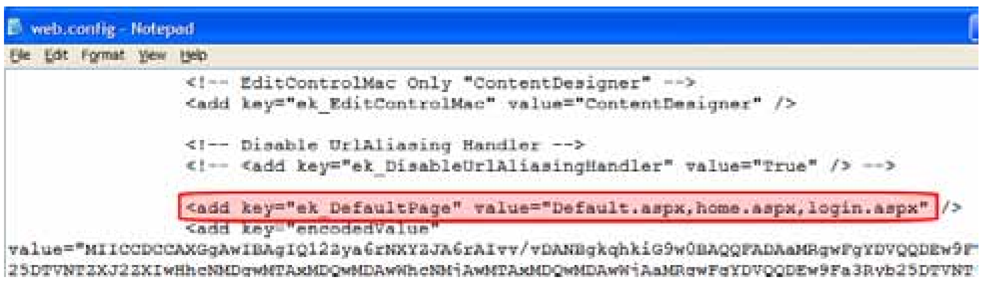


2. Click the Clear Cache button ().

Setting Default Documents

The concept of default document is explained in the following Microsoft KB article: [http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/dc6eb1b4-9028-4308-9935-52b64edfad36.mspx.](http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/dc6eb1b4-9028-4308-9935-52b64edfad36.mspx) Essentially, it lets you establish a default document for client requests to a Web site that do not specify a document name. For example, `www.example.com/jobs`. If the default document is `default.aspx`, this URL resolves to `www.example.com/jobs/default.aspx`.

When using Ektron CMS400.NET Release 7.6 or higher, you identify one or more default documents in the *siteroot*/web.config file's `ek_DefaultPage` element (shown below).



```
web.config - Notepad
File Edit Format View Help
            <!-- EditControlMac Only "ContentDesigner" -->
            <add key="ek_EditControlMac" value="ContentDesigner" />

            <!-- Disable UrlAliasing Handler -->
            <!-- <add key="ek_DisableUrlAliasingHandler" value="True" /> -->

            <add key="ek_DefaultPage" value="Default.aspx,home.aspx,login.aspx" />
            <add key="encodedValue"
value="MIICCDCCAXGgAwIBAgIQ122ya6rNXY2JA6rAIvv/vDANBgkqhkiG9w0BAQQFADAaMRgwFgYDVQQDEw9F
25DTVNT2XJ22XIwHhcNMDgwMTAxMDQwMDAwWhcNMjAwMTAxMDQwMDAwWjAaMRgwFgYDVQQDEw9Fa3Rvb25DTVNT
```

Note: The `ek_DefaultPage` element determines your Web site's default document whether or not you are using URL Aliasing.

So when a site visitor enters an address that includes your domain but no page name, Ektron CMS400.NET refers to `ek_DefaultPage`'s values. In the above example, the first page is default.aspx. If found, that page displays. If not, it looks for the second page listed, etc.

If none of the pages is found or a page is not specified in `ek_DefaultPage`, what happens next depends on the IIS version that your server is running.

IIS version	Result if pages listed in `ek_DefaultPage` are not found
6	■ if `ek_DefaultPage` is blank in web.config, default documents listed in IIS6 are used. ■ if `ek_DefaultPage` has one or more pages but none of them exists on the server, a Page not Found (404) message appears.
7	**Page not found** message appears in browser. Because Ektron CMS400.NET assumes responsibility for letting you define the default document, default documents specified in IIS 7 are ignored.

Automatic URL Aliasing

Automatic aliasing lets you assign an alias to several content items at once. You identify content by either taxonomy or folder. Then, select additional elements of the alias pattern and save all information as a *configuration*.

You can create one automatic aliasing configuration for each folder or taxonomy. Since a single content block can be assigned to several taxonomies, it can have many automatic aliases.

When an automatic alias configuration is activated, an alias is assigned to all content in the taxonomy or folder (and its subfolders). From then on, that content can be identified by its automatic alias. In addition, any content added to the folder/taxonomy in the future will be assigned that alias as long as the configuration is active.

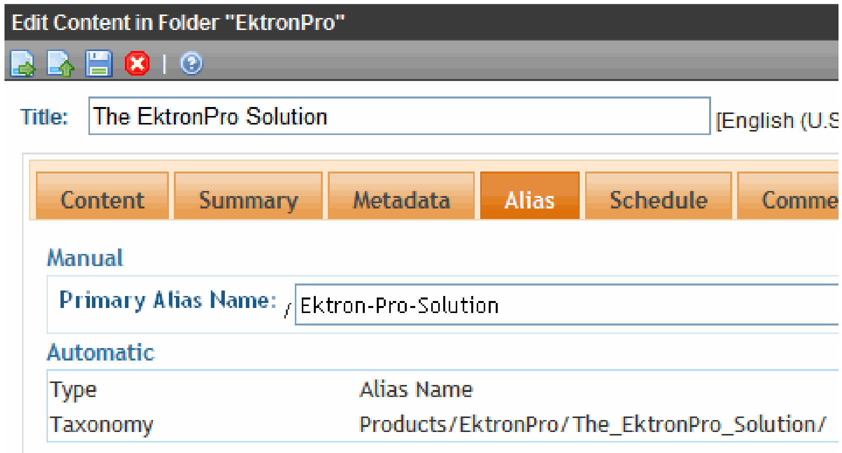
Automatic Aliasing is further described through the following topics.

- "Permissions for Working with Aliasing" on page 10-19
- "Enabling/Disabling Automatic URL Aliasing" on page 10-20
- "Setting up Automatic Aliasing" on page 10-21
- "Viewing and Editing Automatic Alias Configuration" on page 10-25
- "Inactivating an Automatic Aliasing Configuration" on page 10-26
- "Deleting an Automatic Aliasing Configuration" on page 10-27

Permissions for Working with Aliasing

Members of the Administrators group or those assigned to the Alias-Admin Role have full permissions to work with aliasing. They can do things like

- Turn aliasing on and off
- View all manual aliases
- Activate or deactivate manual aliases
- Change the primary alias
- Create automatic aliases
- Create RegEx aliases

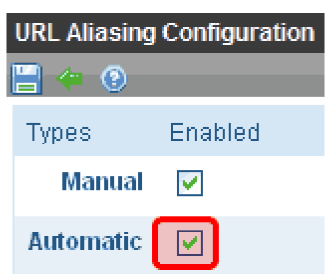


To give a user a limited ability to work with aliasing, you can assign them the Alias-Edit role. These users can only

- view and assign a manual alias to content
- view secondary aliases assigned to content

Enabling/Disabling Automatic URL Aliasing

To enable automatic aliasing, follow this path: **Settings > Configuration > URL Aliasing > Settings**. The screen indicates if automatic aliasing is currently on or off.



To change its state, click the Edit button ( ), check or uncheck the box, and click the Save button ( ).

See Also: "URL Aliasing" on page 10-1

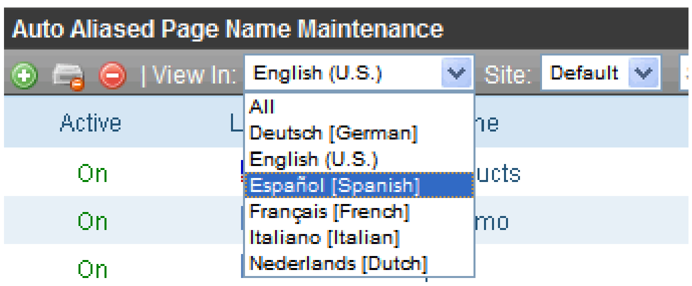
Setting up Automatic Aliasing

After enabling automatic URL aliasing, you can create a *configuration*, which lets you

- identify the content source (that is, a taxonomy or a folder)
- choose elements of the aliasing pattern
- preview sample original and aliased URLs

To create an automatic alias configuration, follow these steps.

1. Open the **Settings** > **Configuration** > **URL Aliasing** > **Automatic** screen.
2. If you are creating an alias based on Taxonomy, select its language from the language dropdown.

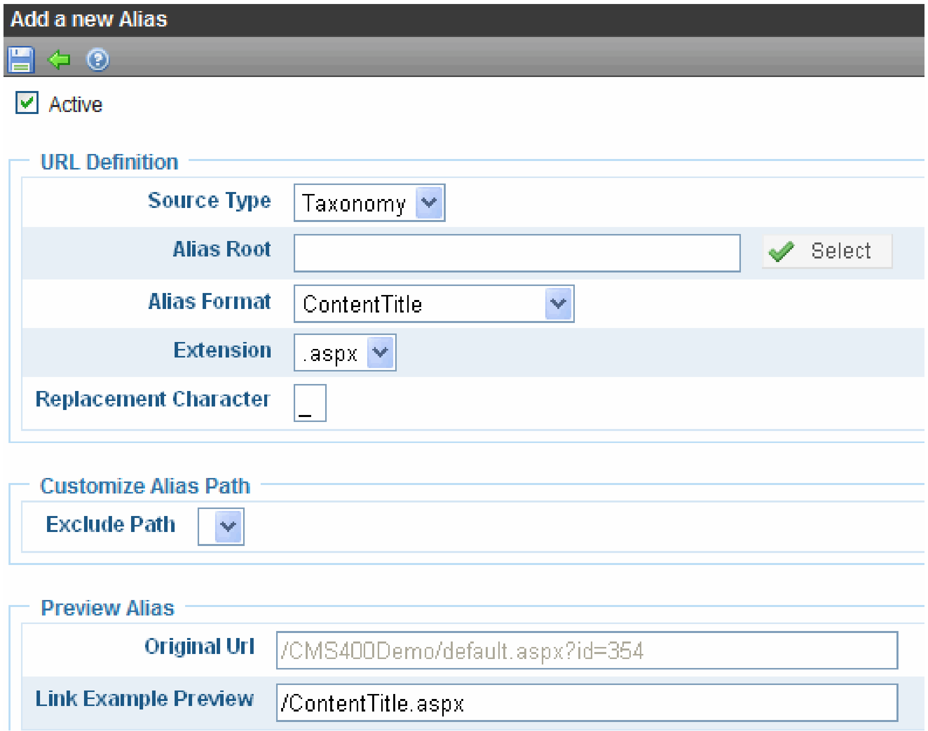


If you creating an alias based on folder, go to Step 3.

Note: On the Auto Aliased Page Name Maintenance screen, a folder-based alias' **Lang** column shows a United Nations flag ( ). This indicates that folders are language-neutral.

---

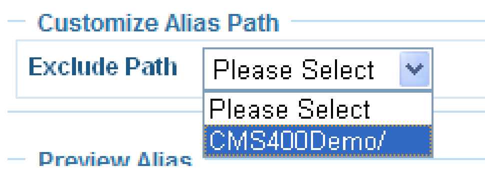
3. Click the plus sign ( ) to access the Add a New Alias screen (shown below).



4. Use the following table to complete the screen.

Field	Description
Active	Check this box to apply this configuration to content. If you do, the aliases are applied when you save the screen. If you uncheck this box, automatic aliases set up via this configuration are deleted from the associated content.
Source Type	Automatic aliases are based on either a taxonomy or a folder. Choose one.
Alias Root	Navigate to and choose a taxonomy or folder to which you want to assign an automatic alias. If you choose a **taxonomy**, the automatic alias is applied to all content assigned to it and all of its child nodes. See Also: Furthermore, if your Ektron CMS400.NET supports multi-site configurations, the automatic alias will apply to content in all sites. This is because taxonomy is site independent. Note: If the language selector was set to **All** on the Auto Aliased Page Name Maintenance screen, and you chose **Taxonomy** as the **Source Type**, **No Taxonomy** appears here. This indicates that you must return to the Auto Aliased Page Name Maintenance screen and select a language before you can select a taxonomy as the Alias Root.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td></td><td>If you choose folder, the automatic alias applies to all content in that folder and its subfolders. See Also:
The taxonomy or folder is part of the automatic alias pattern. See Also: "The Automatic Alias Pattern" on page 10-24</td></tr>
<tr><td>Alias Format</td><td>Use this field to help construct the automatic alias pattern. Choose one of the following items to identify the content within the alias.
ContentTitle - Example: <code>Sample Content Block</code>
ContentID - Example: <code>30</code>
ContentIDandLanguage - Example: <code>30/1033</code>
See Also: "The Automatic Alias Pattern" on page 10-24</td></tr>
<tr><td>Extension</td><td>Use this field to help construct the automatic alias pattern. Choose an extension from the list to identify the end of the aliased URL.
Extensions are defined in the Extension field of the URL Aliasing Configuration screen.
See Also: "The Automatic Alias Pattern" on page 10-24; "Automatic URL Aliasing" on page 10-19</td></tr>
<tr><td>Replacement Character</td><td>Enter the character that replaces prohibited characters in content titles when they appear within an automatic alias. Examples of prohibited characters are a space and question mark (?).
So, for example, if the content title is <code>About Us</code>, and you enter an underscore (-) here, the aliased version of the title is <code>About_Us</code>.
You cannot enter one of the following as the replacement character: [, \ / < > (Space): |? '] # * &%
Note: If you're using IISdmin (Microsoft Vista or Server 2008), and specify a plus sign (+), you get this error: <code>HTTP Error 404.11 Not Found The request filtering module is configured to deny a request that contains a double escape sequence</code>. For a solution, see http://support.microsoft.com/kb/942076/en-us.</td></tr>
</table>

Field	Description
Customize Alias Path	By default, the automatic alias pattern displays all folders or taxonomy levels from the top to the level you select. (See Also: "The Automatic Alias Pattern" on page 10-24) You can use this field to control which folders/taxonomy levels appear in the pattern. For example, your Alias Root is based on the following folder path: `/CMS400Demo/About Us/Careers`. Using this field, you can choose any of the following to indicate the folder or taxonomy path in the automatic alias pattern. 
Preview Alias	This area of the screen displays - a sample **Original URL** - an aliased example of that URL, based on the information entered on the screen To see any content item's fully aliased URL, navigate to it and click its **Alias** tab.

Uniqueness Requirement for Automatic Alias Configuration

A configuration must have a unique combination of Source Type, Alias Root, Alias Format, and Extension. For example

- **Source Type** = taxonomy
- **Alias Root** = the taxonomy named Products
- **Alias Format** = Content title
- **Extension**

You cannot create a configuration whose values match an existing one.

The Automatic Alias Pattern

The Automatic Alias pattern combines the following elements in this order. Each element is separated by a slash (/).

1. site root

2. folder or taxonomy path (Spaces are replaced by the **Replacement Character** specified on the Add/Edit Alias screen).

Note: Either a taxonomy or a folder is selected when creating an automatic aliasing configuration.

By default, a *taxonomy path* has all taxonomy nodes from the top to the level at which content is assigned. Here is an example: `www.example.com/Medical_Conditions/Kidney_Disease/`.

By default, a *folder path* has all folders from the top-level to the folder that contains the content. Here is an example: `www.example.com/CMS400Developer/CMS400Demo/About_Us/Company_Profile/Board_of_Directors.aspx`.

Note: You can use the **Customize Alias Path** field to determine which path components appear in the pattern. See Also: "Customize Alias Path" on page 10-24

3. content name source (Spaces are replaced by the **Replacement Character** specified on the Add/Edit Alias screen)
4. extension

Examples:

Folder-based automatic alias

```
www.example.com/CMS400Demo/About_Us/Company_Profile/Awards_and_Honors/
www.example.com/CMS400Demo/About_Us/Company_Profile/12548/
```

www.example.com/`CMS400Demo/About_Us/Company_Profile/`12584/1033

Taxonomy-based automatic alias

www.example.com/`cms400/MapCategory/Restaurant/Chinese/You_You_Japanese_Bistro/`

Note: Ektron CMS400.NET lets users create content with the same title in different folders. If an automatic alias based on a taxonomy is created, and the same taxonomy node is applied to two content items with the same title, both items will have the same automatic alias. To avoid this problem, do not allow users to assign the same name to more than one content item.

Viewing and Editing Automatic Alias Configuration

To view and edit an automatic alias configuration, go to the **Settings** > **Configuration** > **URL Aliasing** > **Automatic** screen.

TIP!

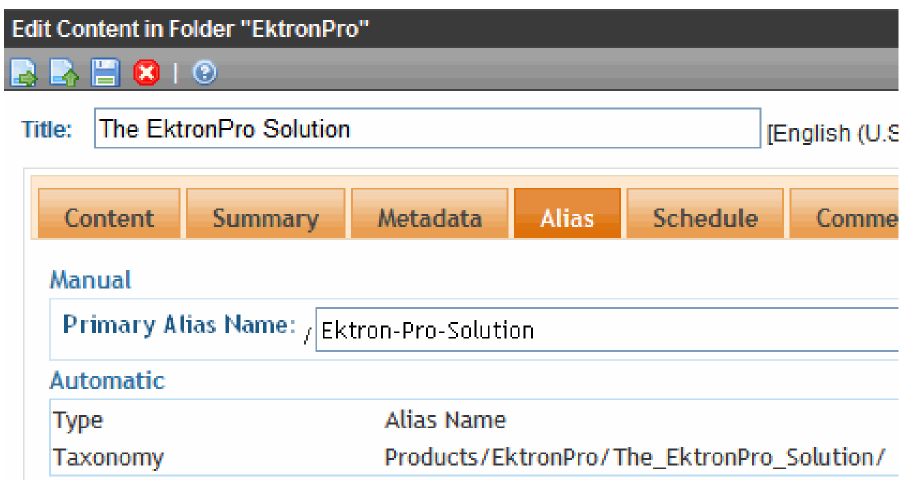
Note: Use the screen's language selector to find taxonomy-based configurations of a selected language.

From the Auto Aliased Page Name Maintenance screen, click the alias configuration that you want to view.

To edit an automatic alias, view it then click the Edit button ( ). To learn about the screen's fields, see "Use the following table to complete the screen." on page 10-22.

Viewing an Automatic Alias

To view the automatic alias assigned to a specific content item, navigate to and view the content. Then, click the **Alias** tab (shown below). A primary manual alias appears near the top, followed by all automatic aliases.



Inactivating an Automatic Aliasing Configuration

Follow these steps if you want to temporarily inactivate an automatic alias configuration. When you do, automatic aliases created by that configuration are removed from all content to which they are applied. The configuration is saved, so if you later want to reactive it, simply undo these steps.

1. Open the **Settings** > **Configuration** > **URL Aliasing** > **Automatic** screen.
2. Click the alias that you want to inactivate.
3. Click the Edit button ( ).
4. Uncheck the **Active** checkbox.

5. Click the Save button ( ).

Deleting an Automatic Aliasing Configuration

Follow these steps if you want to delete an Automatic Aliasing Configuration. When you do, automatic aliases are removed from all content to which they are applied.

1. Open the **Settings** > **Configuration** > **URL Aliasing** > **Automatic** screen.
2. Click the delete button ( ).
3. Check each configuration that you want to delete.
4. Click the delete button ( ).
5. You are asked if you are sure.
6. Click **OK**.

Manual Aliasing

When using manual aliasing, you choose a page name. Next, you specify the content to appear whenever anyone enters the URL using that name into a browser address field. For example, you can alias `www.example.com/cms/index.aspx` as `www.example.com/cms/Launch.html`. From then on, the content can be identified either by its original URL or its alias.

You can assign any number manual of aliases to a content block.

Note: You cannot manually alias the root of your Web site (for example, www.*example*.com). You can, however, alias everything below that.

This section explains manual aliasing through the following topics.

Manual Aliasing and Multi-Site

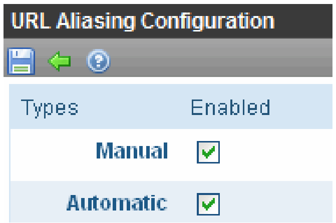
If your Ektron CMS400.NET deployment uses multi-site, the following restrictions apply to manual aliasing.

- Any manual alias applied to the root site cannot be applied to any of the additional sites
- Any manual alias applied to an additional site cannot be applied to the root site

However, the same manual alias can be applied to any number of additional sites.

Enabling/Disabling Manual Aliasing

To activate manual aliasing, follow this path to the URL Aliasing Configuration screen: **Settings** > **Configuration** > **URL Aliasing** > **Settings**.



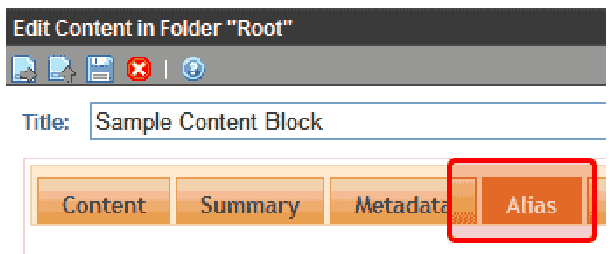
The screen indicates if manual aliasing is currently on or off. To change its state, click the Edit button ( ), check or uncheck the box, and click the Save button.

Assigning a Manual URL Alias to Content

Two screens let you manually alias content.

Screen/tab	Who is authorized to use	Can create/update these manual aliases	For more information, see
Page Name Maintenance	members of Administrators group	an unlimited number of primary and secondary	"Adding a Manual Alias via the Page Name Maintenance Screen" on page 10-29

Screen/tab	Who is authorized to use	Can create/update these manual aliases	For more information, see
Alias tab of View Content screen (see image below)	■ members of Administrators group ■ users assigned Alias-Edit role	primary (Alias tab displays but does not let users change secondary aliases)	"Adding a Manual Alias via the Alias Tab" on page 10-33



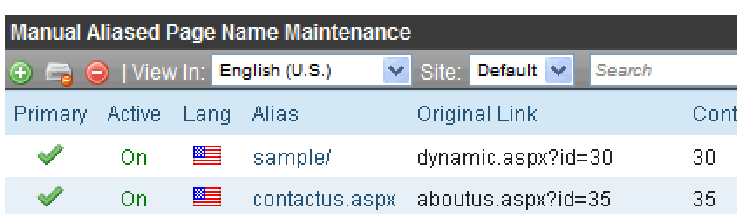
Adding a Manual Alias via the Page Name Maintenance Screen

Prerequisites

- Manual aliasing is enabled. See Also: "Enabling/Disabling Manual Aliasing" on page 10-28
- You are a member of the Administrators group

To add a manual alias via the Page Name Maintenance screen, follow these steps.

1. Go to **Workarea** > **Settings** > **Configuration** > **URL Aliasing** > **Manual**.
2. The Manual Aliased Page Name Maintenance screen appears.



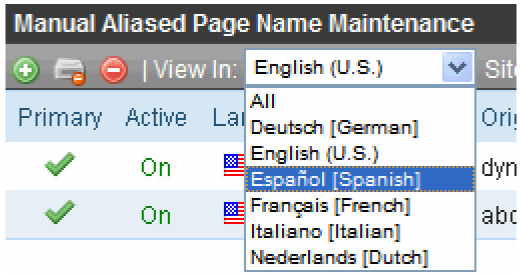
The following table explains the buttons on the screen.

Button	Description	For more information, see
	Add manual alias	"If creating new alias" on page 10-32
	Delete manual alias	"Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen" on page 10-36
	Manually clear cache	"Manually Clearing the Cache" on page 10-17

The following table explains the fields on the screen.

Field	Description
Primary	If you assign more than one manual alias to content, this field designates the primary one. If you only assign one, it is the primary by default. The primary alias appears in the browser when a user hovers the cursor over a link to associated content, such as within a List Summary or a Collection. It also appears in the browser address field after the content is selected. See "Example of an Alias in the Browser" on page 10-5. If a user views a content block's **Alias** tab, he can only see and edit the primary manual alias. See Also: "Adding a Manual Alias via the Alias Tab" on page 10-33
Active	Indicates if this alias is active.
Lang	The alias's language flag.
Alias	The alias (that is, the page name) that site visitors can enter as part of the URL into a browser to see the associated content.
Original Link	The content template and variable being aliased.
Content ID	The ID number of the content assigned to the alias.

3. To edit an existing manual alias, use the language selector dropdown (see image below) to choose the language of the aliases you want to work with.

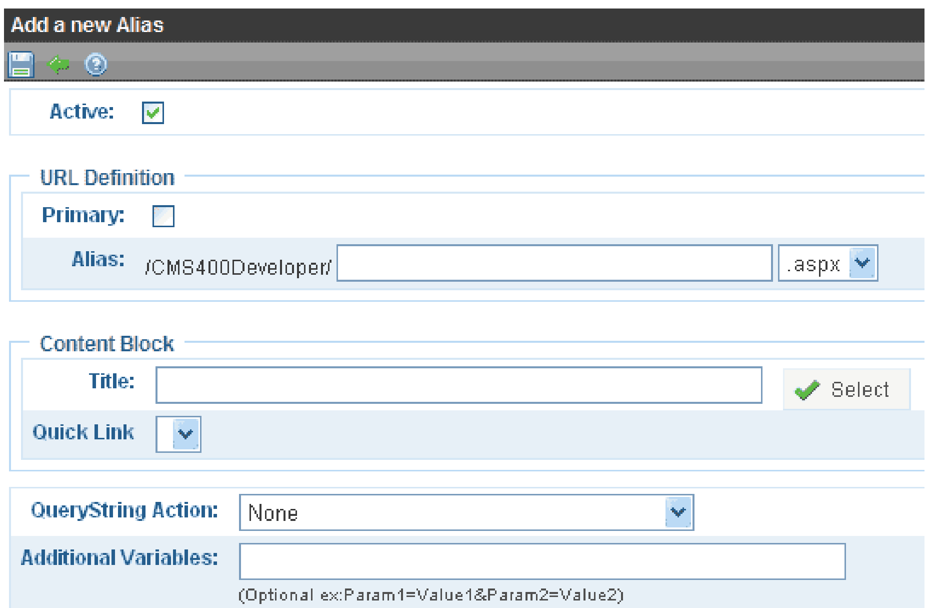


If you are creating a new alias, click the Add Alias button ( ) and skip to Step 8.

4. If your Ektron CMS400.NET version supports multi-site configurations, use the **Site** dropdown to choose the site.
5. Click the alias you want to edit.

Note: If there are many aliases, use the search to help find one. You can filter aliases by alias name, Content ID, etc.

6. The View Alias screen appears. Click the Edit button ( ).
7. The Add/Edit Manual Alias screen appears.



8. If editing existing alias

If this is *not* the primary alias, you can check or uncheck the **Active** checkbox. Only active aliases can be entered into the browser address field to display the assigned content.

If this *is* the primary alias, you cannot uncheck it. If you want to inactivate a primary alias, first assign another alias to be the primary for this content block. Then, return to this screen and make this alias inactive. Alternatively, you can delete a primary alias.

If creating new alias

Check the **Active** checkbox if you want this alias to be active.

9. Check the **Primary** box if you want this to be the primary alias. See Also: "Primary" on page 10-30

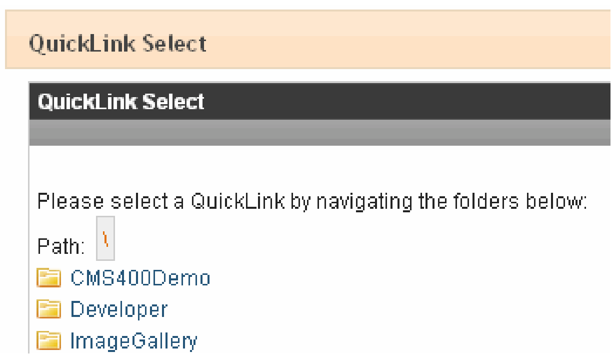
   If another alias is the primary when you check this box, the other alias is no longer the primary.

10. In the **Alias** field, enter the alias name. It cannot include the following characters: (comma), (space), \, <, >, “,:, |. Also, it must be unique within this site and language.

    To the right of **Alias Name** is a pull-down of valid extensions. Select one to apply to this alias. Extensions are defined on the URL Aliasing Configuration screen. See Also: "Extension" on page 10-11

11. Click **Select a Content Block** to choose content. The QuickLink Select window appears.

Note: Only content in the language chosen on the Page Name Maintenance screen appears.



12. Navigate through the folder structure and click the content to which you are assigning the alias.

TIP!

Note: A folder’s content appears below its subfolder list. You may have to scroll down to see the content.

13. The **Title**, **Link** and **Quick Link** fields fill in, using information from the selected content.

    If the content has more than one quicklink assigned to it, select the one to which you are assigning the alias.

14. To learn about the QueryString Action field, go to .

15. Enter the **Additional Variables**. These are used as query string parameters that can track how visitors arrived at the aliased page. You might use these for marketing campaigns, to analyze the source of an aliased page’s visitors.

For example, the **Additional Variables** field has `?gclid=CO7gs_L0_ZICFRkTIgodBgV9CQ`. Your Web site's analytics software can track the source of the query through the variable.

TECHNICAL NOTE

Note: Within the page load event that returns the query string parameters, use the `Request.RawURL()` property instead of `request.querystring`.

16. Click the Save button ( ).

See Also: "Manual Aliasing" on page 10-27

Adding a Manual Alias via the Alias Tab

Once manual aliasing is enabled, every content block includes an **Alias** tab. You can use that tab to view and update the content's primary alias.

Note: If you insert/update an alias via the **Alias** tab, it only goes live after the content is published.

See Also: "Manual Aliasing" on page 10-27

Prerequisites

- Manual aliasing is enabled. See Also: "Enabling/Disabling Manual Aliasing" on page 10-28
- You are a member of the Administrators group or assigned to the Alias-edit Role. If neither, you do not see the **Alias** tab.

To add a manual URL alias via the Alias tab, follow these steps.

1. In the Workarea, select **Content**.
2. Navigate to and click the content you want to work with.
3. Click the Edit button ( ).The Edit Content screen appears.

4. Click the **Alias** tab.

5. In the **Primary Alias Name** field, enter the name of the primary alias.

   The name cannot include the following characters: (comma), (space), \, <, >, “,:, |. Also, it must be unique within this site and language.

6. To the right of **Primary Alias Name** is a pull-down of valid extensions. Select one to apply to this manual alias.

   The extensions are set up in the URL Aliasing Configuration screen’s **Extension** field. See Also: "Extension" on page 10-11

7. Save and publish the content.

Viewing a Manual Alias

See Also: "Manual Aliasing" on page 10-27

To view a manual URL alias, follow these steps.

1. Go to **Workarea > Settings > Configuration > URL Aliasing** > **Manual**.
2. On Manual Aliased Page Name Maintenance screen, click the alias you want to view.
3. The alias information appears. To learn about the screen’s fields, see "The Add/Edit Manual Alias screen appears." on page 10-31.

Editing a Manual URL Alias

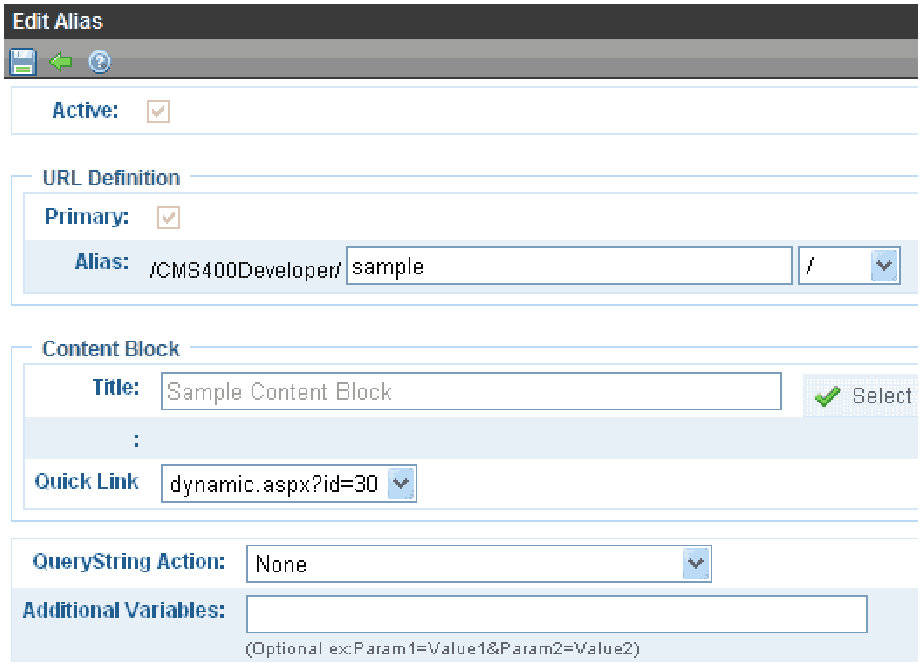
You can edit any manual alias via the Edit Alias screen. This lets you change all fields completed when the alias was created: name, assigned content, etc.

Note: You can also edit a content block’s primary alias name via the **Alias** tab on the content screen. See "Adding a Manual Alias via the Alias Tab" on page 10-33.

See Also: "Manual Aliasing" on page 10-27

To edit a manual URL alias, follow these steps.

1. Go to **Workarea > Settings > Configuration > URL Aliasing** > **Manual**.
2. On Manual Aliased Page Name Maintenance screen, click the alias you want to edit.
3. The View Alias screen appears. Click the Edit button ( ).
4. The Edit Alias screen appears.



5. Make any changes. To learn about the fields, see "If editing existing alias" on page 10-31.

   If this is the only alias assigned to the content, you cannot uncheck **Primary** or **Active**.

   If other aliases are assigned to the content, and you want to make one of them the primary, edit that alias and check the **Primary** checkbox. You cannot uncheck **Primary** from this screen.

   Also, only secondary aliases can be inactivated by unchecking the **Active** checkbox.

6. Click the Save button ( ).

Removing a Manual Alias

Just as there are two ways to add a manual alias, there are two ways to remove one.

- "Removing a Manual Alias via the Content Alias Tab" on page 10-35
- "Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen" on page 10-36

Removing a Manual Alias via the Content Alias Tab

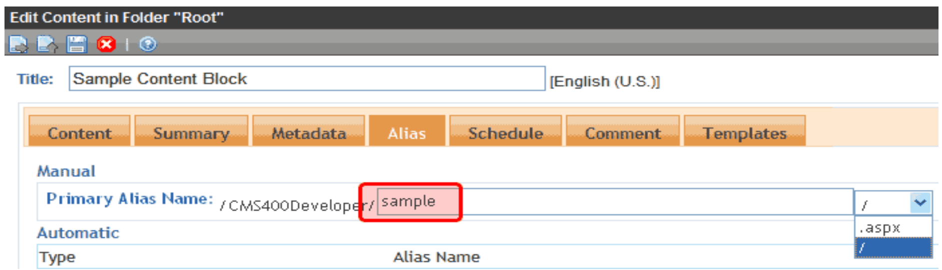
Using a content block's **Alias** tab, you can delete a primary manual alias only if no secondary aliases exist. If secondary aliases exist and you want to delete or replace the primary alias, you must use the Manual Aliased Page Name Maintenance screen. See Also: "Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen" on page 10-36

You can neither see nor delete secondary manual aliases from the **Alias** tab.

Note: If you delete an alias via the **Alias** tab, the change only goes live after the content is published.

To remove the primary manual alias by editing the associated content block, follow these steps.

1. Browse to the content block associated with the alias.
2. Click **Edit**.
3. Click the **Alias** tab.
4. Delete or replace the value in the **Primary Alias Name** field.



5. Click **Save**, **Check in**, or **Publish**.

Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen

Using the Page Name Maintenance Screen, you can delete the primary and any secondary manual aliases.

Warning! If you want to delete a primary manual alias while secondary aliases exist, you must first designate one of the secondary aliases as the primary. You can only delete the primary alias if no secondary aliases exist.

To remove a manual alias via the Page Name Maintenance Screen, follow these steps.

1. Go to **Workarea** > **Settings** > **Configuration** > **URL Aliasing** > **Manual**.
2. On Manual Aliased Page Name Maintenance screen, click the Remove button ( ).
3. Check the box next to all aliases you want to remove.
4. Click the Delete button ( ).
5. Click **OK** to confirm.

See Also: "Manual Aliasing" on page 10-27

Using RegEx Expressions

RegEx expressions allow site visitors to enter a human-readable URL into the browser address field and transform that entry into the query string component of an Ektron CMS400.NET page. The benefit is that the site visitor can “guess” other pages based on an easily recognizable pattern.

For example, a RegEx expression aliases `blogs.aspx?blogmonth=3&blogyear=2006&blogid=41` as `blogs/2006/03/41`. From that, a site visitor can infer that he can enter `blogs/2006/03/40` to see the previous post, enter `blogs/2006/03` to see all March 2006 posts, etc.

This section provides a description of the screen’s fields, then a step-by-step explanation of how to create and validate a RegEx expression.

See Also:

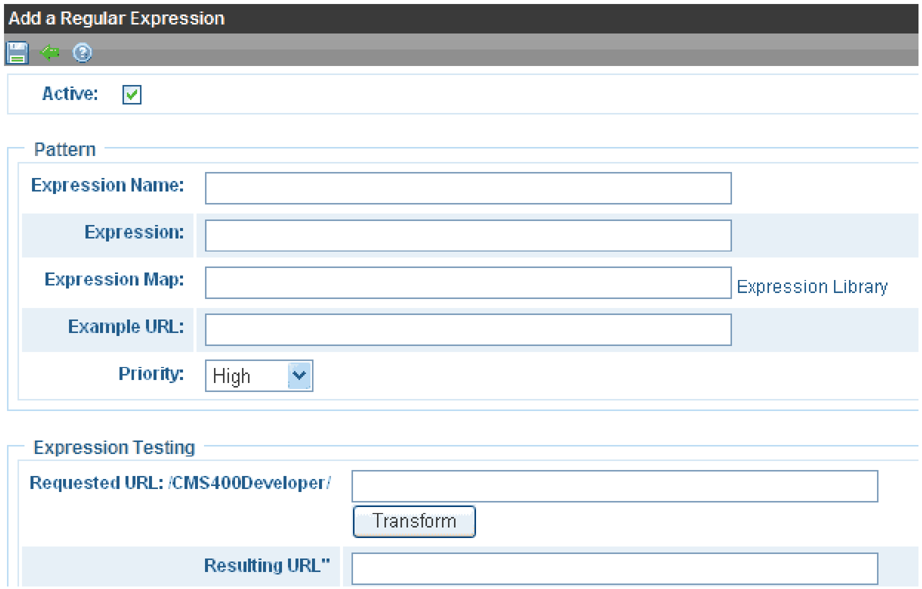
- "Add a Regular Expression Screen" on page 10-37
- "Instructions for Creating a RegEx Expression" on page 10-40
- "Viewing a Regular Expression" on page 10-41
- "Editing a Regular Expression" on page 10-41
- "Deleting a Regular Expression" on page 10-41

Add a Regular Expression Screen

To access the Regular Expression screen, follow these steps.

See Also: "Using RegEx Expressions" on page 10-37; "Instructions for Creating a RegEx Expression" on page 10-40

1. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **URL Aliasing** > **RegEx**.
2. Click the Add button ( ).
3. The Add a Regular Expression screen appears.



4. Use the following table to complete the screen.

Field	Description	For more information, see
Active	Check this box to activate the expression. If the expression is active, site visitors can enter an aliased URL to access a page on your site. For example, they can enter `www.example/com/blogs/2006` `/03/41` to access a blog page even though the actual URL is `www.example/com/blogs/` `blogs.aspx?blogmonth=3&` `blogyear=2006&blogid=41`	
Expression Name	Assign an easily recognizable name to this regular expression. It appears on the RegEx Aliased Page Name Maintenance screen to help users identify it.	
Expression	Enter a RegEx expression that will replace the variables (for example, `$1`, `$2`, etc.) in the Expression map. If you want to insert a question mark into the Expression, you must precede it with a backslash (\).	"Instructions for Creating a RegEx Expression" on page 10-40 http://-regexlib.com/

Field	Description	For more information, see
Expression Map	Enter a map of original URL elements. The map lets you replace query string parameters with variables, such as `$1`, `$2`, etc. As a result, a site visitor can identify any page that uses this pattern by changing the variable values. You can click **Expression Library** to view examples of RegEx expression maps. To copy any map that resembles your page pattern, click it. You can then modify is as necessary.	"Instructions for Creating a RegEx Expression" on page 10-40
Example URL	Displays an example of Web page that follows this pattern.	
Priority	Assign a priority to this expression from the following choices. - high - medium - low - none Assign **high** to expressions that will be used most frequently. This field helps the aliasing feature respond quickly when site visitors enter expressions into the browser address field. This is because aliasing first tries to match a site visitor's entry with high priority expressions, then medium, then low.	
Requested URL	Enter a user-friendly pattern that site visitors can insert to access pages on your site. This pattern replaces the query string component of a URL. For example, `blogs/2006/03/41`.	"Instructions for Creating a RegEx Expression" on page 10-40
Transform button	After completing all fields on the screen except **Resulting URL**, use this button to check the validity of the **Expression**, **Expression Map** and **Requested URL** fields.	
Resulting URL	Values appear in this field after you click the **Transform** button. It uses the **Expression** and **Expression Map** field values to translate a Requested URL (one a site visitor will enter) into a Resulting URL (the page's actual query string parameter).	

Instructions for Creating a RegEx Expression

Use the following steps as a guide to creating a Regex expression.

1. Find a site page (such as a blog) whose query string parameters allow users to guess similar pages using a pattern. For example

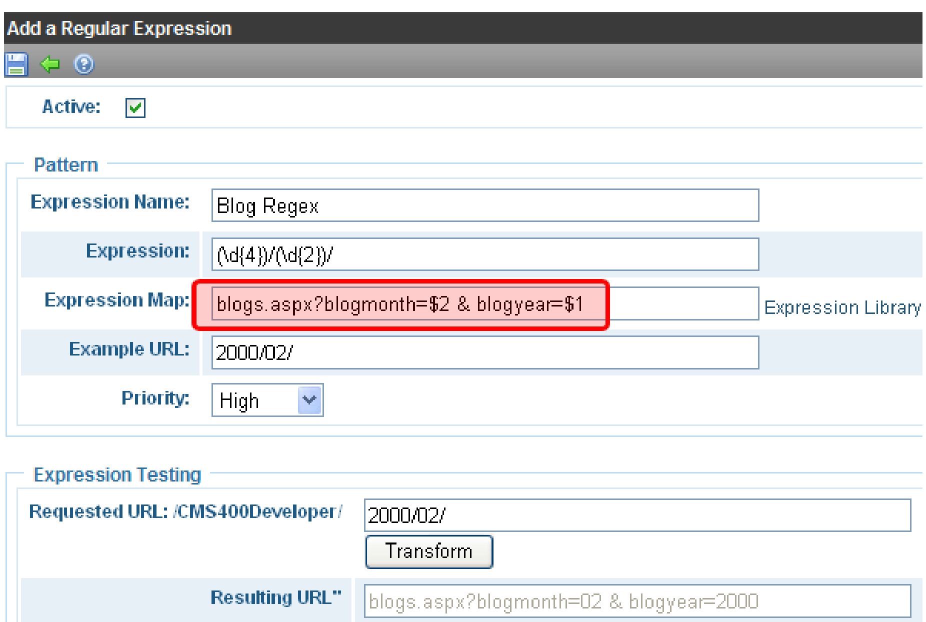
```
http://ecmintranet/blogs.aspx?blogmonth=3&blogyear=2006
```

2. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Url Aliasing** > **RegEx**.
3. Click the Add a Regular Expression button ( ).
4. Give your expression a name.
5. Click **Expression Library**.
6. Find and click an Expression Map similar to the page you found in Step 1. To continue our example, choose

```
PageName.aspx?year=$1 & month=$2
```

7. The **Expression** and **Example URL** field values fill in, using information from the Expression Map.
8. As needed, adjust the values in the Expression map or the RegEx expression to match your page name. For example, change **PageName** to **blogs**, and delete **Default.aspx**

   See Also: http://regexlib.com/
9. To continue the example, change the Expression Map field so that it looks like this.



10. Click the **Transform** button to verify that the resulting URL matches the original page pattern. If it does not, check all steps, especially the **Expression** field.

Viewing a Regular Expression

To view a regular expression, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **URL Aliasing** > **RegEx**.
2. Click the expression whose information you want to view.

To learn more about the fields on the screen, see "Use the following table to complete the screen." on page 10-38.

See Also: "Using RegEx Expressions" on page 10-37

Editing a Regular Expression

To edit a regular expression, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **URL Aliasing** > **RegEx**.
2. Click the expression whose information you want to edit.

To learn more about the fields on the screen, see "Use the following table to complete the screen." on page 10-38.

See Also: "Using RegEx Expressions" on page 10-37

Deleting a Regular Expression

To delete a regular expression, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **URL Aliasing** > **RegEx**.
2. Click the delete button ( ).
3. Check the box next to the expression you want to delete.
4. Click the delete button ( ).

See Also: "Using RegEx Expressions" on page 10-37

Site Aliasing

If your site supports the multi-site feature, you can enter aliases for any site. For example, your company's name just changed from Bionics to NewGen. You can use the site aliasing feature to resolve the url `www.bionics.com` to `www.newgen.com`.

Note: If your Ektron CMS400.NET supports multi-site configurations, an automatic alias assigned to a taxonomy will apply to content in all sites. This is because taxonomy is site independent.

Warning! If the site being aliased resides in a folder under your server's Web root folder (for example, ser4325/min), you must add the subfolder to the alias. So, to continue the above example, you could not enter http://www. myalias.com as an alias for that site. Instead, you would enter http://www.myalias.com/min/.

See Also:

- "Creating Site Aliases" on page 10-42
- "Editing a Site Alias" on page 10-43
- "Deleting a Site Alias" on page 10-44

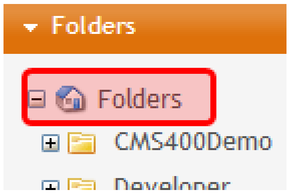
Creating Site Aliases

Enabling site aliasing has two steps.

- "Setting up a Site Alias in the Ektron CMS400.NET Workarea" on page 10-42
- Add each site alias as an IIS host. To learn how do this for your server, please consult IIS help.

Setting up a Site Alias in the Ektron CMS400.NET Workarea

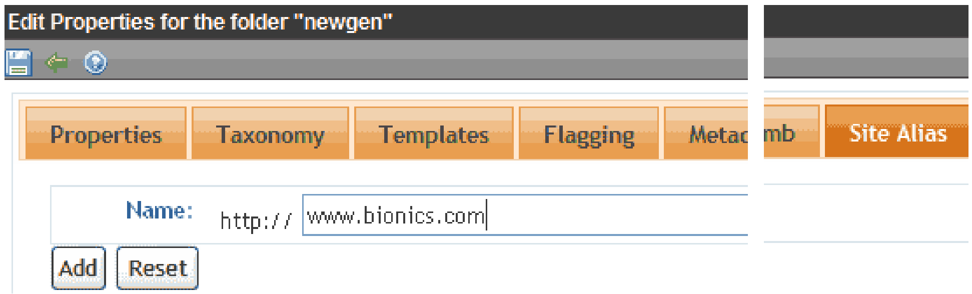
To set up site aliases, follow these steps.



Note: You cannot assign a site alias to the site root folder.

1. Open the site folder for which you want to create aliases. (Site folders have a globe icon, like this: ).
2. Click **View** > **Properties**.
3. Click the Edit button ().

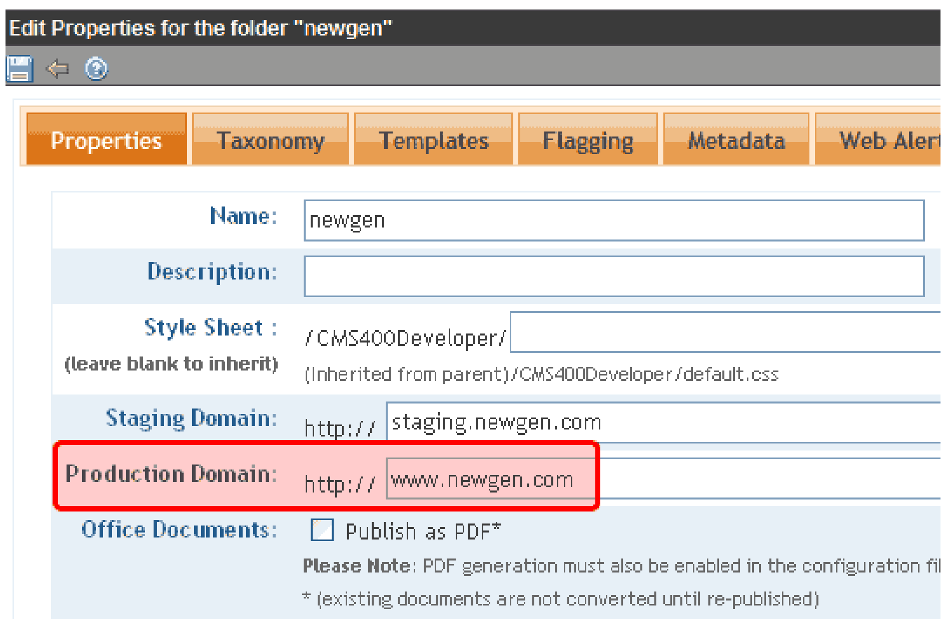
4. Click the **Site Alias** tab.



5. Enter the alias into the **Alias Name** field.

Note: The alias cannot end with a slash (/).

From now on, if a site visitor enters the alias into a browser address field, he is redirected to the site URL (set on the folder properties tab's **Production Domain** field).



Editing a Site Alias

Follow these steps to edit a site alias.

1. Open the site folder for which you want to create aliases. (Site folders have an icon, like this: ).

2. Click **View** > **Properties**.
3. Click the Edit button ( ).
4. Click the **Site Alias** tab.
5. From the Alias list, click the alias that you want to edit. When you do, it is highlighted in yellow and appears in the **Alias Name** field.
6. Change the alias text.
7. Click the **Save** button directly below the **Alias Name** field.

8. Click the screen's Save button ( ).

Deleting a Site Alias

Follow these steps to delete a site alias.

1. Open the site folder for which you want to create aliases. (Site folders have a globe icon, like this: newgen).
2. Click **View** > **Properties**.
3. Click the Edit button ( ).
4. Click the **Site Alias** tab.
5. From the Alias list, click the alias that you want to delete. When you do, it is highlighted in yellow and appears in the **Alias Name** field.
6. Click the delete icon ( ).
7. The alias is deleted.

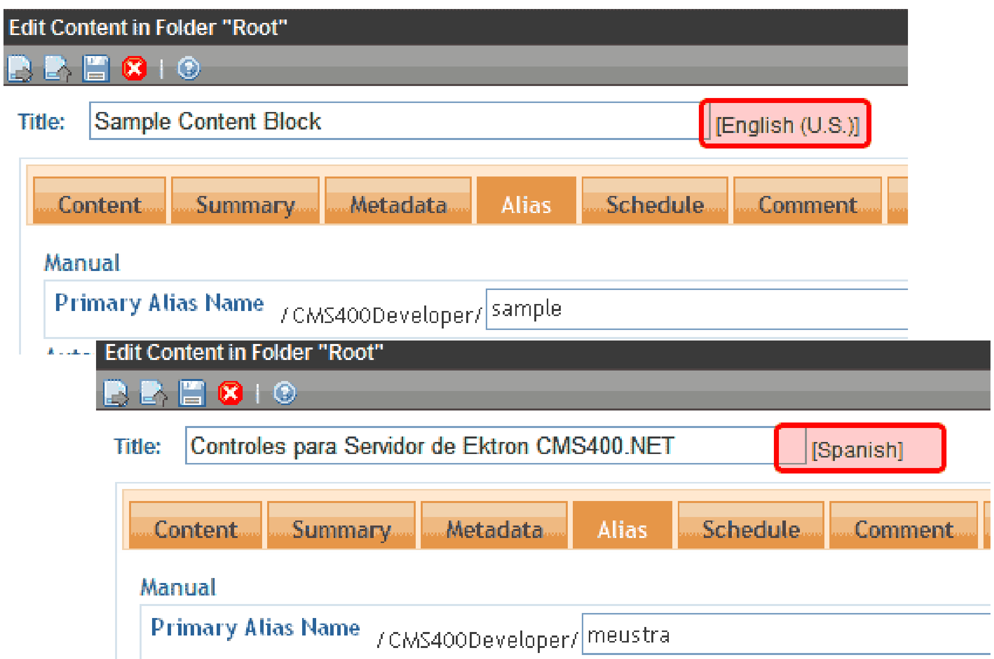
Upgrading from Previous Releases

See the following Ektron CMS400.NET Knowledge Base article to learn about 7.6 and up URL Aliasing upgrade issues: http://dev.ektron.com/kb_article.aspx?id=21358

Assigning an Alias to Multi-Language Content

If Ektron CMS400.NET has several foreign-language versions of content that share an ID, you can alias only one of them and check the URL Aliasing Configuration screen's **Disable Language Awareness** checkbox. Then, when a site visitor selects a language in which to view your site and enters the alias, Ektron CMS400.NET displays the aliased content in the selected language.

If you prefer, you can assign a different alias to each language version of content. To do this, select the content, language, go to the **Alias** tab, and assign a language-specific alias. For example, your English Careers page's alias is **careers**, while your Spanish alias is **carreras**, and your German alias is **Karrieren**.



Also, alias names must only be unique within a language. So, for example, you cannot have two aliases named `Ektron` within U.S. English content. But, you can create two aliases named `Ektron` if one is applied to U.S. English content, and the other applies to Spanish content.

Using Classic ASP with Windows 2008 Server 64 Bit

If you want to use aliasing on a 64-bit server running Windows 2008, follow these steps.

1. Install classic ASP onto the server. It is not installed by default. See Also: http://technet.microsoft.com/en-us/library/cc753918.aspx
2. Open your `site root/web.config` file.
3. Go to the `<handlers>` section.
4. Find this tag:

```
<add name="ek*" path="*" verb="GET,HEAD,POST"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"
modules="ManagedPipelineHandler" scriptProcessor="" resourceType="Unspecified"
requireAccess="Script" preCondition="" />
```

5. Add the following ASP handler above the `ek` handler shown above.

<add name="ASPClassic" path="*.asp" verb="GET,HEAD,POST" modules="IsapiModule" scriptProcessor="%windir%\system32\inetsrv\asp.dll" resourceType="File" />

Chapter 11

Managing Tasks

A task is a request from one user to another to perform an action within Ektron CMS400.NET. Examples of a tasks include:

- updating content
- publishing content
- updating an image
- reordering a collection

If you are not in the administrators group or assigned the Task-create role, the Tasks folder only displays tasks assigned to you or that you assigned to another user or user group. You can also assign tasks to yourself.

Administrators can view all tasks, regardless of who they are assigned to or by.

A task may or may not be related to a specific piece of content. If it is, you can access content then "attach" a task to it. This kind of task is managed just like the other tasks, but you can also view and update it via the attached content.

This chapter explains how to work with tasks through the following topics.

Note: Tasks can also be created automatically when forms are submitted. See Also: "Assigning a Task to a Form" on page 7-260

Task Permissions

Members of the Administrators group have permission to perform all task activities. Alternatively, you can assign roles to give users specific task-related permissions, as indicated below.

Permission	Role
Create task	Task-Create
Redirect task (that is, assign to another user)	Task-Redirect
Delete task	Task-Delete

Task Categories and Types

Tasks can be assigned a Task Category, then a Task Type. This gives users an additional way to filter their tasks.

Task Categories and Task Types have a hierarchical relationship: the Task Category is the parent, and the Task Type is the child. So, several types can be assigned to each category.

Some examples of Task Categories might be Engineering, Sales, Documentation, or Web Design. Examples of Task Types might be Edit Content, Update Documents, or Contact Customer.

Note: Only members of the Administrator User Group or users assigned the following roles can view, add, or edit task categories and types: Task-Create, Task-delete, Task-Redirect. See Also: "Defining Roles" on page 15-32

You can create Task Categories and Task Types on these occasions.

- When adding a task. See Also: "Creating a Task via the Task Folder" on page 11-13
- When working in the View Categorization screen.

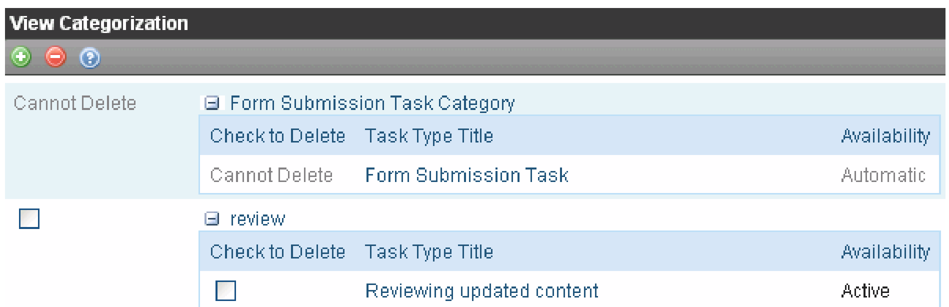
View Categorization Screen

The View Categorization screen allows administrators to create, edit, and delete Task Categories and Task Types.

See Also: "Task Categories and Types" on page 11-3

To access the View Categorization Screen, access the **Workarea** > **Settings** > **Configuration** > **Task Types**.

The following screen appears.

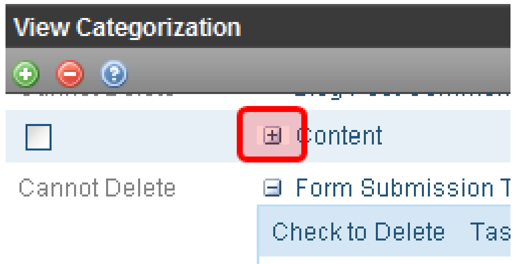


Viewing Task Categories

Note: The View Categorization screen has a system-defined category (Form Submission Task) that can only be used with forms. You can change its name but cannot delete it. For more information, see "Working with HTML Forms" on page 7-220.

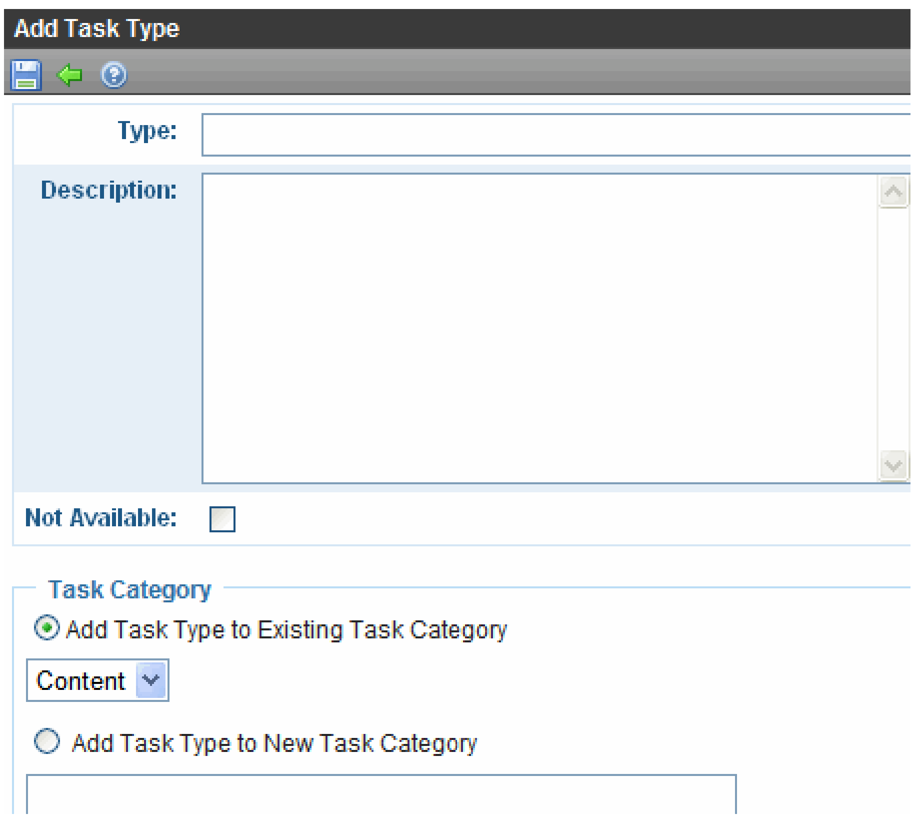
While in the View Categorization screen, you can collapse and expand Task Categories. To collapse a Task Category, click the (⊟) button next to the Task Category name. To expand one, click the (⊞) button next to the Task Category name.

The following example shows the View Categorization screen with one Task Category minimized.



Creating Task Categories and Task Types

From the View Categorization screen, you can create Task Categories and Task Types by clicking the Add Task button ( ). When you do, the following screen appears.



From this screen, you can perform these tasks.

- "Adding a New Task Category and Task Type" on page 11-6
- "Adding a New Task Type to an Existing Task Category" on page 11-7
- "Editing Task Category" on page 11-7

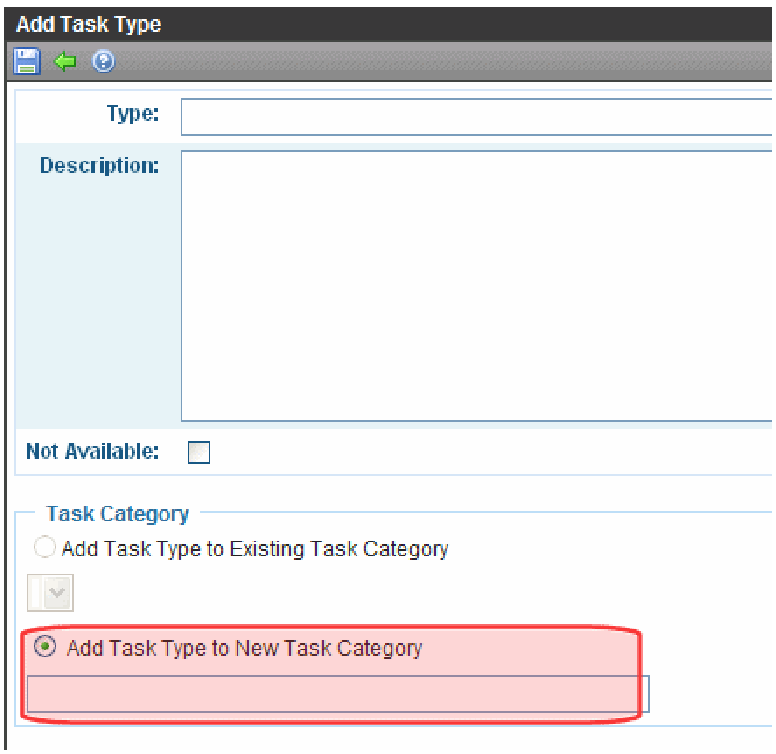
- "Editing a Task Type" on page 11-8
- "Task Type Availability" on page 11-8

Adding a New Task Category and Task Type

To add new Task Category and Task Type, follow these steps.

See Also: "Task Categories and Types" on page 11-3

1. Click the **Add Task Type** button ( ).
2. The Add Task Type Screen appears.
3. Click the **Add Task Type to New Task Category** radio button or in the text box.
4. Enter a name in the **New Task Category** field.



5. Add a Task Type name in the **Task Type** field.
6. Enter a **Task Type Description**.
7. Choose a Task Type Availability. See Also: "Task Type Availability" on page 11-8
8. Click **Save** ( ).
9. Your new Task Categories and Task Types appear on the View Categorization screen.

Adding a New Task Type to an Existing Task Category

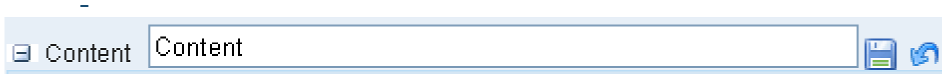
To add a new Task Type to an existing Task Category, follow these steps.

1. Click the **Add Task Type** button ( )
2. The Add Task Type Screen appears.
3. Click the **Add Task Type to New Task Category** radio button or click the drop down box.
4. Choose a category from the drop down box.
5. Add a Task Type name in the **Task Type** field.
6. Enter a **Task Type Description**.
7. Choose a Task Type Availability. See Also: "Task Type Availability" on page 11-8
8. Click **Save** ( ).
9. Your new Task Categories and Task Types appear on the View Categorization screen.

Editing Task Category

You can edit a Task Category names. To edit a Task Category, click the Task Category link.

A text box screen appears next to the category name. Use the text box to change the name.



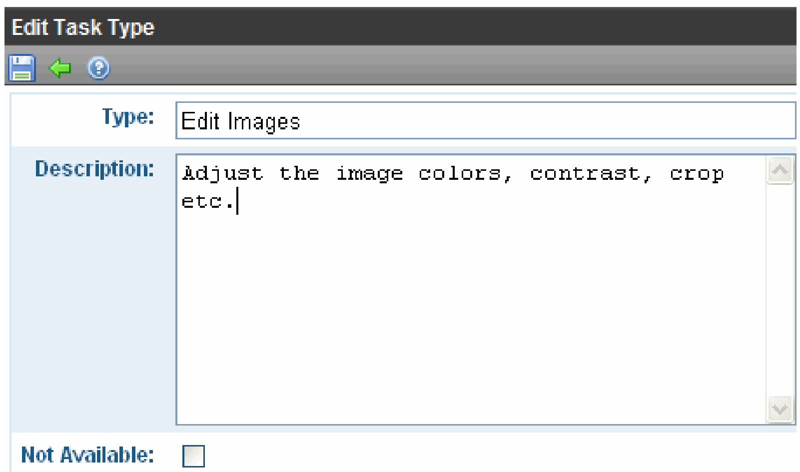
You can either save ( ) the changes, or cancel ( ) the edit.

Editing a Task Type

From the View Categorization screen, you can edit a Task Type. This allows you to change the Task Type name, Task Type description, and Task Type availability.

To edit a Task Type, follow these steps.

1. On the View Categorization screen, click a Task Type.
2. The Edit Task Type screen appears.



From this screen you can edit the following:

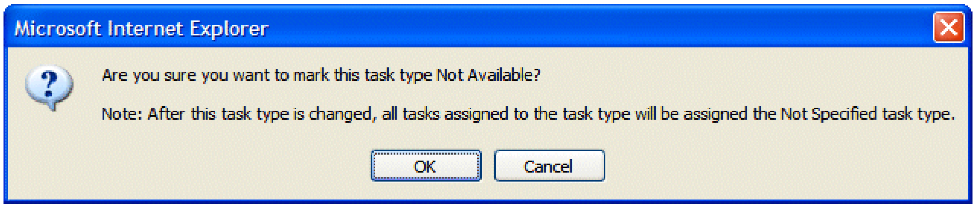
- Task Type
- Task Type Description
- Task Type Availability. See Also: "Task Type Availability" on page 11-8

3. Edit the information.
4. Click Save ( ).
5. The Task Type information is changed.

Task Type Availability

Task Types can be hidden from users by clicking the Not Available check box in the Add Task Type and Edit Task Type screens. By making a Task Type not available, you can suppress without deleting it.

When you make a Task Type not available, you see the following warning.



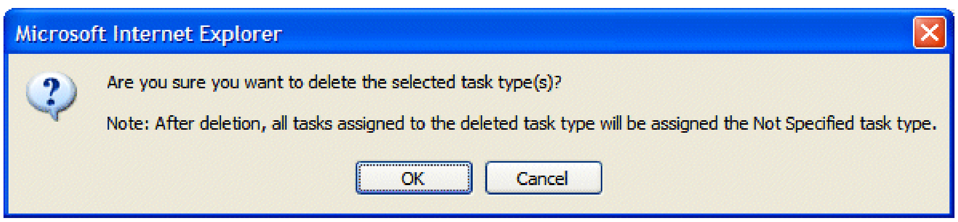
After you make a Task Type not available, the assigned tasks' Type and Category are changed to **Not Specified**.

Deleting Task Categories and Task Types

You can delete Task Types by Task Category or individually.

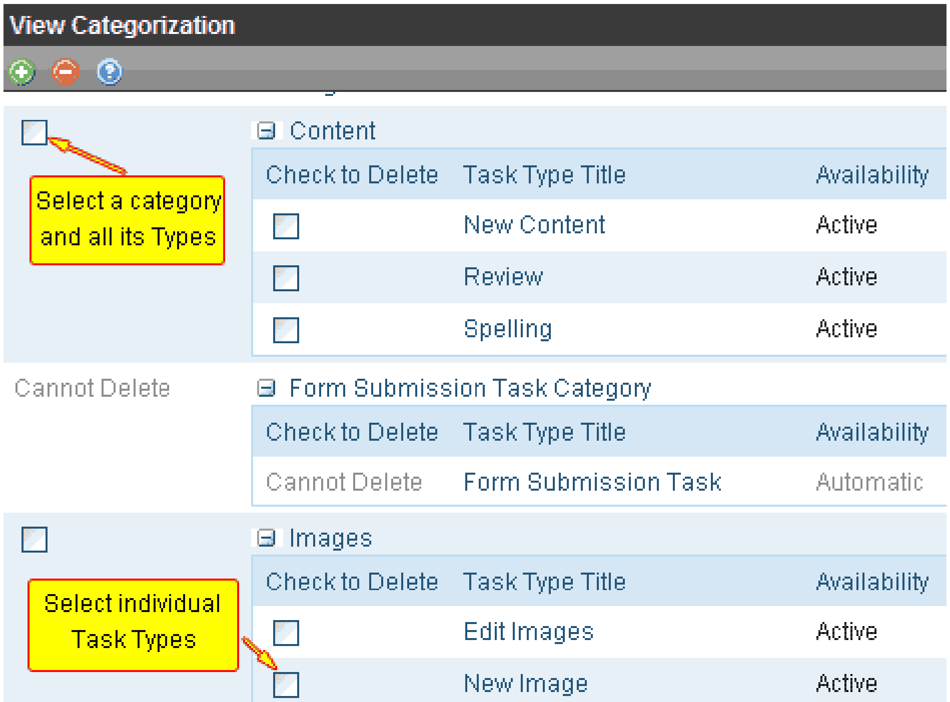
To delete a Task Type, click the check box next to the Task Type, then click the Delete ( ) button.

When you delete a Task Type, the following appears.



To delete all Task Types, check the **Delete all** check box.

The following example shows which check boxes on the screen are associated with All Task Types, Task Categories, and individual Task Types.



Task States

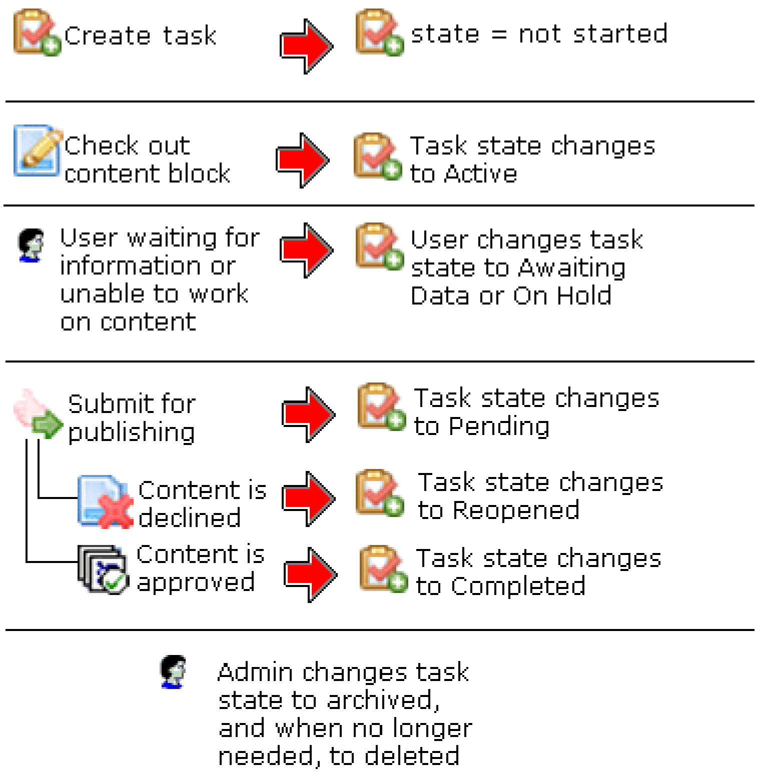
During the life of a task assigned to content, it normally progresses through a series of states. The state helps track a task's progress from creation to completion and even removal from the database. When reviewing the history of a task, the state can be used to review which actions changed the task's state by whom and when.

User-Assigned versus System-Assigned States

Some states can only be assigned by users while others are only assigned when an event occurs to the associated content. For example, when content is first submitted for approval, the associated task's state changes to Not Started.

Warning! The administrator user can always change a task's state to any other state.

The following graphic illustrates the sequence of user and system actions that change a task's state.



Progression of Task States

State	Description	Assigned by
Not Started	Assigned when task is created.	User
Active	The task's content is checked out.	System
Awaiting Data	The task is started but the assigned-to user is awaiting data from an external source. You can use comments to indicate the data being waited for.	User
On Hold	Task cannot be worked on at this time.	User

State	Description	Assigned by
Pending	The content is submitted for approval. A task remains pending while its content is in the approval process. When the last person in the approval chain approves the content, the task's state changes to Completed. If any approver declines the content, the task's state changes to Reopened. If an editor edits the content and then checks it back in, the task's state changes to Reopened.	System
Reopened	Content is declined by an approver in the approval process. Also, if someone edits content whose task state is pending, the tasks's state changes to Reopened.	System
Completed	The last user in the approval chain approves the content and it is being published.	System
Archived	After a task is completed, administrators can assign this state. It no longer appears on open task lists but is kept for reviews and reports. Only the administrator can view Archived tasks. See Also:	User
Deleted	When an archived task is no longer needed for reporting or reviewing, administrators can assign this state. While in this state, the task remains in the database. See Also: When you purge the task, it and all of its transactions are removed from the database. See Also:	User (user with delete permission can delete; only admin and user with Task-Delete role can purge)

Restrictions on the Task Flow Process

- Only users with archive and delete permissions can set a task's status to archived or deleted. This can be done at any stage of the task flow process.
- Notes can be entered for the task at any time.
- An administrator can assign a task to any state at any time.

Creating a Task via the Task Folder

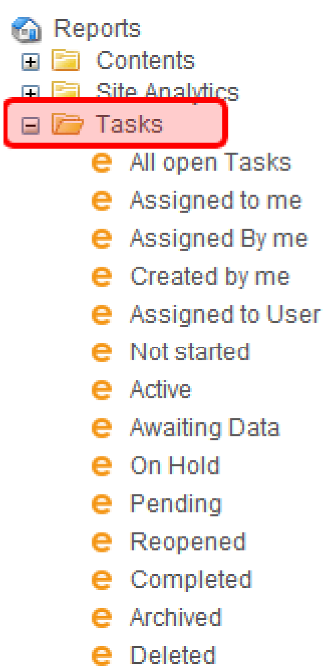
This topic consists of the following subtopics:

- "Accessing the Tasks Folder" on page 11-13
- "Creating a Task via the Task Folder" on page 11-14
- "Adding a Task Category and Task Type" on page 11-18

Accessing the Tasks Folder

To access the Tasks folder, follow these steps.

1. From the workarea, click the **Reports Menu tab.**
2. Click the Tasks folder.



3. Click the **Tasks** folder. The following subfolders appear:

- **Assigned To Me** - tasks assigned to you
- **Assigned By Me** - tasks you assigned to someone else
- **Created By Me** - tasks you created
- **Assigned To User** - search for tasks assigned to a user

- **Not Started** - tasks whose state is set to not started
- **Active** - tasks whose state is set to Active
- **Awaiting Data** - tasks whose state is set to Awaiting Data
- **On Hold** - tasks whose state is set to On Hold
- **Pending** - tasks whose state is set to Pending
- **Reopened** - tasks whose state is set to Reopened
- **Complete** - tasks whose state is set to Complete

You can click any folder to view only tasks in that category.

Also, the View Tasks screen appears in the right frame, listing all tasks assigned to you, or assigned by you.

From this page, you can view, sort, update, or add tasks. To learn more about the View Tasks screen, see "Viewing a Single Task" on page 11-24.

To learn about sorting by Task Type, see "Sorting Tasks By Task Type" on page 11-27.

Creating a Task via the Task Folder

To create a task, follow these steps.

1. Access your Tasks folder, as described in "Accessing the Tasks Folder" on page 11-13.
2. Click the Add button ( ).

Warning! The Add button only appears if your system administrator has granted you permission to add tasks. For more information, see "Task Permissions" on page 11-3.

3. The Add Task screen appears.

Enter information for the task using the following table

Field	Description
Task Title	Enter a title for the task (for example, Update Content). The title appears in the left column of the View Tasks screen.
Assigned To	Your user name appears. ■ If you do not have Redirect permissions, you cannot assign tasks to other users. ■ If you have Redirect permissions, your user name appears followed by **Select User or Group**. To assign the task to yourself, proceed to the next field. To assign the task to someone else, click **Select User or Group** and choose a user or group. (The user to whom the task is being assigned must have permission to edit the content.) When you complete the screen, an email is sent to the selected user or user group informing him of the assigned task. Note: email is only sent if email notification is enabled for Ektron CMS400.NET.
Language	Select the language of the user who will perform the task.
Content	If this task involves a piece of content, select it. When you click **Select**, a new window appears. From this window, you can navigate through folders to find the content. You can only select a piece of content whose language matches the user language selected above. See Also: "Selecting Content for the Task" on page 11-17
Priority	Select the priority of the task. Your choices are High, Normal and Low. The priority appears on the View Tasks screen. A user can sort tasks on the screen by priority.
Task Category	Select a category for the task. When a Task Category is chosen, the Task Type drop down box is auto filled with task types associated with that category. See Also: "Adding a Task Category and Task Type" on page 11-18.
Task Type	Select the Task Type for this task. You must specify a Task Category before you assign a task type. See Also: "Adding a Task Category and Task Type" on page 11-18.
Add	By clicking the Add link, you can add Task Categories and Task Types. See Also: "Adding a Task Category and Task Type" on page 11-18 Note: If you Add a Task Category or Task Type while adding a task, the task information (Task Title, Assigned To, Language, etc.) entered will be lost when the screen refreshes.
Edit	By clicking the Edit link, you can edit the Task Type chosen in the Task Type drop down box. See Also: "Editing a Task Type" on page 11-21

Field	Description
	Note: If you edit a Task Type while adding a task, the task information (Task Title, Assigned To, Language, etc.) entered will be lost when the screen refreshes.
State	Choose a status for the task. Your choices are: - Not Started - In Progress - Completed - Waiting on Someone else - Deferred If the task is not linked to content, you can assign it to any state. However, if you later link the task to content (via the **Content** link above), the state switches to Not Started. The state appears on the View Tasks screen. A user can sort tasks on the screen by state.
Start Date	Using the calendar button, choose a start date for the task. The start date appears on the View Tasks screen. A user can sort tasks on the screen by start date. Technical note: If you see a mix-up of the month and date of your entry (for example, you select March 2 but see February 3), make sure the date format specified in the Windows Control Panel Regional Settings dialog matches your current language. Also, make sure the settings apply to the default user.
Due Date	Using the calendar button, choose the date by which the task needs to be completed. The due date appears on the View Tasks screen. A user can sort tasks on the screen by due date. Technical note: If you see a mix-up of the month and date of your entry (for example, you select March 2 but see February 3), make sure the date format specified in the Windows Control Panel Regional Settings dialog matches your current language. Also, make sure the settings apply to the default user.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Description</td><td>Add additional information to describe the task. The description appears on the View Task screen (circled below).

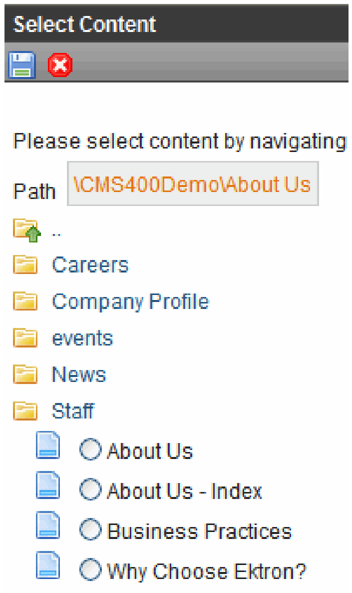
</td></tr>
</table>

4. Click the Save button ( ).

If email notification is enabled, an email is sent to the user/user group to which the task was assigned.

Selecting Content for the Task

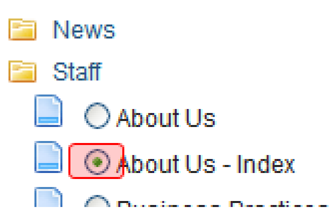
When you click **Select Content** from the Add Task screen, the Select Content screen appears. It shows only content in the selected language.



You should only select a content folder for which you have permissions.

To select a piece of content to assign to the task, follow these steps.

1. Navigate to the content. (Click any folder to open it.)
2. Click the circle to the left of the content.



3. Press the Save button ( ).

Adding a Task Category and Task Type

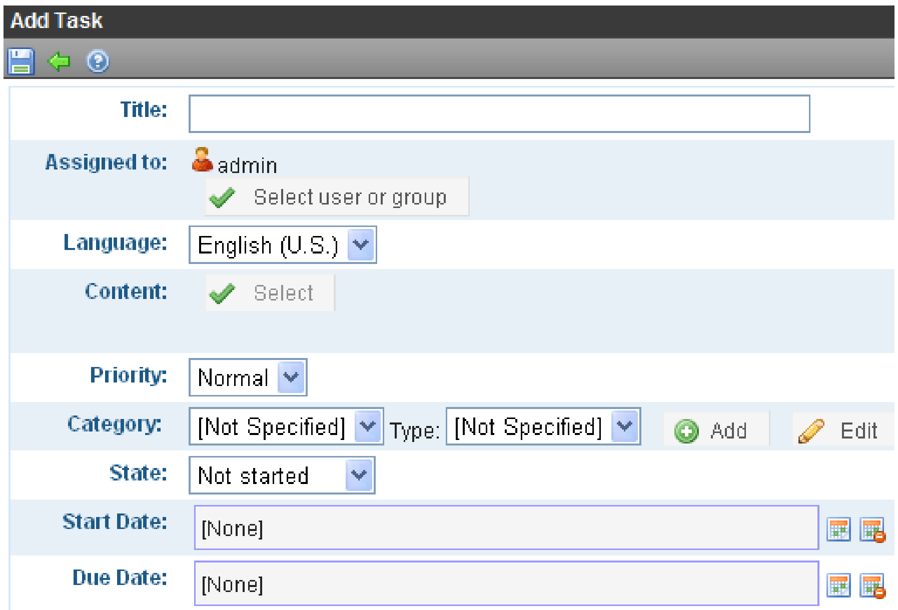
Task Categories and Task Types let users and administrators sort task by user defined categories and types.

By clicking the Add link, located next to the Task Type drop down box, you can add Task Categories and Task Types. This allows you to add categories and types without leaving the Add Task screen.

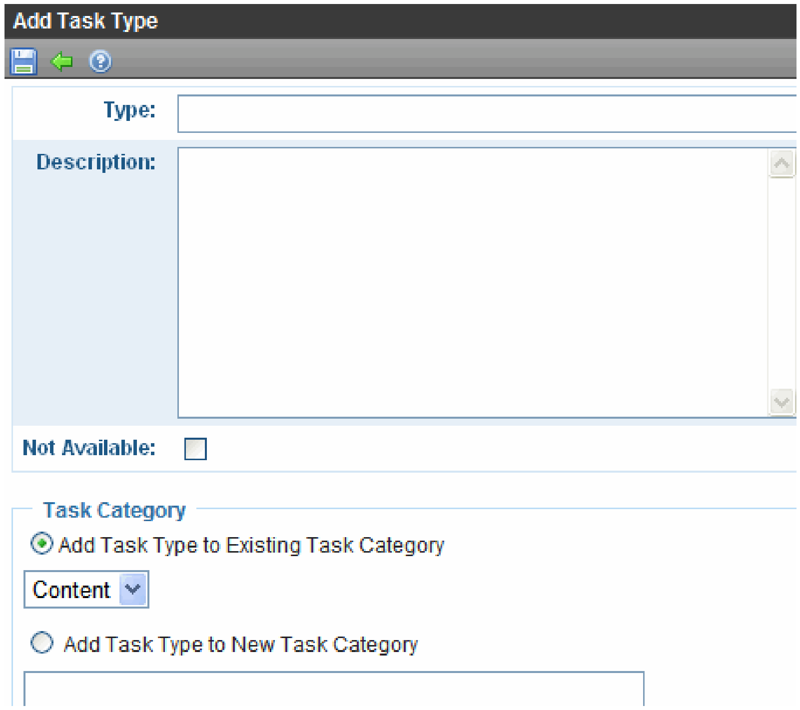
Note: Administrators can also add and edit Task Categories and Task Types from the Workarea by clicking **Settings > Configurations > Task Types**. See Also: "Adding a Task Category and Task Type" on page 11-18

To add a Task Category and a Task Type, follow these steps.

1. Go to the Add Task screen, as described in "Creating a Task via the Task Folder" on page 11-14.
2. Click the **Add** link, next to the Task Type dropdown box.



3. The Add Task Type screen appears.



From this screen you can perform the following:

- Add a task type to an existing task category
- Create a new task category
- Add a new task type
- Add a task type description
- Define task type availability

Note: As a user, if you set the Task type to Not Available, you cannot edit the Task Type after that. To make the Task Type available, see your administrator. Task Type availability is explained in "Task Type Availability" on page 11-21.

---

4. Enter your information.
5. Click Save ( ).
6. Your new Task Category and Task Type appear in the drop down boxes.

Task Type Availability

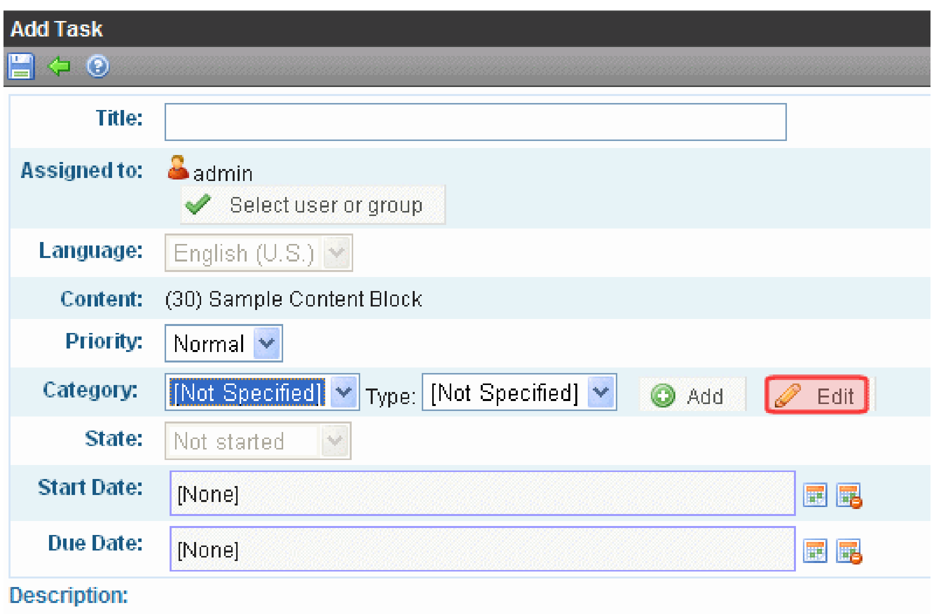
Task types can be hidden from users by clicking the Not Available check box in the Add Task Type and Edit Task Type screens. By making Task Types not available, you can make the Task Type unavailable without deleting it.

Editing a Task Type

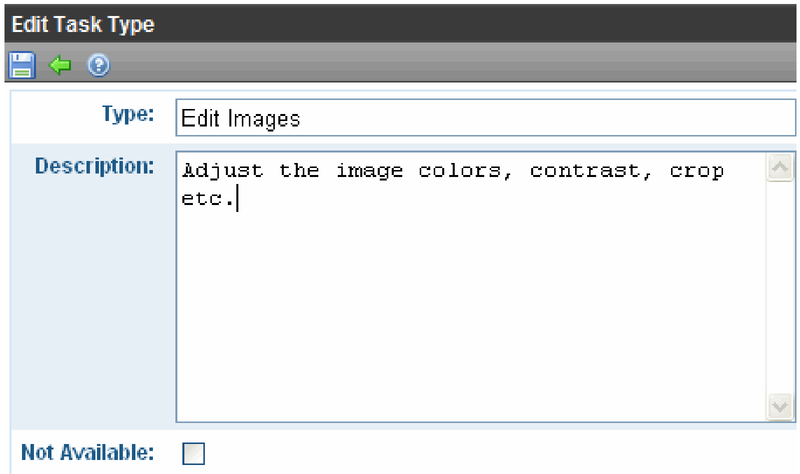
From the Add Task screen, you can edit a Task Type. This will allow you to change the Task Type name, Task Type description, and Task Type availability.

To edit a task type, follow these steps.

1. Go to the Add Task screen, as described in "Creating a Task via the Task Folder" on page 11-14.
2. Choose a Task Category and the Task Type to edit.
3. Click **Edit**, next to the Task Type dropdown box.



4. The Edit Task Type screen appears.



From this screen you can edit the following:

- Task Type
- Task Type Description
- Task Type Availability. See Also: "Task Type Availability" on page 11-21

Note: As a user, if you set the Task type to Not Available, you cannot edit the Task Type after that. To make the Task Type available, see your administrator. Task Type availability is explained in "Task Type Availability" on page 11-21.

5. Edit the information.
6. Click Save ().
7. The Task Type information is changed.

Creating a Task from the Web Site

To create a task from a Web page, follow these steps.

1. Browse to the content for which you want to assign a task.
2. Right click the mouse to display a menu.
3. Click the Add Task button ().

Warning! The Add Task button only appears if your system administrator has granted you permission to add tasks. For more information, see "Task Permissions" on page 11-3.

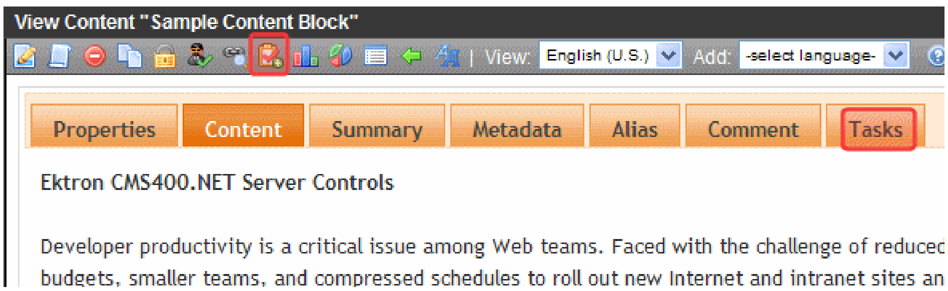
4. The Add Task screen appears. The content you were viewing is assigned to the task.
5. Follow the directions in . The only differences are
   - the content’s ID number and title appear on the screen

- the language of the content is the default language

See Also: "Creating a Task from the Web Site" on page 11-22

Creating a Task via the Content Folder

The above section describes assigning tasks from the Tasks folder. You can also assign task via the content folder, as illustrated below.



Assigning a Task from the View Content Screen

To assign a task from the View Content screen, follow these steps.

1. Access the View Content screen for the content to which you want to “attach” in a task, as described in "Viewing Content" on page 7-9.
2. Click the Add Task button ( ).

Warning! The Add Task button only appears if your system administrator has granted you permission to add tasks. For more information, see "Task Permissions" on page 11-3.

3. Follow the directions in "Creating a Task via the Task Folder" on page 11-13. The only differences are

- the content’s ID number and title appear on the screen
- the language of the content is the default language

Viewing a Single Task

Once a task is added, (with the exception of Administrators and users assigned to the Task-Create role) only the user who assigned the task and those to whom the task was assigned can view it.

To view a task, follow these steps.

Viewing a Task from the Content Folder

1. Access the Contents folder from the left side of your Workarea.
2. Open the folder that contains the content.
3. Click the content associated with the task.
4. Click the **Tasks** tab.
5. The page lists all tasks assigned to the content.
6. Select a task.

From the view task page, you can add a comment to the task.

Viewing a Task from the Tasks Folder

To view a task from the Tasks folder, follow these steps.

1. From the Smart Desktop, select the Tasks folder. See Also: "Personalizing the Smart Desktop" on page 4-4
2. Click the task you want to view.
3. The View Task screen is displayed. From here, you can perform these tasks.

- "Editing a Task" on page 11-29
- "Deleting a Task" on page 11-34
- "Adding Comments to Tasks" on page 11-30

See Also: , "Sorting Tasks By Task Type" on page 11-27,; "Viewing a Single Task" on page 11-24;

Viewing All Tasks

Beneath the **Smart Desktop >Tasks** folder, 14 view screens display all tasks filtered by specified categories. The categories appear in the table below.

After viewing tasks in any category, most screens let you perform an action on the tasks (see table below). For example, you can redirect your tasks to another user. To select all tasks on a screen, click the check box in the header row (illustrated below).

Screen	Displays these tasks	Action you can perform from view screen
Tasks	Open tasks assigned to yourself, and open tasks you have assigned to other users.	▪ Create a new task ▪ Delete a task ▪ View a task ▪ Sort tasks by column
All Open Tasks	All open tasks (that is, tasks in one of these states) for all users ▪ not started ▪ active ▪ awaiting data ▪ on hold ▪ reopened ▪ pending	▪ Edit a task ▪ Sort tasks by column
Assigned To Me	All open tasks assigned to you	▪ Assign tasks to a different user ▪ View a task ▪ Sort tasks by column
Assigned By Me	All open tasks you assigned to yourself or others	▪ Assign tasks to a different user ▪ View a task

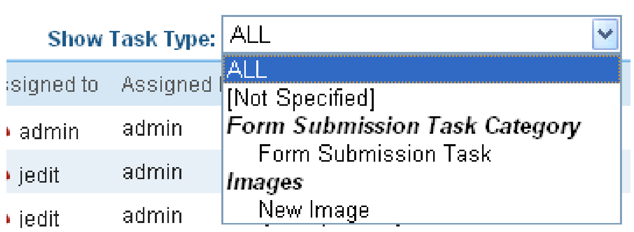
Screen	Displays these tasks	Action you can perform from view screen
		Sort tasks by column
Created by Me	All open tasks you created	View a task Sort tasks by column
Assigned to User	All open tasks assigned to a user you select	Select any user and view all tasks assigned to that user. To do so, select new user from **Assign to User** drop down list and click **Get Tasks**. View a task Sort tasks by column
Not Started	All whose state is Not Started See Also:	Change to any other state View a task Sort tasks by column
Active	All whose state is Active	Change to any other state View a task Sort tasks by column
Awaiting Data	All whose state is Awaiting Data	Change to any other state View a task Sort tasks by column
On Hold	All whose state is On Hold	Change to any other state View a task Sort tasks by column
Pending	All whose state is Pending	Change to any other state View a task Sort tasks by column
Reopened	All whose state is Reopened	Change to any other state View a task Sort tasks by column

Screen	Displays these tasks	Action you can perform from view screen
Completed	All whose state is Completed	Change to any other state View a task Sort tasks by column
Archived	All whose state is Archived	Change to any other state View a task Sort tasks by column
Deleted	All whose state is Deleted	Change to any other state Purge tasks View a task Sort tasks by column

Sorting Tasks By Task Type

On every View Task page, you can sort tasks by the Task Type assigned to the task. You sort by Task Type using the Show Task Type drop down box. It is located in the upper right corner of the Workarea.

Note: Task Types only appear in the Show Task Type dropdown box when they have been added to a task.



To sort by Task Type, click the drop down box and choose a Task Type. Words in ***bold Italics*** are Task Categories. You cannot sort by Task Categories.

Determining Which Tasks a User Can View

To provide security, Ektron CMS400.NET restricts which users can use the task views. These restrictions are listed on the following table.

View option	Administrator group member	User or group to whom task assigned	User who assigned task	User who created task	All users
All Open *	X				
Assigned by Me		X	X		
Assigned to Me *		X			
Created by Me *				X	
Assigned to User	X	X	X	X	X
Not Started	all tasks in specified state	only tasks assigned to user in specified state			
Active	I	I			
Awaiting data	I	I			
On hold	I	I			
Pending	I	I			
Reopened	I	I			
Completed	I	V			
Archived	I				
Deleted	V				

* - user can only view open tasks, that is, not started, active, awaiting data, on hold, pending, or reopened

Viewing a Task’s History

Ektron CMS400.NET maintains a history of all events in the life of a task, as well as any comments entered. As examples, the task history shows when and by whom the task was created, when it changed to Active, when it was linked to content, when its state changed, when it was approved, etc.

You can view the task’s history until the task is purged. To view a task’s history, follow these steps.

1. Navigate to the View Task screen, as explained in .
2. Click the History button ( ).
3. The history of task events appears (example below).

View Task History for Image change needed

Date	Initiator	Activity	Information
3-Sep-2009	jedit	Creation	
3-Sep-2009	jedit	Content Linked	Health Center Staff(1052)
3-Sep-2009	jedit	Start Date Change	Date Set to 9/3/2009
3-Sep-2009	jedit	Due Date Change	Date Set to 10/27/2010
3-Sep-2009	jedit	Content Language	English (U.S.)
3-Sep-2009	jedit	Language Change	English (U.S.)
3-Sep-2009	jedit	Title Change	Image change needed
3-Sep-2009	jedit	Task Type Change	New Image

Editing a Task

You can change task information, such as

- Title
- Assigned to
- Language
- Content
- Priority
- Task Category
- Task Type
- Status (State)

- Due Date
- Start Date
- Description

To edit a task, perform the following steps.

1. Access the View Task page for the task, as described in .

Note: You cannot edit a task after viewing it from the Content folder.

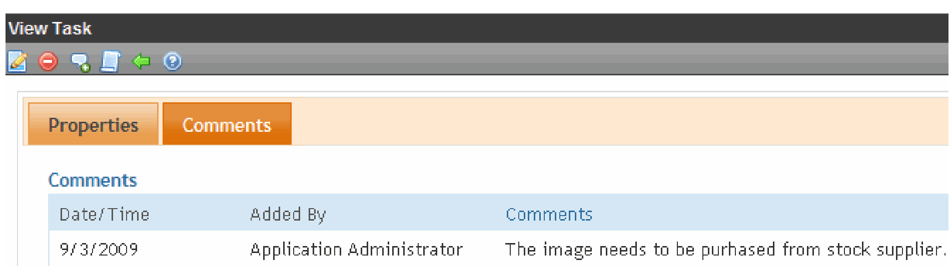
2. Click the Edit button ( ).
3. The Edit Task screen appears.
4. Edit the task.
5. Click the Update button ( ) to save the changes.

Adding Comments to Tasks

You can add comments to an assigned task if you want to provide additional information about its status. For example, if you update a task's status from *In progress* to *Waiting on Someone Else*, you can use a comment to describe the status change, such as:

```
left voice mail with John with questions about his changes
to the home page
```

Comments appear on the Comments Tab of the View Task screen (illustrated below).

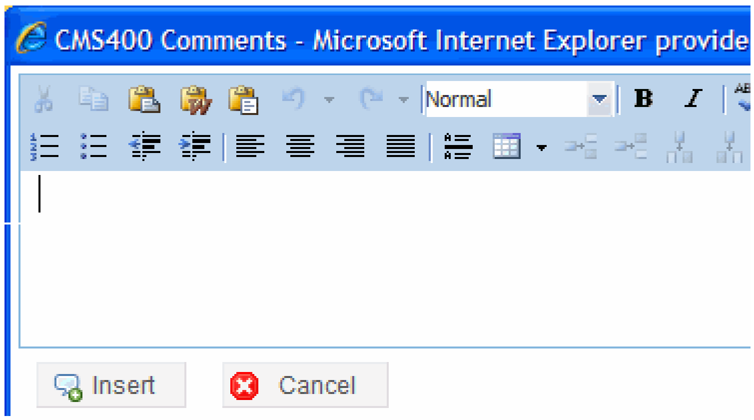


Several comments can be added to a task to record its progress from assignment to completion.

To add a comment to a task, follow these steps.

Note: When an approver approves/declines content from the Content Awaiting Approval screen, if the content has an active task, the Add Comments to Task screen appears. The screen lets the approver insert comments about the task associated with the content.

1. Access the View Task screen for the task, as described in "Viewing a Task from the Tasks Folder" on page 11-24.
2. Click the Add Comment button ( ).
3. The Comments window appears.



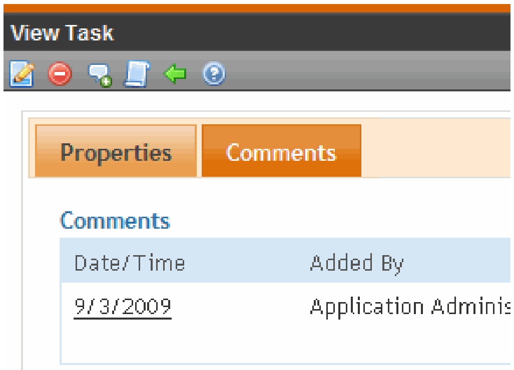
4. Enter your comment in the editor. Note that you can format and spell check the text using the toolbar buttons.
5. Click the  button.
6. The View Task screen reappears with the comment at the bottom of the page.

See Also: "Adding Comments to Tasks" on page 11-30

Updating Comments

To update a comment, follow these steps.

1. Access the View Task screen that contains the comment you want to update, as described in .
2. Click the Comments Tab.
3. Click the comment's **Date/Time** link (illustrated below).



4. The Comments window opens with the comment displayed.
5. Update the comment.
6. Click the  button.

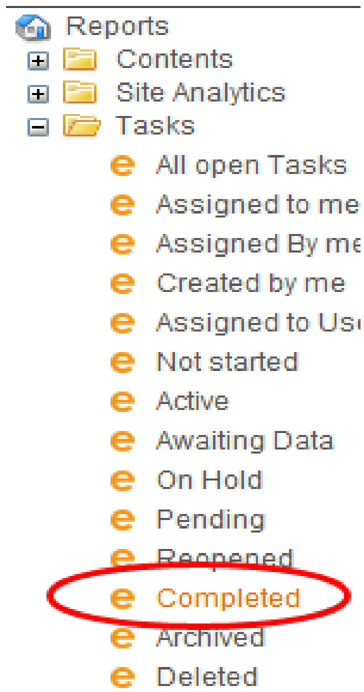
Archiving a Task

After a task is completed, you may want to change its state to Archived. Archiving moves selected tasks from the Completed tasks list to the archived list. This change cleans up the completed tasks list and makes it and easier to use.

Archived tasks are typically kept for a predetermined time period, at which point an administrator deletes them (depending on your organization's policies).

To archive a task, follow these steps.

1. From the Smart Desktop, open the Tasks folder.
2. Click the view option corresponding to the state of tasks you want to archive. Typically, you would archive completed tasks.



3. A list of Completed tasks appears. Select tasks one at a time, or click the check box on the top left corner to select all.

4. Next to the **Change to State** field, click the down arrow to display the drop down list and select **Archived**.
5. Click the Set button.

Purging a Task

If you want to remove deleted tasks from the system, you purge them. Purging removes a task and its history from the database.

To purge one or more tasks, follow these steps.

1. From the Smart Desktop, click the Tasks folder.
2. Click the **Deleted** view option.
3. Select tasks one at a time, or click the check box on the top left corner to select all.

4. Click the Purge button.

Deleting a Task

You can easily delete a task that is no longer needed. For example, the user who assigned a task would typically delete it when it is completed.

An administrator can change any task's state to deleted. He would typically do so after it is completed or archived, depending on your organization's policies.

Note that a deleted task remains in the system until you purge it. It is visible only on the View Deleted Tasks option.

To delete a task, follow these steps.

1. Access the View Task screen for the task, as described in .
2. Click the Delete button ( ).

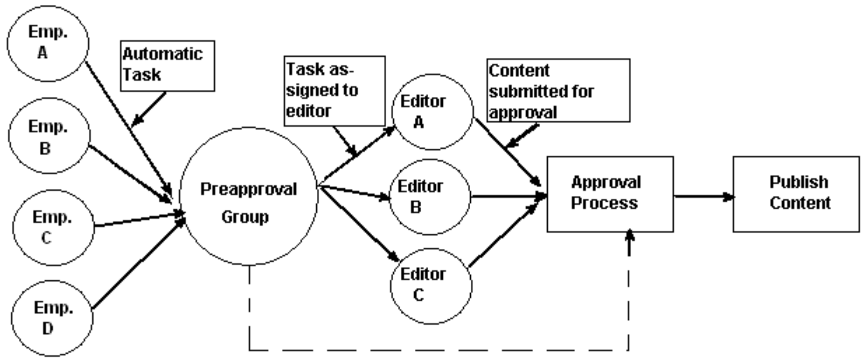
Warning! The Delete button only appears if your system administrator has granted you permission to delete tasks. For more information, see "Task Permissions" on page 11-3.

3. A confirmation message appears.
4. Click **OK**.

Automatic Creation of Tasks Associated with Content

In addition to the manual assignment of tasks, they can be automatically generated whenever content, an asset, or a form is created. You would enable and use the Automatic Task Creation feature if you want to set up a *preapproval* process, which requires one or more users to review and approve content before it enters the regular approval process. (The regular approval process is described in .)

The most common scenario illustrated below.



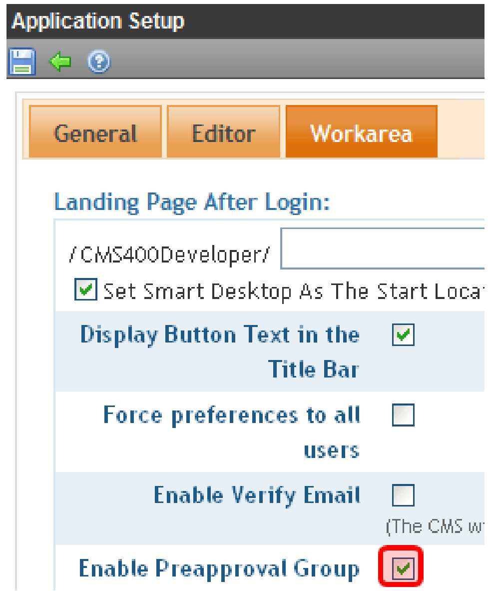
In this example, an automatically-generated task assigns the content to a preapproval group. When any member of that group reviews his tasks, he inspects the corresponding content and assigns it to an editor. After the editor reviews and possibly edits the content and submits it for approval, it enters the normal approval process.

This section explains the automatic task creation process through the following subtopics:

- "Enabling Automatic Task Creation" on page 11-35
- "Assigning a Preapproval Group to a Folder" on page 11-36
- "How Automatic Task Creation Works" on page 11-37

Enabling Automatic Task Creation

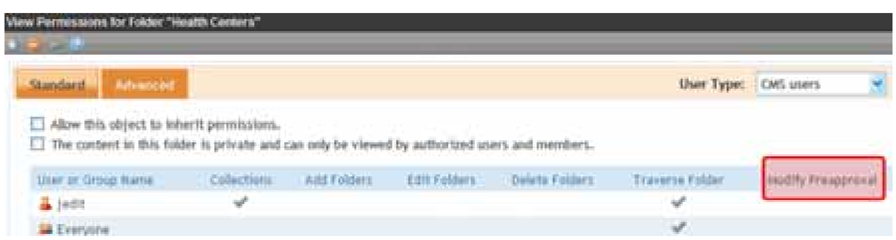
The Settings > Configuration > Setup screen > Workarea tab's **Enable PreApproval Group** field controls Ektron CMS400.NET's Automatic Task feature. Check this box to turn Automatic Tasks on.



Next, you create user groups and assign them to folders whose content must complete the preapproval process before it enters the regular approval process. See "Assigning a Preapproval Group to a Folder" on page 11-36.

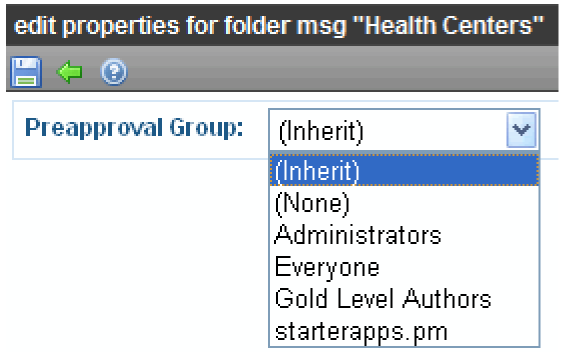
Assigning a Preapproval Group to a Folder

The ability to select or update a folder's preapproval group is determined by the advanced permission **Modify Preapproval**. Only users with this permission can see the Modify Preapproval button ( ) when viewing the Folder Properties screen.



If you have permission to modify a folder's preapproval group, go to the Folder Properties screen and click the Modify Preapproval button ( ) to access the **PreApproval Group** field. (The field only appears if you have enabled the Preapproval Feature. See "Enabling Automatic Task Creation" on page 11-35.)

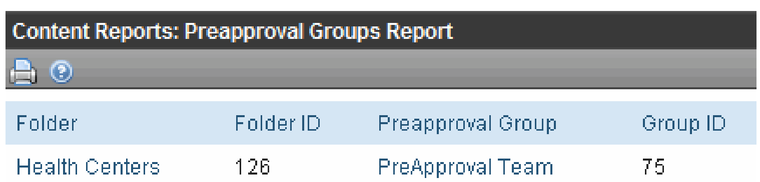
If you assign a user group, an automatic task can be assigned to that group whenever content in that folder is created or updated.



If you select **Inherit**, this folder gets its preapproval group from the parent folder. If you select **None**, you disable the preapproval feature for the folder.

Preapproval Groups Report

The Preapproval Groups Report lists all preapproval groups assigned to folders within Ektron CMS400.NET. To access it, go to **Smart Desktop** > **Reports** > **Preapproval Groups**. See Also: "Personalizing the Smart Desktop" on page 4-4


Content Reports: Preapproval Groups Report

Folder	Folder ID	Preapproval Group	Group ID
Health Centers	126	PreApproval Team	75

How Automatic Task Creation Works

When a user submits a content item for approval, Ektron CMS400.NET checks to see if an open task exists for it. (An open task is one whose state is Not Started, Active, Awaiting Data, on Hold, or Pending.) If none exists and a preapproval group is assigned to its folder, a task is created and associated with the content.

At this point, all members of the folder's preapproval group see the task on their Smart Desktop.

A task has the following information.

.

Field	Value
Title	A string formulated by joining the ■ content title ■ content ID number ■ underscore ■ Task For example, Private Content2_Task
Assigned to	The preapproval group
Assigned by	The user who submitted the content
Content	The content being submitted for approval
Priority	Normal
State	Not Started
Due date	none
Start date	none
Created by	User who submitted content
Description	none

Next, the task can be reviewed by any member of the preapproval group. The member then has two choices.

- review the content and submit it for publishing. This action completes the preapproval process and submits the content into the regular approval chain.
- assign the task to another user, such as an editor. (The user to whom the task is being assigned must have permission to edit the content.) The editor reviews the content, updates it as needed, and submits it into the regular approval chain.

Note: The user submitting the content does not need permission to create tasks. Also, the user assigned to the task should not change its state using the task system. Instead, he should review and approve content using the regular content workflow mechanism. That mechanism automatically changes the task's state.

The tables below explain the sequence of changes to content and its associated task. All changes are logged into the task's history. See Also: "Viewing a Task's History" on page 11-29

Also, email is automatically generated for automatic tasks as it is for manually-created tasks.
See Also:

Sequence of Task/Content Statuses (Author Lacks Permission to Approve Content)

Event	Content Status	Task Status
Content is created and checked in	Checked In	No auto task assigned
Content is submitted for approval Note: The above action creates the automatic task for the content.	Waiting for completion of associated tasks	Not Started
Content is assigned by a member or preapproval group to an editor	Waiting for completion of associated tasks	Not Started
Editor updates content then checks it in	Checked In	Active
Content is submitted for approval; it enters any approval chain set for the folder Note: Since the task requires an approval, it appears in the task list of the current approver. When the content is approved, the task is moved to the next approver's task list.	Submitted for Approval	Pending
Approver denies request	Checked In	Reopened
Approver approves content	Approved	Complete

Sequence of Task/Content Statuses (Author Can Approve Content)

Event	Content Status	Task Status
Content is created then checked in	Checked In	No auto task assigned
Content is edited then checked in	Checked In	Active
Content is submitted for approval Note: Although an author can approve content, he must click publish twice: once to change content status to Awaiting Completion of Associated Task, and a second time to change it to Approved.	Waiting for completion of associated tasks	Not Started
Content is published	Approved	Complete

Task Email Notification

email notification for tasks is sent on these occasions.

Warning! For email notifications to be sent, the following items must be true:
- Users have email enabled in their user profile.
- Users have a valid email address in their user profile.
- CMS400.NET is set up and configured to send emails.

- A task is assigned to a user.
- A task is redirected to a user.
- A task is submitted for content approval. Sent to the first user in the approval chain.
- The approval process moves on to the next approver.
- The content is declined at an approval stage. This is sent to the assigned user.
- The content is published. This goes to the creator, assigned user, and the approvers.

See Also: "Configuring E-Mail for Tasks and Content" on page 1-109

Chapter 12

Business Rules

Business Rules allow you to define conditions for Web pages on your site. You choose an action based on whether the conditions are true or false when a site visitor browses your site. For example:

- **Condition** - a site visitor visits your site for the first time
- **Action** - add a cookie to the site visitor’s system and pop up a welcome message

With Business Rules, you do not write code to set conditions and initiate actions. You simply complete the information requested in the Business Rules wizard, have your developer add a Business Rules server control to your Web form, and assign the server control the Business Rules Ruleset. See Also: "BusinessRules Server Control" on page 12-13

Business Rules start out with a Ruleset that is assigned an ID. Each Ruleset is made up of one or more rules. Rules are made up of conditions and actions. There are several predefined conditions and actions for rules in CMS400.NET.

Conditions include:

- Cookie Parameter = value
- Form Parameter = value
- QueryString Parameter = value
- Server Variable = value
- Custom Parameter = value

Actions include:

- Displaying a calendar
- Displaying a message
- Opening a URL in a new window
- Popping up a message
- Redirecting to a new URL
- Setting a cookie value
- Displaying a content block.

Once a rule is defined, you can add it to multiple Rulesets. This is useful if you have several groups of rules that use a common rule.

Business Rules are more fully explained through the following topics.

- "Permission to Work with Business Rules" on page 12-3
- "Selecting a Rule" on page 12-3
- "Creating a New Business Rule Ruleset" on page 12-4
- "Working with Rulesets" on page 12-5

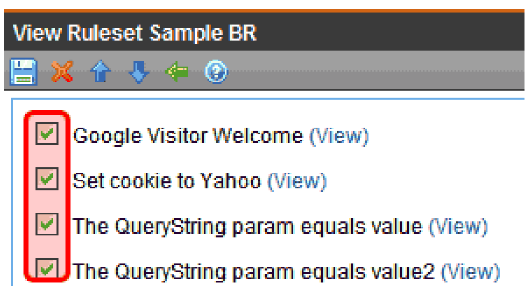
- "BusinessRules Server Control" on page 12-13

Permission to Work with Business Rules

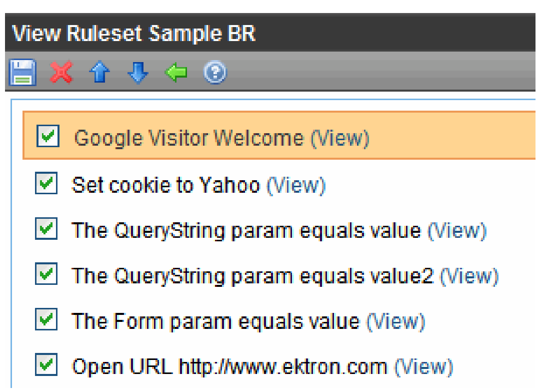
Only members of the Administrators user group and those defined in the Manage Members for Role: Add Role Member Business Rule Editor screen can work with Business Rules. See Also: "Defining Roles" on page 15-32

Selecting a Rule

There are two ways to select a rule. The first, check boxes, allows you to select a rule by clicking the check box. This method is used when turning a rule on or off in the Ruleset. Checked, the rule is active. Unchecked the rule is inactive.



The second, highlighting a rule, is used to when you want to work with the rule. For example, you want to add or remove a rule from a Ruleset. To highlight a rule, click its title. Once a rule is highlighted, it is ready for an action, such as Remove or Edit.

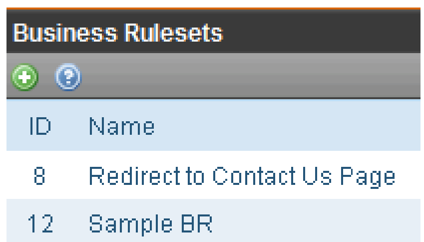


Creating a New Business Rule Ruleset

Note: Only members of the Administrators group or those defined in Manage Members for Role: Rule Editor screen can create or edit Business Rules and Rulesets.

See Also: "Creating a New Business Rule Ruleset" on page 12-4

You create Business Rules Rulesets from the Business Ruleset screen in the Workarea.

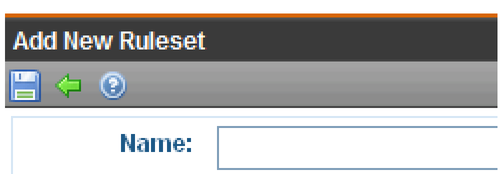


The Business Ruleset screen contains these columns:

- **ID** - the numerical ID assigned to the Ruleset.
- **Name** - a unique name you give to the Ruleset to help you understand what the Ruleset does.

To add a new Ruleset, follow these steps:

1. In the Workarea, click **Settings** > **Business Rules**.
2. Click the Add New Ruleset button ( ).
3. The **Add New Ruleset** screen appears.

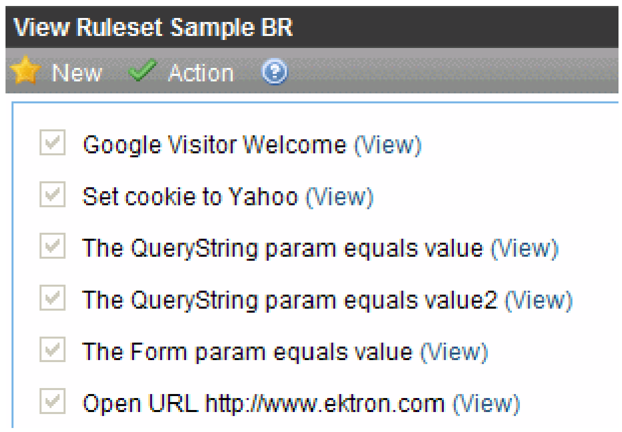


4. In the **Name:** text box, add a name for the rule.
5. Click the Save button ( ).
6. The View Ruleset screen appears.

At this point, you can continue to add a rule or click the Back button ( ) and return to add a rule later.

Working with Rulesets

After creating a Ruleset, you typically add rules to it via the View Ruleset screen.



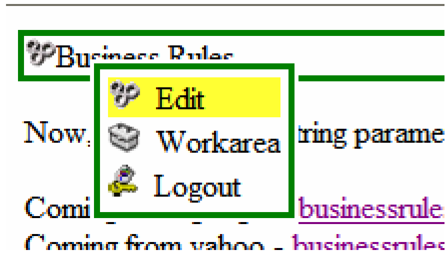
The View Ruleset screen is the launch pad for working with existing Rulesets. From this screen you can:

- "Edit a Ruleset" on page 12-5
- "Remove a Rule From a Ruleset" on page 12-6
- "Change the Order of Rules in the Ruleset" on page 12-7
- "Delete a Ruleset" on page 12-7
- "Add a New Rule to a Ruleset" on page 12-7
- "Add an Existing Rule to a Ruleset" on page 12-11
- "Edit a Rule in a Ruleset" on page 12-12
- "Viewing a Rule in a Ruleset" on page 12-13

Edit a Ruleset

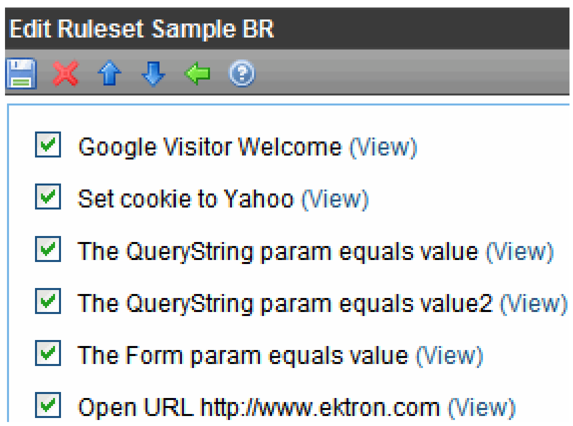
See Also: "Working with Rulesets" on page 12-5

You can initiate editing a Ruleset from two different locations, the Web page or the Workarea. To edit a Ruleset from the Web page, navigate to a Business Rule on a Web page while logged in. Then, right click the Business Rule icon and click **Edit**.



If editing from the Workarea, click **Settings** > **Business Rules** and then click the Ruleset to edit. Next, click **Action > Edit Ruleset**.

The Edit Ruleset screen appears.



Remove a Rule From a Ruleset

Follow these steps to remove a rule from the Ruleset.

1. Navigate to the Edit Ruleset screen, as explained in "Edit a Ruleset" on page 12-5.
2. Highlight the rule you want to remove.

Warning! The check box associated with the rule must be empty for you to remove the rule. If the check box is not empty, the rule will look as though it has been removed

3. Click the Remove Rule button ( ).
4. A pop up appears letting you know that the rule will be removed from this Ruleset only.
5. Click **OK**.
6. The rule is removed from the Edit Ruleset screen.
7. Click the Save button ( ).

Change the Order of Rules in the Ruleset

The order of rules in a Ruleset affects how rules are applied when a site visitor views a page. For example, you want to display a welcome message before a content item. To accomplish this, move the rule for the welcome message above the rule for a content item.

Follow these steps to change the order of the rules in a Ruleset.

1. Navigate to the **Edit Ruleset** screen, as explained in "Edit a Ruleset" on page 12-5.
2. Highlight the rule you want to reorder.
3. Click the Move Up or Move Down buttons ( ) ( ) to move the rule up or down the list.
4. Click the Save button ( ).

Delete a Ruleset

When you delete a Ruleset, it is removed from the system permanently. However, rules included in a Ruleset are not deleted. This is because a rule can be used in multiple Rulesets.

Follow these steps to delete a Ruleset.

1. Navigate to the **Edit Ruleset** screen, as explained in "Edit a Ruleset" on page 12-5.
2. Click the Delete Ruleset button ( ).
3. A dialog asks you to confirm the deletion.
4. Click **OK**.

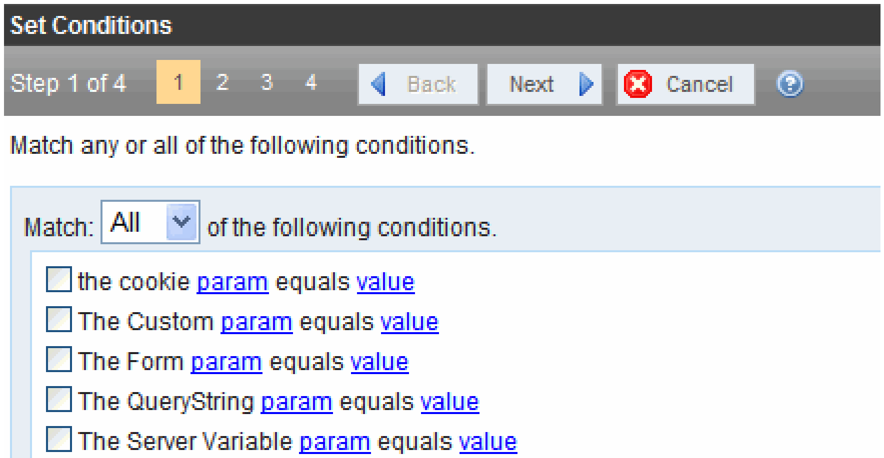
Add a New Rule to a Ruleset

Adding a new rule is easy with Ektron CMS400.NET. Just click the **Add** button on the View Ruleset screen. The Rules Wizard launches and helps you define a rule.

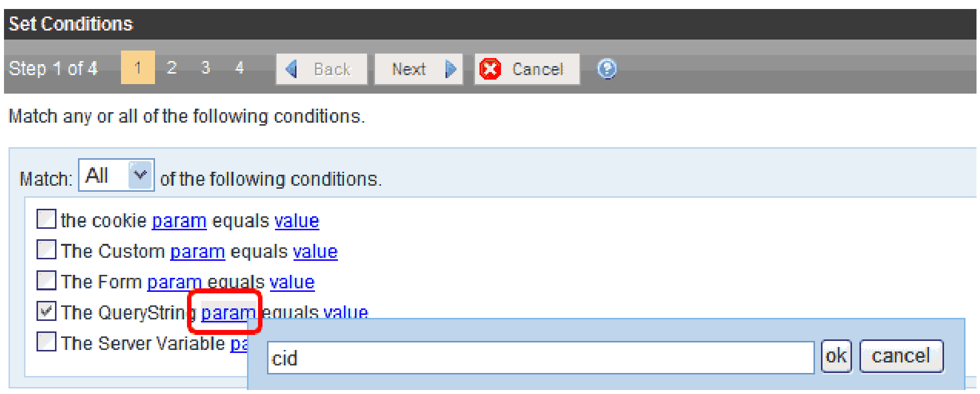
Follow these steps to add a new rule to your Ruleset.

1. If you arrived here from the section, continue to the next step.

   Otherwise, navigate to the Business Rules screen in the Workarea by clicking **Settings** > **Business Rules**. Next, click the Business Rule for which you want to create a new rule.
2. Click **New > Add New**.
3. The Rules Wizard launches.



4. Step 1 prompts you to create conditions for the rule and decide whether a site visitor needs to match Any or All conditions. Clicking the param and value links opens a dialog to enter information.



Place a check next to any condition you want to use. Use the table below to help you fill out the param and value fields.

Conditions Table

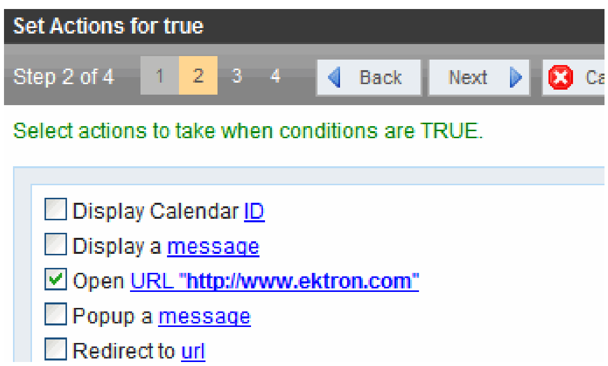
Condition	Description	Example
The Cookie param equals value	Use a cookie for this condition. **param** - enter **Name** in this field. **value** - enter the name of the cookie in this field.	Does the site visitor's system have an Ektron cookie? **Usage**: The Cookie param "Name" equals value "Ektron"

Condition	Description	Example
The Form param equals value	Use a form elements field name and match the value entered into the element. **param** - enter a form's element Field Name from a form. **value** - enter the value you want the form element to match.	A form has a Choices Field element with the Field Name "Favorite_Food" and choices of Pizza, Steak and Chicken. When a site visitor chooses Pizza and clicks submit, your rule launches a Pizza company's Web site. **Usage**: The Form param "Favorite_Food" equals value "Pizza"
The QueryString param equals value	Use the QueryString for this condition **param** - the name of the QueryString. For example, ID. **value** - the value associated with the parameter. For example, 18.	Is content with the ID of 18 being displayed? **Usage**: The QueryString param "ID" equals value "18"
The Server Variable param equals value	Use server variables from the site visitor. **param** - enter the name of a server variable. For example, HTTPS. **value** - the value associated with the parameter. For example, On.	Is the site visitor's browser using SSL? **Usage**: The Server Variable param "HTTPS" equals value "On"
A list of server variables and their descriptions can be found at http://msdn.microsoft.com/library/default.asp?url=/library/en-us/iissdk/html/21b3be8f-d4ed-4059-8e21-6cba2c253006.asp.		

Condition	Description	Example
The Custom param equals value	Use custom parameters from the user. User parameters are defined in the codebehind of a web page. **param** - enter the name of a custom parameter. For example, AcctBlnc **value** - the value associated with the parameter. For example, 1000	Is the user's account balance $1000? **Usage**: The Custom param "AcctBlnc" equals value "1000"

5. Click **Next**.

Step 2 of the Wizard prompts you select an action to take if conditions are true. Check the boxes for the actions to take. Click the blue links to add the appropriate information.

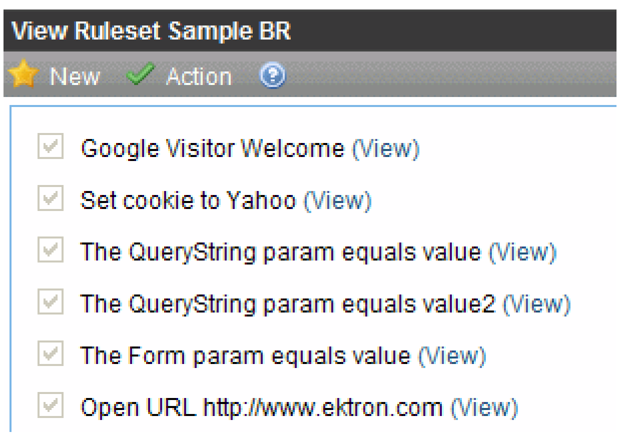


Conditions Table

Action	Description
Display Calendar ID	Enter a CMS400.NET Calendar ID.
Display a Message	Enter a message to be displayed.

Action	Description
Open URL	Enter a URL. This opens a new window with the URL.
Popup A Message	Enter a message that appears in a popup dialog box.
Redirect to a URL	Enter a URL to redirect a the site visitor's browser.
Set Cookie to Value	Creates a cookie on the site visitor's system. Enter **Name** for Cookie and the name of the cookie for Value.
Display Content Block ID	Enter a CMS400.NET content block's ID.

6. Click **Next**.
7. Step 3 of the Wizard lets you select actions to take when conditions are false. This works the same as Step 2 of the Rules Wizard. For descriptions of the actions, see "Conditions Table" on page 12-8.
8. Click **Next**.
9. Step 4 of the Wizard asks you to enter a name for the rule in the text box.
10. Click **Done**.
11. The View Ruleset screen appears. Your rule appears in the Ruleset box.



Add an Existing Rule to a Ruleset

Because rules are not tied to a Ruleset once they are created, you can add a rule to more than one Ruleset. To add an existing rule to a Ruleset, follow these steps:

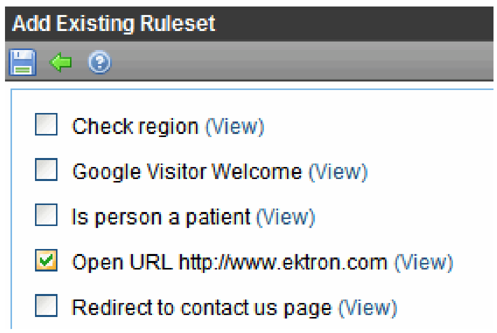
1. If you arrived here from the section, continue to the next step.

Otherwise:

Navigate to the Business Rules screen in the Workarea by clicking **Settings** > **Business Rules**. Next, click the name of the Business Rule for which you want to add an existing rule.

2. Click **New > Add Existing**.
3. The Add an Existing Rule screen appears.

4. Check the rules to add to the Ruleset.

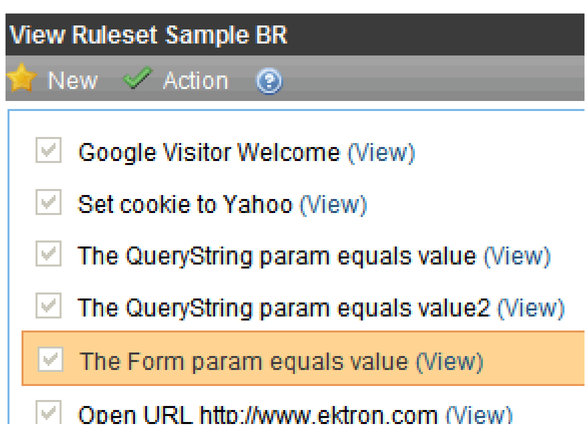


5. Click the Save button ().

Edit a Rule in a Ruleset

Following these steps to edit a rule in a Ruleset.

1. In the Workarea, navigate to **Settings** > **Business Rules**.
2. Select the Ruleset that contains the rule to be changed.
3. Highlight the rule to be changed.

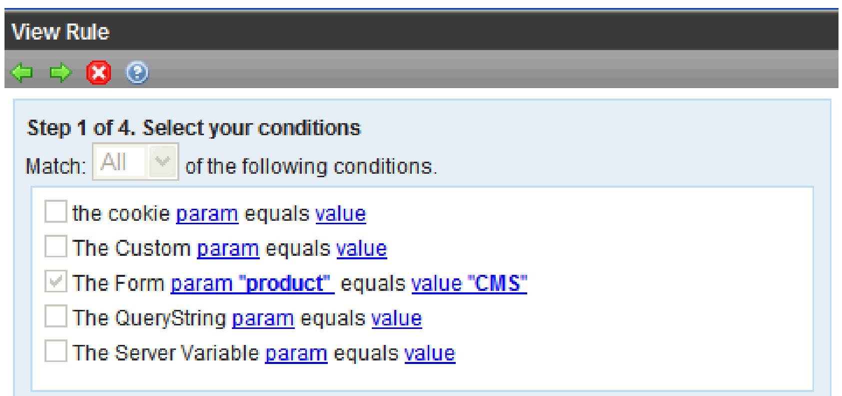


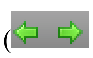
4. Click **Action** > **Edit Rule**.
5. The Rules Wizard appears with the rule loaded. Edit as necessary. The Rules Wizard is explained in "Add a New Rule to a Ruleset" on page 12-7.

Viewing a Rule in a Ruleset

To help you understand the contents of a rule, a (View) link appears next to each rule in a Ruleset. Click this link to launch a view window for the rule. This window displays settings for each Rules Wizard step applied to a rule.

Note: The steps are not editable from this window. To edit rules in a Ruleset, see "Edit a Rule in a Ruleset" on page 12-12.



To navigate through the steps, use the Previous and Next Step buttons (). To close the window, click the Close button.

BusinessRules Server Control

The BusinessRules server control allows you to add a Business Rule created in the Workarea to a Web form. It also allows you to add a place holder for a Business Rule. Then, a CMS400.NET administrator can create a business rule at a later date.

For an explanation of Business Rules and how they work, see "Business Rules" on page 12-1.

BusinessRules Server Control Properties

The following table explains the properties of the Business Rules server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9.	String
Hide	Used to hide a control in design time and run time. **True** = Hide Business Rule **False** = Show Business Rule	Boolean
Language	Set a language for viewing form content. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
RuleID	The ID of the Ruleset to evaluate. If you don't know the ID number of the Ruleset, use the CMS Explorer to browse to it. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	Long
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Chapter 13

Multivariate Testing

Multivariate testing helps determine the optimum page layout for Web pages. By adjusting page layouts, Web site managers increase the number of visitors to a target page. With Ektron CMS400.NET Multivariate Testing, these adjustments occur automatically and the optimal page layout becomes the actual page web site visitors see.

Content variations appear to site visitors during an *experiment*. The page variation that the site visitor sees is randomly selected by the system. When a visitor navigates to a special page called the target, it is logged as a *conversion*. Conversions are counted, and the variation that produces the most conversions is automatically promoted to the Web site.

Sometimes, this type of testing is called “A/B Testing”, but Multivariate Testing is far more than that. A/B testing provides only a few variations. With Multivariate Testing, the number of page combinations grows exponentially as the number of layout and content combinations increase.

Warning! In order to use the Multivariate Testing feature, you must have PageBuilder templates available on your Web Site. For more information about Pagebuilder templates, see "Building Pages" on page 6-5.

An Example of Multivariate Testing

In the example below, the marketing manager wants to know which of three ads produces the most visits to a registration page.

- The page containing the ads with a link to a registration form is the *experiment page*.
- A page containing the registration form is the *target* page.
- Results are calculated by counting visits to the target page produced by each ad - these are called *conversions*.

When the target number of conversions occurs, the variation achieving it automatically becomes the permanent page on the site. The optimum ad runs on the web site without further effort by the Web site Admin.

See Also:

- "Widgets used by Multivariate Testing" on page 13-4
- "Using PageBuilder Pages and Content " on page 13-5
- "Creating a Multivariate Experiment" on page 13-5
- "Starting and Running an Experiment" on page 13-9
- "Additional Information" on page 13-12

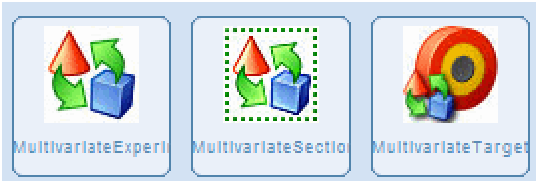
- "Multivariate Target Widget Details" on page 13-16
- "Multivariate Experiment Widget Details" on page 13-17
- "Multivariate Section Widget Details" on page 13-18

Widgets used by Multivariate Testing

You use three PageBuilder widgets for Multivariate Testing. =

- Multivariate Experiment Widget
- Multivariate Section Widget
- Multivariate Target Widget

The widgets look like this in the PageBuilder Widget tray.



The following table describes each widget type.

Widget Name	Page Used	Description	For details, see
Multivariate Target WIdget	Target Page	When a page view occurs on a page containing this widget, the conversion count is increased.	"Multivariate Target Widget Details" on page 13-16
Multivariate Experiment Widget	Experiment Page	This controls the experiment. Settings include the target content number, start/stop button and the Report hide/show button. This is only available when logged in and editing the PageBuilder experiment page.	"Multivariate Experiment Widget Details" on page 13-17

Widget Name	Page Used	Description	For details, see
Multivariate Section Widget	Experiment Page	This widget allows you to drag and drop various content widgets into it. These produce the variations used during the experiment. A slider control selects each specific content used in the variations. More than one Multivariate Section widget can be used on a page.	"Multivariate Section Widget Details" on page 13-18

Using PageBuilder Pages and Content

Before you create a Multivariate Experiment, you will need to have two web pages - the Target page and the Experiment page.

Both pages are created with PageBuilder which allows you to drag and drop widgets into your page. For more information about PageBuilder, see "Building PageBuilder Pages" on page 6-1. You may choose any type of widget for your pages.

Creating a Multivariate Experiment

Note: To run Multivariate Tests, you must be an Administrator or have the Multivariate Tester Role assigned. For more information see "Defining Roles" on page 15-32.

To create a Multivariate experiment, follow these steps:

1. Create a target page that contains the Target Widget. See "Creating a Multivariate Target Page" on page 13-6
2. Create an experiment page that contains the content variations with the Experiment and Section widgets. See "Creating a Multivariate Experiment Page" on page 13-6
3. Run the experiment until it automatically ends or you stop it. See "The image below shows a completed experiment page that has two Section Widgets." on page 13-8

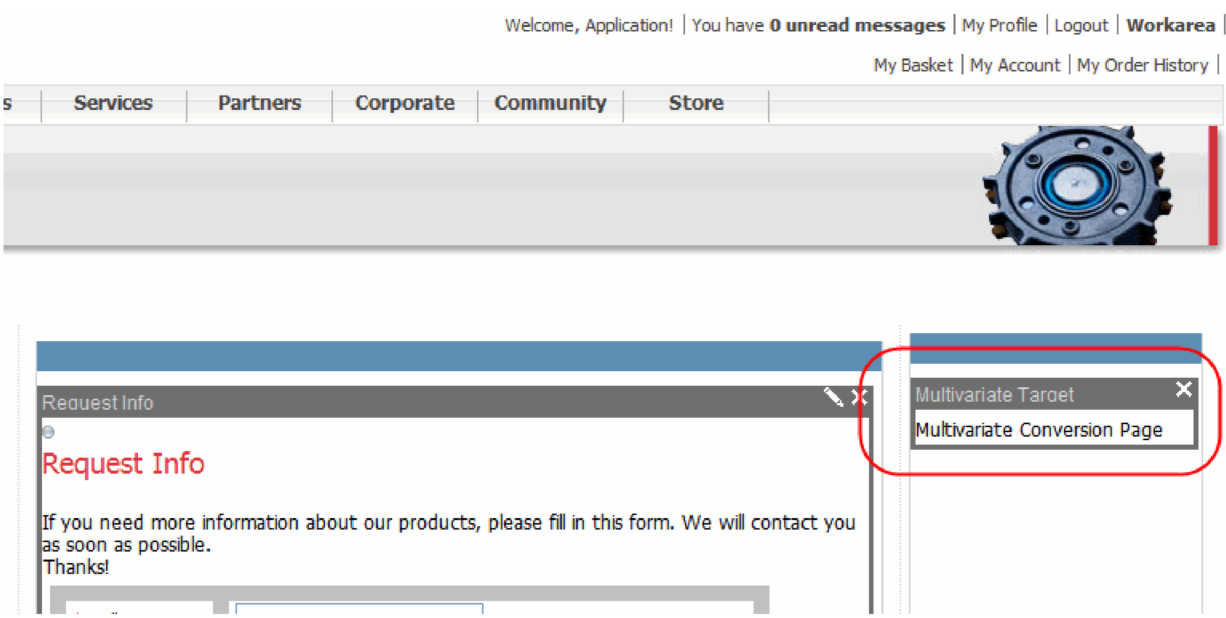
Creating a Multivariate Target Page

The target page is the Web page you wish your visitors to view. It contains the Multivariate Target Wizard. Visitors arrive here by clicking links on the experiment page.

To create the target page, follow these steps.

1. Create or edit the PageBuilder page with the target content.
2. Note the ID of the content number on this page. (For example: 948.) This ID number is used in Step 3 below "Creating a Multivariate Experiment Page" on page 13-6.
3. Add the Multivariate Target widget to any location on the page.

   This is how the Multivariate Target widget appears on the Pagebuilder page.



4. Publish this page

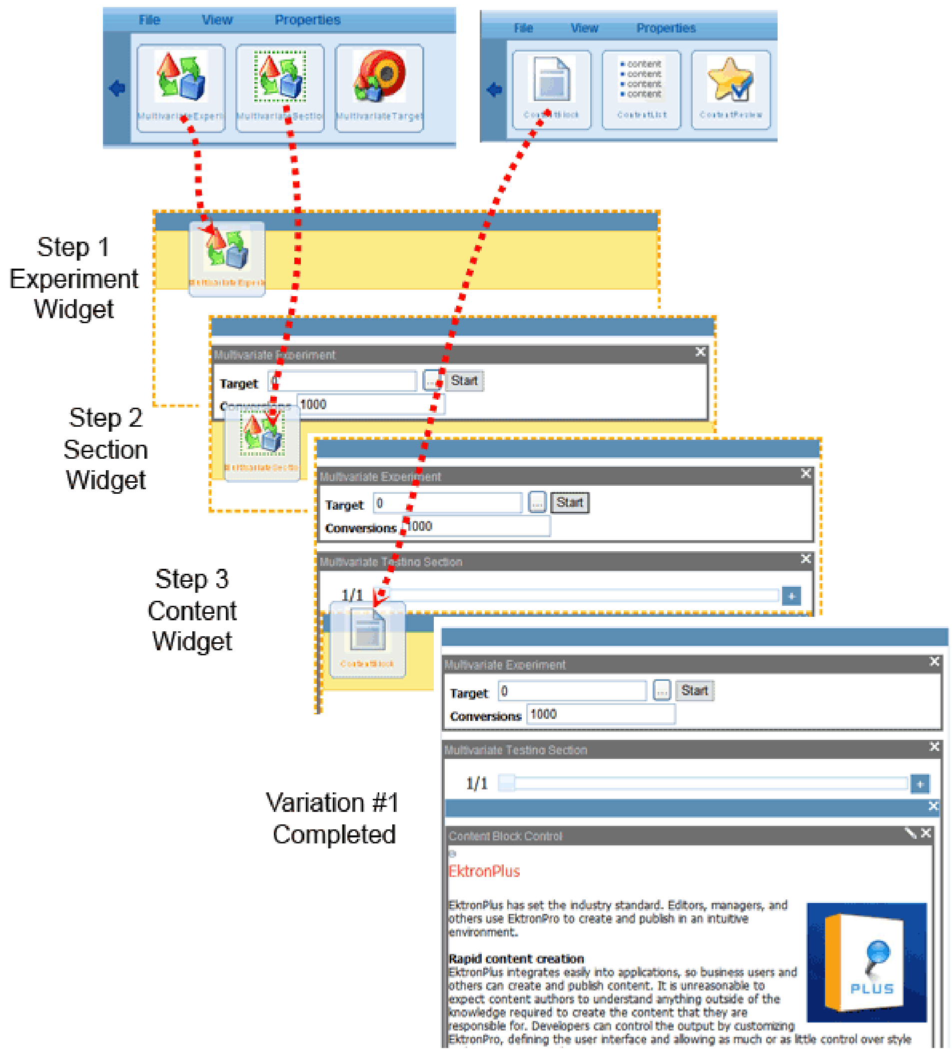
After creating the Target Page, create the Multivariate Experiment Page using the following procedure.

Creating a Multivariate Experiment Page

The Experiment page contains:

- the Experiment Widget
- the Section Widget(s)
- the content variations

The illustration below shows the basic steps to create an experiment page with Multivariate Test widgets.



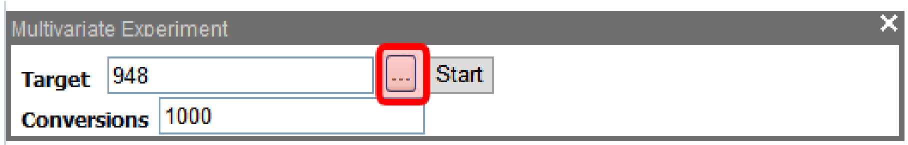
Follow these steps.

1. Create or edit the PageBuilder page you wish to use during the experiment. See Also: "Building PageBuilder Pages" on page 6-1
2. Place the Multivariate Experiment widget in any location on your web page. For more information see "Multivariate Experiment Widget Details" on page 13-17

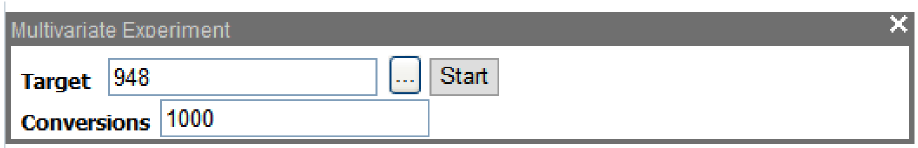
Note: Do not worry about the appearance of this widget. Multivariate Test Widgets do not appear on a Web page when you are not logged in. Only the content shows.

3. Enter the Target Page Content Id number. (For example, 948.) (See step 2 of "Creating a Multivariate Target Page" on page 13-6)

   To help find the content, browse the content folders by clicking the button circled below.

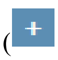


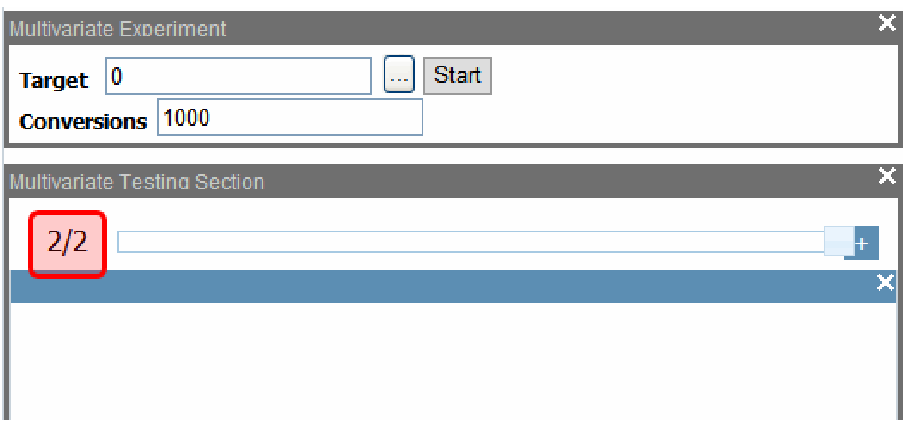
4. Enter the Conversions before promote value. Setting this to 1000 tells the experiment to automatically end when one variation has reached 1000 conversions.



5. Place at least one Multivariate Section widget into the location where your content variations should appear. For more information, see "Multivariate Section Widget Details" on page 13-18
6. Drag any type of content widget into the Multivariate Section widget.
7. Configure the content widget with the appropriate settings.

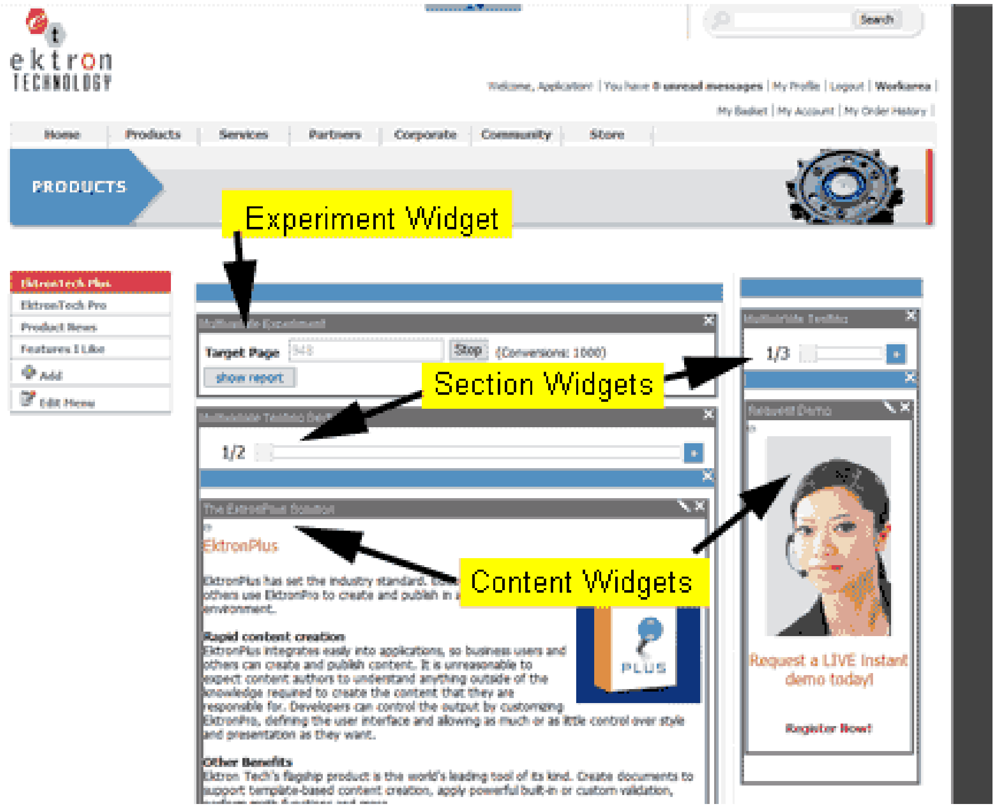
Note: You may use any widget inside the Multivariate Section Widget. The Content WIdget was chosen for illustration purposes here.

8. Add more variations by clicking the Add Variations button () and repeat steps 6 and 7. You now have variation 2 of 2.



9. If you wish to add another section and variations, go back to step 5 and continue.

The image below shows a completed experiment page that has two Section Widgets.



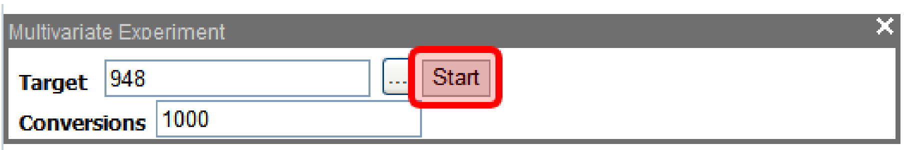
10. Publish the PageBuilder page.

Now you are ready to run the experiment.

Starting and Running an Experiment

Once you create the Target Page and Experiment Page, follow these steps.

1. Select the PageBuilder page that contains the Multivariate Experiment Widget.
2. Click File > Edit to see the Experiment Widget.
3. On the Experiment Widget, click the Start button.



After you press Start, you see the Stop and Reports buttons.

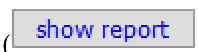
Now that the experiment is running, visitors see the page variations. (Also see "Visitors See Randomized Variations" on page 13-10.)

Note: During an experiment, testers may modify variations and content within the Multivariate Section widget.

Visitors See Randomized Variations

When an experiment is running, visitors see a specific variation that is chosen randomly. The visitor continues to see this particular page variation until the experiment is ended.

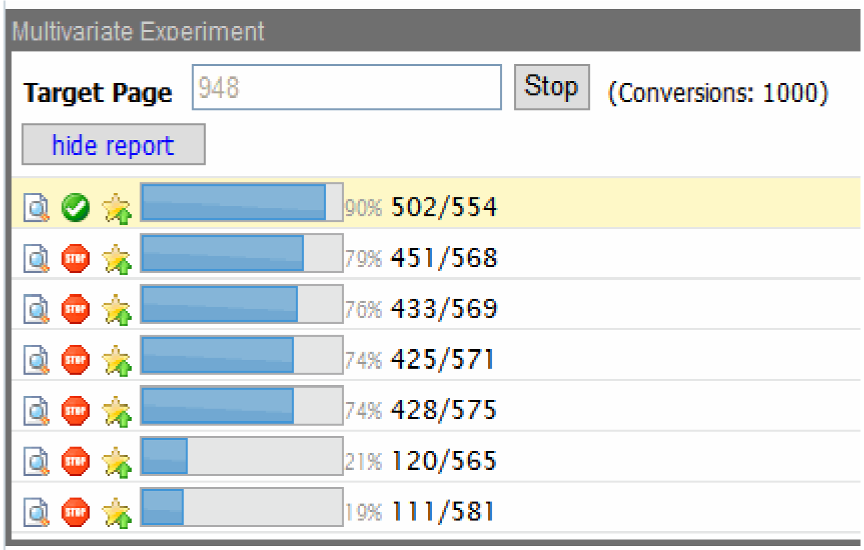
Clicking the Reports Button During an Experiment

Click the Show Reports button (

) to see the experiment's progress.

The reports show:

- the percent conversions compared to visits
- the number of conversions
- the total number of visits to each variation



For more information about Reports, see "Multivariate Experiment Widget Details" on page 13-17.

The experiment continues until it is either stopped or ends automatically or manually.

Previewing a Variation

Click the Preview button ( ) to see the page variation that the progress bar represents.

Enabling or Disabling a Variation

At any time during the experiment, you may Disable any variation. Do this by clicking the ( ) button which currently shows the variation is enabled. The variation then becomes disabled and cannot be viewed by site visitors.

When a variation is disabled, visitors who have seen this page no longer see it but see another variation instead.

You may re-enable a variation by pressing the ( ) button which currently shows the variation as disabled. The variation then becomes enabled and visitors can view it.

Stopping the Experiment

At any time during the experiment, click the Stop button on the Experiment Widget.

This suspends the experiment. Counters stop incrementing even though visitors continue to see the page variations.

While the experiment is stopped, cookies are neither set nor read. For more information about cookies see "Cookies in Multivariate Testing" on page 13-12.

Note: When you stop an experiment, the Multivariate Section Widget remains on the experiment page.

You may restart the experiment again by pressing the Start button. All counters are reset to 0 and restarted.

Automatically Ending the Experiment

When one variation reaches the target number of conversions, it automatically becomes the page variation all visitors see. All other variations are disabled.

Manually Ending the Experiment

During the experiment, you may click on the Promote button ( ) of the specific variation you wish to promote. This ends the experiment and it becomes the page variation all visitors see. All other variations are disabled.

Note: When the experiment automatically or manually ends, the Multivariate Section Widget is removed from the experiment page.

Additional Information

Cookies in Multivariate Testing

When visitors view the experiment page, a cookie is set in the browser. This cookie indicates the specific variation seen by the visitor. From this point forward, if they next visit the target page, this cookie is read and the proper variation counter is increased.

A cookie persists forever or until the cookies are removed from the browser cache. The cookie gives a visitor a consistent page variation each time they revisit during the experiment.

Visitors that block cookies are not counted in conversions. Also, they see random page variations each time they visit the page.

Using a Target Page Outside of the CMS

When your target page is outside of your Web Site, you must create an intermediate page that contains the Target Widget and also code to redirect the visitor to the outside address.

For example, if you want to test visitors from your page to http://www.NFL.com, do the following:

- create a new Pagebuilder page
- Add the target widget to it.
- Add the code that will redirect the visitor from this page to www.NFL.com
- Create content with links to the target page you just created

Now when the experiment is running, the experiment page links the visitor to this intermediate page and the conversion is counted. Then the redirect will take the visitor to the external page.

Repeating an Experiment

To repeat an experiment after it has ended, you first must restore the history of this page.To restore history of a PageBuilder page, follow the steps found in the section entitled "Restoring a Previous Version" on page 7-128.

After you have restored the previous version, you may edit the parameters of the experiment, modify the content, and run the experiment again.

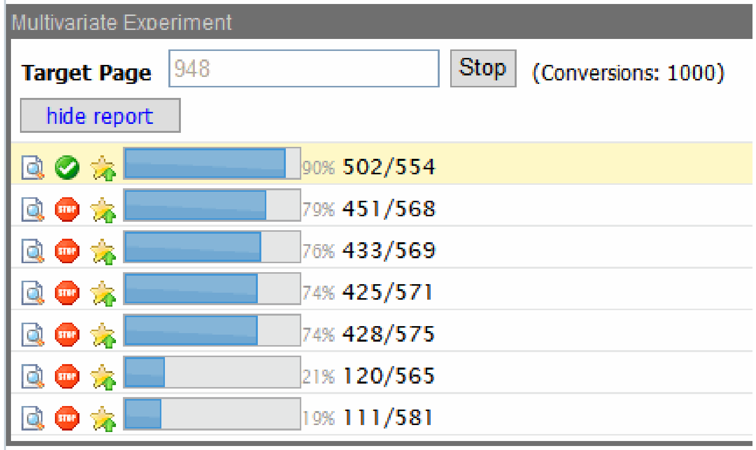
Scheduling an Experiment

The PageBuilder page has the same properties as other content types including the Schedule Property. To set the beginning and ending date of the page, edit the PageBuilder page and follow the procedure for setting content schedules located in the section "Scheduling Content to Begin and End" on page 7-195.

Be sure to set the Schedule End Date to be long enough past the time you believe the experiment will automatically end.

More Information About the Reports

Reports show how each variation has performed during the experiment. Click on the Show Report button in the Experiment Widget to see the progress and results.



The bar graph shows the conversion percentage.

The numbers to the right of the bar graph show two values. The first value is the percent of conversions compared to the total number of visits to the experiment page. On variation #2 above, the “79%” means that 568 visitors to this variation have successfully reached the target page 451 times.

The numbers after the percentage show the actual conversations. The first number before the “/” indicates the total number of conversions during the experiment. The second number is the total number of times this variation was viewed by a visitor.

Note: Users that are logged in are counted as a page view to the experiment page but not counted on the target page as a conversion.

The following table describes how to use each button.

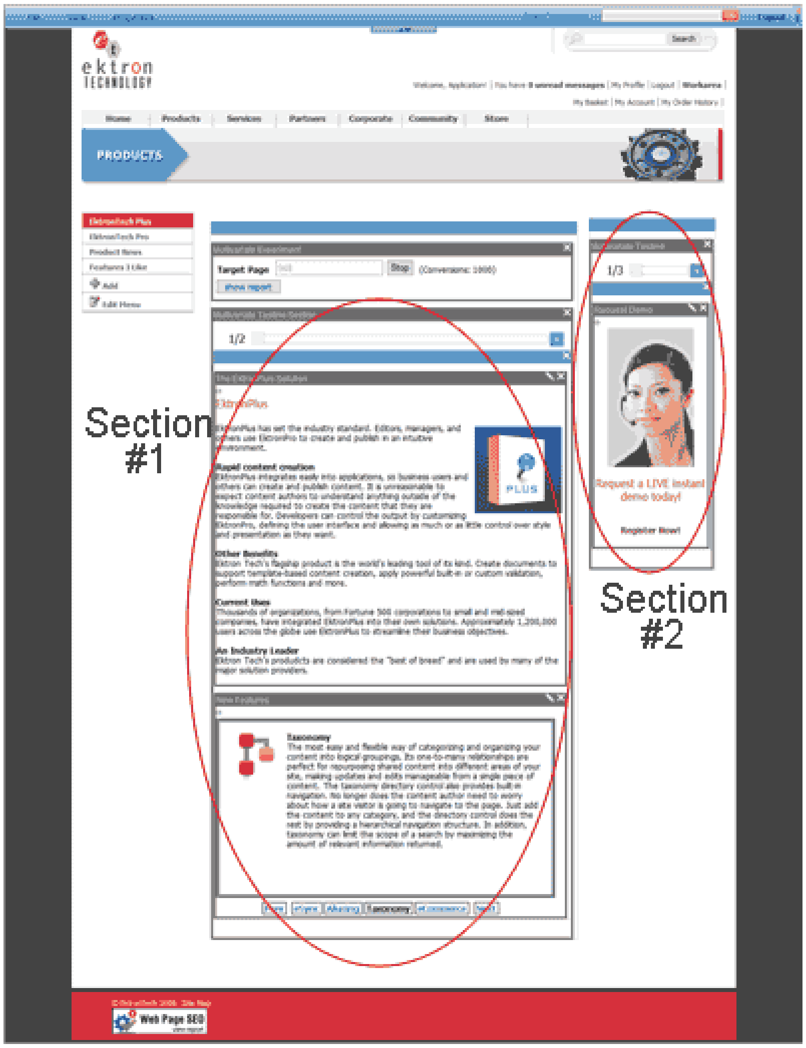
Button	Description
	Preview shows the page configurations for this specific variation. Notice that not only does the content in the Multivariate Section wizards change, but also the slider number changes too.
	Variation Enabled. When this shows, this variation is currently selected to run. Clicking on this button *disables* this variation.
	Variation Disabled. When this shows, this variation is currently not selected to run. Clicking on this button *enables* the variation.
	Promote. Clicking this button promotes this specific variation to become the

Button	Description
	actual page seen by visitors. All other variations are disabled and the experiment is ended.

Using More Than One Section Widget on a Page

You may create a PageBuilder page with more than one Section Widget. This provides greater flexibility in helping to identify combinations of content and images that provide the best conversion results.

A page containing two Multivariate Section Widgets is shown below.



The contents inside the Section Widgets are part of the variations shown randomly during the experiment.

The Quantity of Variations Tested

The number of variations in a Multivariate Experiment grows exponentially as you add sections and variations.

For example, if you have two sections with 3 variations in each section, there are a total of 8 (2^3) pages to be tested. If you increase this to 4 variations each, there are 16 (2^4) pages.

Multivariate Target Widget Details

The target widget is placed on the page containing the content you wish people to find.

The target widget does not have any configurations and need only reside somewhere on the page.

Note: Use only one Target Widget per PageBuilder page

Below is an example of the target widget placed on a PageBuilder page.

The Target or Results Page

The Target page contains the Multivariate Target widget.

Whether you arrive at the target page (results page) by browsing to the variations page first or you arrive by browsing to the target page directly, the views are counted.

The exceptions to this are:

- if you are logged in
- if you have not first visited the experiment page to receive the cookie
- if you have cleared the cookies before visiting the target page

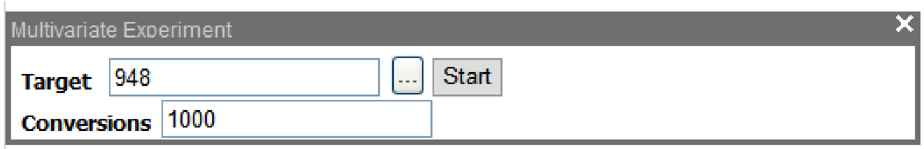
Note: Users that are logged in are counted as a page view of the experiment page but not counted on the target page as a conversion.

Multivariate Experiment Widget Details

The Multivariate Experiment Widget contains all of the information about the variations you use in an experiment. It also contains the Start/Stop button and the conversion limits.

Note: Use only one Experiment Widget per PageBuilder page.

The image below is an example of the Multivariate Experiment Widget before the experiment is started.



Field	Definition
Target Page	This is the content ID of the target page.
Conversions before Promote	This i the number of conversions any variations must have before the experiment is stopped automatically.

Set the target page ID number and the value of the “Conversions before promote”. Once this value is reached, the experiment will promote the variation with the highest percent of success and disable all other variations.

To start the experiment, click the Start button.

Below is an example of a Multivariate Experiment widget while an experiment is running. If desired, you can click the Stop button to stop the experiment.

The experiment widget also shows reports to indicate how each variation has performed during the experiment.

Click on the Show Report button to see the conversion information during the experiment. For further information about reports, see "More Information About the Reports" on page 13-13.

Automatic Promotion

Automatic promotion occurs when the target number of conversions occur on one of the variations. For more information see "Automatically Ending the Experiment" on page 13-12.

Manual Promotion

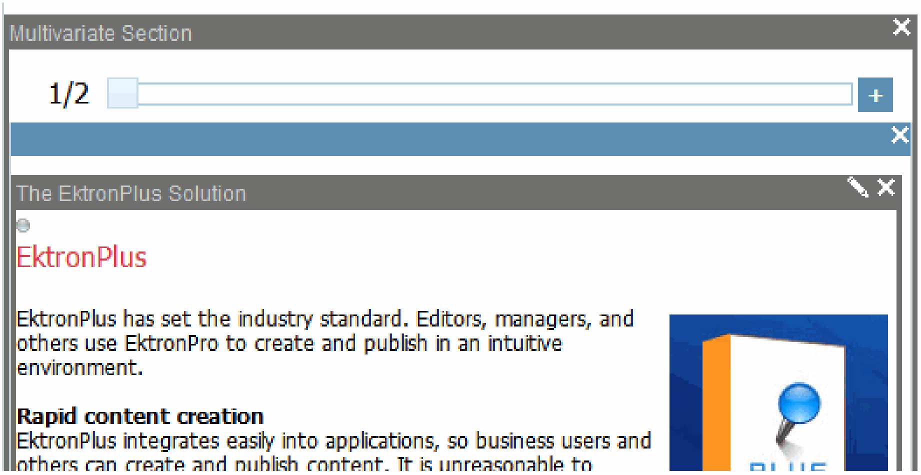
During an experiment, you may choose a specific variation to be the page that all visitors see and end the experiment. For more information see "Manually Ending the Experiment" on page 13-12.

Multivariate Section Widget Details

The Multivariate Section widget contains the content variations for the experiment. By using a variety of content combinations, the experiment tests the best arrangement of content to accomplish the desired conversion goals. The content is presented randomly to the site visitor.

Note: You may use one or more Section Widgets per PageBuilder page.

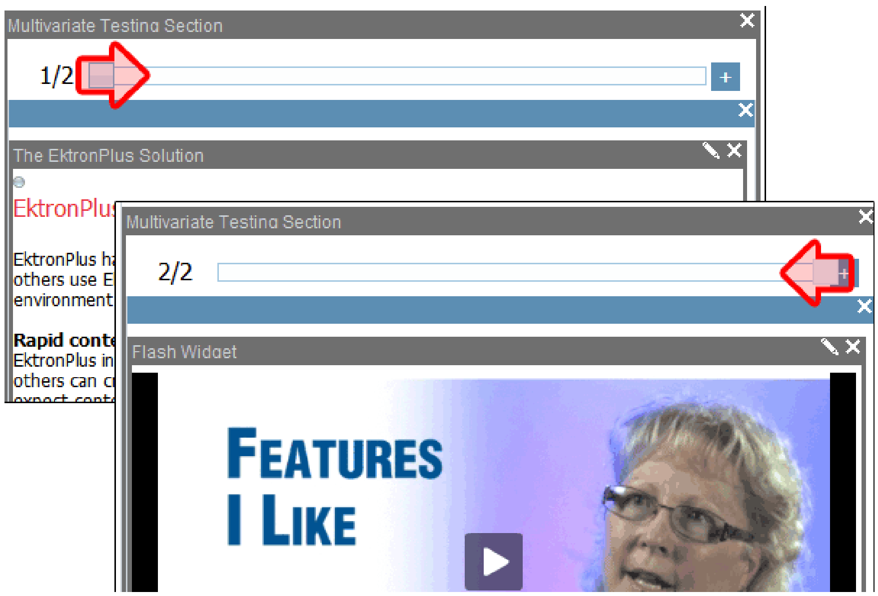
Below is a web page containing the Multivariate Section widget.



Variation Selector Slider

The slider bar at the top of the Multivariate Section widget is used to select the variation.

The examples below demonstrates the slider control for variation 1/2 and 2/2.



Move the slider to see each variation.

Click the Add Variation button (+) to add another variation. Drag and drop the content widget into this section. After configuring it, this content widget is now one of the variations used in the experiment cycle.

Progress Bar

During the experiment, statistics are collected on:

- the number of page visits to the target page
- the number of page visits to a specific variation

The experiment will continue to progress until it is either stopped or ended.

For more information, see "More Information About the Reports" on page 13-13.

Chapter 14

Working with Multi-Language Content

Ektron CMS400.NET supports the creation of content in any language supported by the Unicode standard. This section explains how to create and work with content in any language.

Overview

First, determine the languages in which your site's content should appear (see "Determining Which Languages are Available" on page 14-5). Then, for any content, you can provide editions in each supported language.

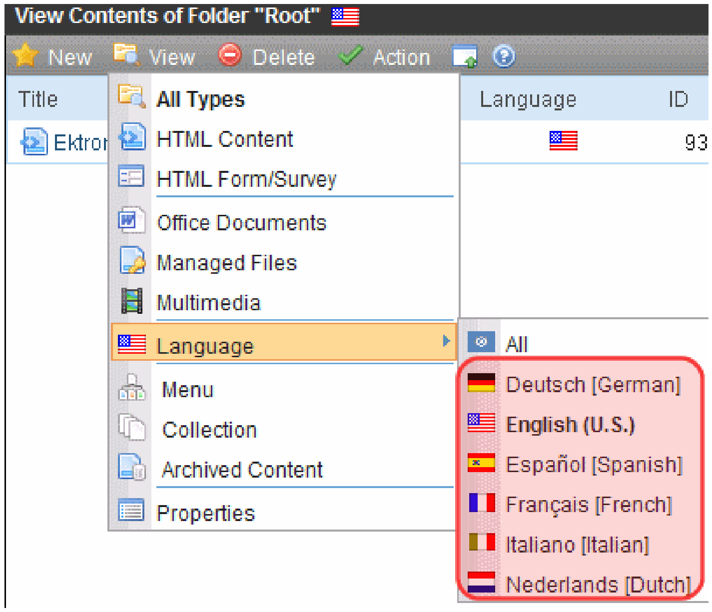
To provide multi-language content, you can either create new content or copy and edit existing content. For example, you can begin the creation of German content by copying English content into it, then translating that content into German and deleting the English content.

All editions of content have the same ID number but are differentiated by the language attribute. As a result, your Web page template can link to a single content item, but what is displayed is determined by the selected language. There are two ways that content's language can be selected:

- a language cookie, which is created when a visitor enters your site and selects a language
- the link to another page includes the language (`langType`) parameter. For example, `mytemplate.aspx?LangType=1033`.

Note: For a list of the decimal values for each supported language, see Ektron CMS400.NET **Workarea > Settings > Configuration > Language Settings**.

The View Contents of Folder screen's **View** field lets you choose a language then view and create content in that language. You can also view *all* content in the folder, regardless of language. This field makes to easy to find and work on content editions in a selected language.



The View Contents of Folder screen also displays the language of each content item. This helps you distinguish them when viewing all content.

Finally, you can set up a separate approval chain for each edition of a content, and can assign collections and tasks in any supported language.

This section describes how to work with a multiple language Web site through the following topics.

- "Enabling/Disabling Support for Multiple Language Content" on page 14-4
- "Viewing Your Site in Another Language" on page 14-4
- "What Happens if Chosen Language is Not Available" on page 14-5
- "Determining Which Languages are Available" on page 14-5
- "The Default Language" on page 14-7
- "Creating New Content" on page 14-8
- "Translating Content" on page 14-8
- "Additional Multi-Language Topics" on page 14-23
- "Setting Up a Multilingual Web Site" on page 14-25
- "Using a Language Other than American English as the Default" on page 14-29

Enabling/Disabling Support for Multiple Language Content

Support for multi-language content is enabled in the web.config file. To enable or disable it, follow these steps.

1. Open the file `webroot\yourwebsite\web.config`.
2. To enable multi-language content, set the value of `ek_EnableMultilingual` to 1. To disable it, set it to zero (0).
3. Save and close web.config.

Viewing Your Site in Another Language

It's easy for your site visitors to view your site in any enabled language. On any screen, your developer can display a language drop-down list (circled in red below).

(For more information about the LanguageSelect Server Control which displays this drop-down list, see See "LanguageSelect Server Control" on page 14-46.) On the sample site provided with Ektron CMS400.NET, this drop-down list appears in the lower left corner of the home page, but your developer can place it anywhere on any page.

Another way to indicate which language-edition of content to display is by adding the language parameter (`langType`) to the Quicklink. For example, `products.aspx?LangType=1033` displays the English (US) edition of the products.aspx content. This syntax automatically sets the language cookie.

Note: For a list of the decimal values for each supported language, see Ektron CMS400.NET **Workarea > Settings > Configuration > Language Settings**.

See Also: "What Happens if Chosen Language is Not Available" on page 14-5

What Happens if Chosen Language is Not Available

A visitor to your site uses one of the methods listed above to select a language. Ektron CMS400.NET uses the following criteria to determine which language edition to display for content.

1. If an edition of the content is available in the selected language, display that.
2. If option 1 is not available, display an edition of the content in the default language (defined in the ek_DefaultContentLanguage variable in web.config).

Note: When Ektron CMS400.NET is installed, the default language is English.See Also: "The Default Language" on page 14-7

3. If neither edition is available, display nothing.

Determining Which Languages are Available

To determine which languages are available for creating content, go to the Workarea and click **Settings** > **Configuration** > **Language Settings**. The Language Settings screen lists all languages in which content can be created on your site.

Note: Only members of the Administrator User Group can view, add, or edit language settings.

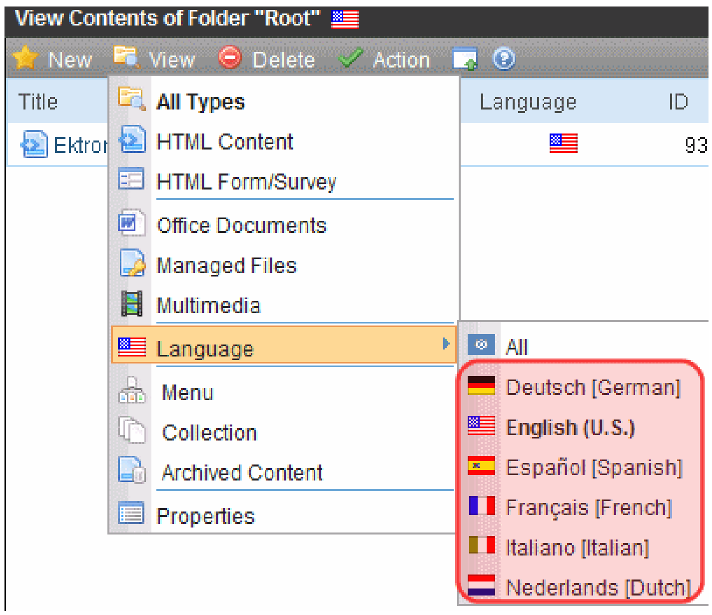
See Also: "Working with Multi-Language Content" on page 14-1

To change the list, follow these steps.

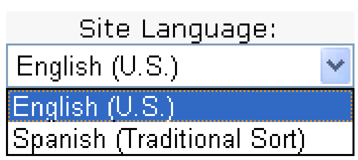
1. Click the Edit button ().
2. The Edit Language Setting screen appears.

3. Each language has two check boxes. They are described below.

- To enable a language in the Workarea only, click ( ). If this column is checked, the language populates the language drop-down lists within Ektron CMS400.NET, as shown below.



- To enable a language in the Workarea *and* let site visitors select it when viewing the site, click ( ).



So, you can enable languages in the column when you are translating the site but are not ready to make those content items publicly available. When you complete the translation, check the column.

Note: If you select , the check box in the column is checked automatically. This is because, if you let users view the language on the site, it must be enabled in the Workarea.

Note: The default content language on a dropdown list is determined in the `ek_DefaultContentLanguage` element of the web.config file.

If you choose only one language on the Language Settings screen, fields that prompt the user to select a language do not appear in Ektron CMS400.NET. Instead, all content is created in that language.

The Default Language

The default language determines which edition of content to display when a visitor to your site does not select a language.

It is also used if a visitor selects a language other than the default, then navigates to page for which content does not exist in the selected language. In that case, Ektron CMS400.NET displays that content in the default language (if available).

Within Ektron CMS400.NET, the default language determines the default value on the language drop-down lists that appear on every page on which a user can select a language.

When you install Ektron CMS400.NET, the default language is English.

Use the following procedure to change the default language for your multi-language Web site.

1. Open `webroot\yourwebsite\web.config`.
2. Set the value of `ek_DefaultContentLanguage` to the locale id of the default language. For example, 1031 for German.

Note: For a list of locale ids, see Ektron CMS400.NET **Workarea > Settings > Configuration > Language Settings**.

3. Save and close web.config.

See Also: "Using a Language Other than American English as the Default" on page 14-29

Disabling a Language

To disable any language, uncheck the accompanying checkbox on the Edit Language Setting screen. (For more information, see "Determining Which Languages are Available" on page 14-5.)

If you want to disable the default language, you must first assign a new default language. See Also: "The Default Language" on page 14-7 explains what a default language is and how to assign one.

What Happens to Content When You Disable Its Language

If you disable a language for which content exists, that content remains in the database but no one can access it, either from within Ektron CMS400.NET or when visiting your site.

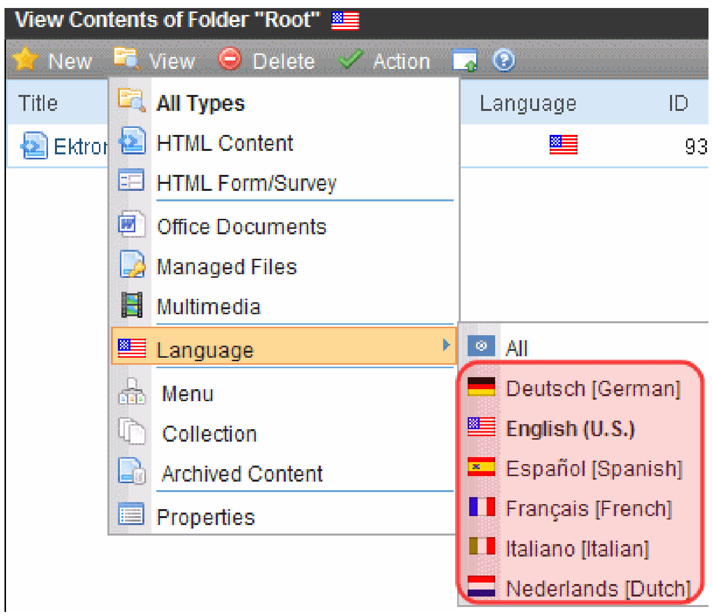
If you later enable that language, the content is once again available.

Creating New Content

To create content in a non-English language, follow these steps.

1. Navigate to the content folder in which you want to create the content. (You must have permission to add content to the folder.)
2. From the language drop-down list, select the language in which you want to create the content.

.



If the desired language is not available, see "Determining Which Languages are Available" on page 14-5.

3. Click the Add Content button ( ) and create the content as you would any content.
4. In order to add metadata to a content, metadata specifications must have been created for the selected language.See Also: "Working with Metadata" on page 7-146

Translating Content

When translating content into a foreign language, you have three options.

Option	For more information, see
Copy original content into a new content item in a new language. Then, translate content manually.	"Translating Content Manually" on page 14-9
Use the computer-based translation tool provided with Ektron CMS400.NET.	"Using Machine Translation" on page 14-10
Create an XLIFF or XHTML file from existing content. The file is sent to a translation agency and returns translated to the new language(s). Then, import the translated files into Ektron CMS400.NET.	"Using the Language Export Feature" on page 14-13

Translating Content Manually

Use this procedure when you want to initialize new foreign language content with content from a source language, then translate the content manually. This copying should facilitate the translation.

For example, an editor is translating content from French to German. The editor copies the French edition to new content whose language is German. As the editor translates the French edition into German, he deletes the French content. Any images in the content would usually remain, and all formatting (tables, bullets, etc.) is retained.

After signing in to Ektron CMS400.NET, you copy content into new content of a different language by either

- navigating the Web site, or
- accessing the Workarea and navigating the folder structure

After copying the original content, translate it into the new language then delete the original text. Both procedures are described below.

Accessing Content via the Web Site

1. Navigate to a page on which you can select the site language. See Also: "Viewing Your Site in Another Language" on page 14-4
2. Select the language into which you want to translate the content.
3. Navigate to content that you want to translate. You must have privileges to add content to this folder. See Also:
4. Right click within the content’s border and a small menu appears.
5. Click the Add New Language option ( ).
6. The original language content appears. Translate into the new language then delete the original content.

Note: At this point, you can click the Translate Content button ( ) to have the software translate the content. You can then edit it as needed to perfect the translation.

7. In order to add metadata to content, metadata specifications must have been created for the selected language. See Also: "Working with Metadata" on page 7-146
8. When you save the content, it is saved as the edition of that content in the selected language.

Accessing Content via its Content Folder

To copy content into a new content of a different language, follow these steps.

1. Go to the View Content screen for the content you want to translate. Its status must allow editing (it cannot be submitted or pending).
2. From the View drop-down list, select a original language.
3. Click the content you want to translate.
4. It appears on the View Content screen.
5. Use the **Add** drop down list in the upper right corner to select the language into which you want to translate the content.

6. The original language content appears. Translate into the new language then delete the original content.
7. In order to add metadata to content, metadata specifications must have been created for the selected language.See Also: "Working with Metadata" on page 7-146
8. When you save the content, it is saved as the edition of that content in the selected language.

Using Machine Translation

Ektron CMS400.NET includes a machine translation feature, which can automatically translate content from/to the following languages.

- Chinese Simplified
- Chinese Traditional
- Dutch

- English
- French
- German
- Greek
- Italian
- Japanese
- Korean
- Portuguese (Brazilian)
- Russian
- Spanish

Note: Currently, machine translation is not supported for all languages in the Language Settings screen.

Like most software-based translation, someone fluent in the new language should review the translated content to verify that the translation is appropriate within the context of the page.

The machine translation feature lets you choose a glossary (that is, a field, industry, or subject area). This helps the software find the best translation for a term or phrase with different meanings in different fields.

To use the machine translation feature, follow these steps.

Accessing Content via the Web Site

1. Navigate to a page on which you select the site language. See Also: "Viewing Your Site in Another Language" on page 14-4
2. Select the language into which you want to translate. If you do not see the language on the language selector dropdown, you need to enable the language. See Also: "Determining Which Languages are Available" on page 14-5
3. Navigate to content you want to translate.

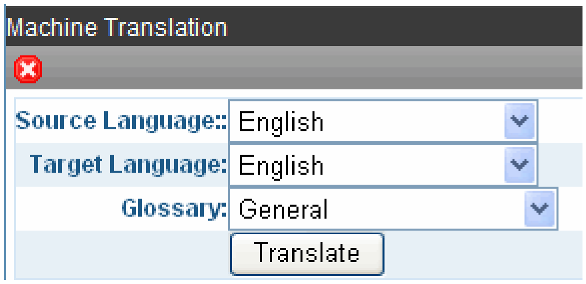
Note: You must have privileges to add content to the folder.See Also:

4. Right click within the content's border. A menu appears.
5. Click the Add Content button ().
6. The original language content appears.
7. If the screen uses a Smart Form, select the text that you want to translate.

Note: You cannot use Machine Translation to translate field names in a Smart Form. XLIFF files are a good way to translate XML field names.See Also: "Using the Language Export Feature" on page 14-13

8. Click the Translate Content button ().

9. The Translation screen appears.



10. Select the source (old) and target (new) languages.
11. If the content should refer to a specific glossary, select one from the dropdown list.
12. Click the **Translate** button.
13. The translation appears. If it looks OK, press **Paste Content**.
14. The translated content replaces the original content in the editor. Modify as needed.
15. In order to add metadata to content, metadata specifications must have been created for the selected language.See Also: "Working with Metadata" on page 7-146
16. When you save the content, it is saved as the edition of that content in the selected language.

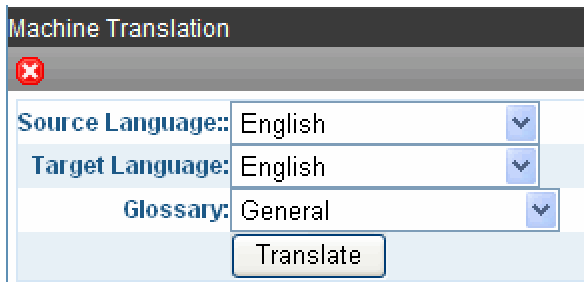
Accessing Content via its Content Folder

To machine translate content by identifying its content folder, follow these steps.

1. In the Workarea, navigate to the content folder that contains the content you want to edit.
2. Click **View** > **Language** and select an original language (that is, the language from which it will be translated).
3. Click the content you want to translate. Its status must allow editing (that is, its status cannot be submitted or pending).
4. It appears on the View Content screen.
5. Use the **Add** dropdown list in the upper right corner to select a new language for the content.

   If you do not see the language on the dropdown, you need to enable the language. See Also: "Determining Which Languages are Available" on page 14-5

6. The original language content appears. Edit the title if appropriate.
7. Click the Translate Content button ().
8. The Translation screen appears.



9. Select the source (old) and target (new) languages.
10. If the content should refer to a specific glossary, select one from the dropdown list.
11. Click the **Translate** button.
12. The translation appears. If it looks OK, press **Paste Content**.
13. The translated content replaces the original content in the editor. Modify as needed.
14. In order to add metadata to content, metadata specifications must have been created for the selected language.See Also: "Working with Metadata" on page 7-146
15. When you save the content, it is saved as the edition of that content in the selected language.

Note: When the View Contents of Folders screen reappears, it is probably set to the source language. In this case, you do not see the new content in the target language. To see it, click **View > Language** and select **All** or the target language.

Using the Language Export Feature

The Language Export feature lets you copy content into XLIFF files that can be submitted to a translation agency. The agency translates the files and returns them. In the final stage, you import the translated content back into Ektron CMS400.NET.

The Language Export feature lets you translate the following kinds of CMS information.

- content, including summary, comments, and meta data
- forms, including response message, comments, and meta data
- all menus (you cannot choose individual menus)
- file assets (files managed by the DMS, including Office documents, Open Office documents, managed files, etc.)
- taxonomies

The Language Export Feature is explained through the following topics.

- "What is XLIFF?" on page 14-14
- "Overview of Exporting/Importing Translation Files" on page 14-15
- "Creating the .zip File" on page 14-15
- "Importing Translated Files into Ektron CMS400.NET" on page 14-19
- "Applying Translated Metadata to Translated Content" on page 14-21

What is XLIFF?

XLIFF (XML Localization Interchange File Format) is a format that's used to exchange localization data between participants in a translation project. This special format enables translators to concentrate on the text to be translated, without worrying about text layout. The XLIFF standard is supported by a large group of localization service providers and localization tools providers.

To learn more about XLIFF, visit these Web sites:

- http://www-106.ibm.com/developerworks/xml/library/x-localis/
- http://www.xliff.org/

See Also:

- "Overview of Exporting/Importing Translation Files" on page 14-15
- "Creating the .zip File" on page 14-15
- "Importing Translated Files into Ektron CMS400.NET" on page 14-19

Supported Versions of XLIFF

Ektron CMS400.NET supports the following versions of the XLIFF standard: 1.0, 1.1, and 1.2. You specify the version you are exporting in the web.config file, using the `ek_XliffVersion` element. Any version listed above can be imported.

SDL Trados Studio 2009

Trados is a commonly used translation tool.

SDL Trados Studio 2009 supports XLIFF 1.1 and 1.2, which are the recommended versions for use with Ektron CMS.

If you are using Trados (an earlier version of the product), it only supports XLIFF 1.0. Note that CMS 400 6.1.4 and older default to XLIFF 1.1, you need to change the XLIFF version in the web.config file as described in "Supported Versions of XLIFF" on page 14-14.

Overview of Exporting/Importing Translation Files

1. You select content to translate. You can select:

- a content item
- a folder (all content in the selected folder is selected; all subfolders of the selected folder may be included)
  - all menus
  - one or more taxonomies

2. Ektron CMS400.NET converts the selected content to XLIFF files. You can prepare the files for translation into several languages at once.

   A separate .xlf file is created for each item. Then, all .xlf files for a language are compressed into one .zip file. A separate .zip file is created for each language.

3. Transmit the.zip files to a translation agency, which converts them into the new language(s).
4. The translation agency returns the files.
5. Import them into Ektron CMS400.NET. If the editions of the content do not exist in the target language, they are created.

Creating the .zip File

To create one or more .zip files for translation, follow these steps.

See Also: "Using the Language Export Feature" on page 14-13

Note: Only members of the Administrator User Group and those defined in the Manage Members for Role: XLIFF-Admin screen can create or import XLIFF files. See Also: "Using the Roles Screens" on page 15-33.

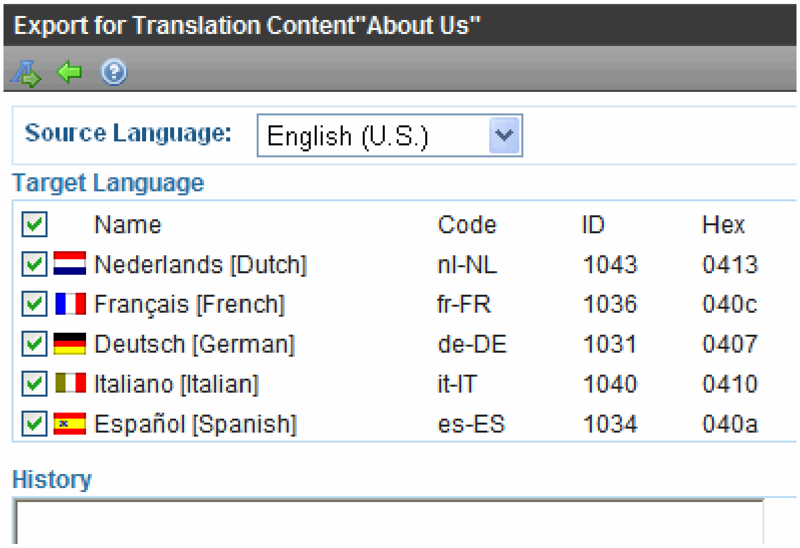
1. To translate *one content item*, navigate to its folder then click it.

   To translate *all content in a folder* (and, if desired, all of its subfolders), navigate to its View Contents of Folder screen.

   To translate a menu, go to **Content Tab** > **Menus**.

To translate a taxonomy, go to **Content Tab** > **Taxonomy** and check the taxonomies to translate.

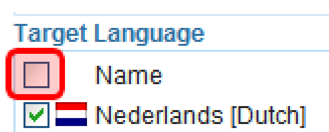
2. Click the Export for Translation button ( ). (On the View Contents of Folder Screen, click **Action** > **Export for Translation**.)
3. The Export for Translation screen appears.



Note: The **Include Subfolders** field only appears if you click the Export for Translation button from the View Contents of Folder screen.

4. If you want to include content in all of the selected folder's subfolders, check **Include Subfolders**. To translate just the selected folder, uncheck it.
5. The language of items being translated appears in the **Source Language** pull-down. If this is not the correct source language, click the down arrow and select the correct one.
6. All languages enabled in the Language Settings screen are selected under **Target Language(s)**. (See Also: "Determining Which Languages are Available" on page 14-5).
7. To translate the content into *all* languages, proceed to the next step.

   To translate the content into *some* languages, uncheck the languages that you do not want. You can uncheck the box in the header row (illustrated below) to uncheck all, then only check the ones you want.

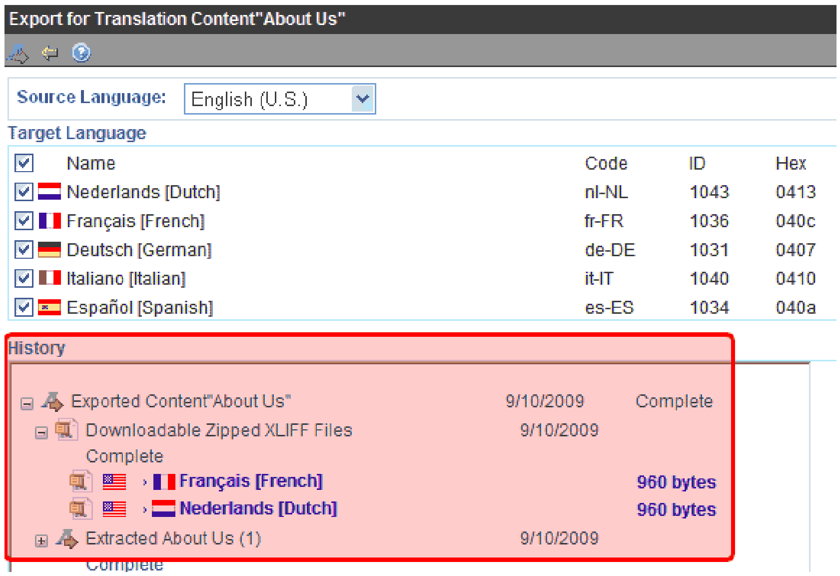


8. Click the Create XLIFF Files for Translation button ( ).

9. Ektron CMS400.NET creates one .zip file for each language. The .zip file includes an XLIFF file for each selected content item.

Note: If any selected folder contains content in a target language whose edit date is more recent than the source language edition, that content is excluded from the .zip file. Ektron CMS400.NET assumes that, since a more recent target-language edition exists, you do not want to translate the corresponding source language edition.

The **History** section of the Export for Translation screen displays the translated files.



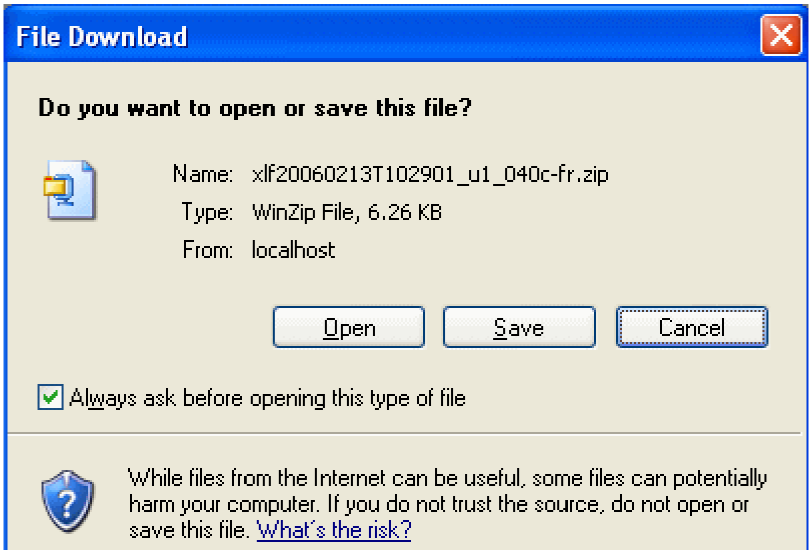
The history lists the .zip file created for each language. (.zip files are indicated by the WinZip icon ( ).) To the right of the icon are

- the flag of the source language
- an arrow indicating the direction of the translation
- the flag and name of the destination language
- the size of the zip file

Note: The top of the history window displays the most recently exported/imported files.

10. If you want to review the items in a zip file, click the plus button next to **Extracted**. When you do, each content item’s ID number, title, and last edit date appear.

11. Click the blue text of a .zip file. The File Download window appears.



Note: If you want to review the XLIFF files within the .zip file, click **Open**.

12. Click the **Save** button. The Save As window appears. Navigate to the folder where you want to place the zip file and click **Save**.
13. Transmit the files to the translation agency.

Note: When XLIFF files are returned by the translation agency, their extension must be .xlf. Other than that, the file name is not important.

File Naming Patterns

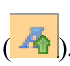
File Type	Pattern
XLIFF	*item identifier*[*item ID*]_[*new language hexadecimal code*][*two letter new language code*].xlf ■ *item identifier* options: – content: **cont** – form: **form** – menu: **s** – menu item: **s** – taxonomy: **t** ■ *item ID* varies, depending on whether the item is content, a form, a menu, or a menu item – content: content ID number – form: form ID number – Menu: menu ID number – Menu item: menu ID number
Zip	xlf[*timestamp in format yyyymmddThhmmss*]_u[*user ID*] _ [*new language hexadecimal code*]-[*two letter language code*].zip The user ID indicates which user performed the export or import.

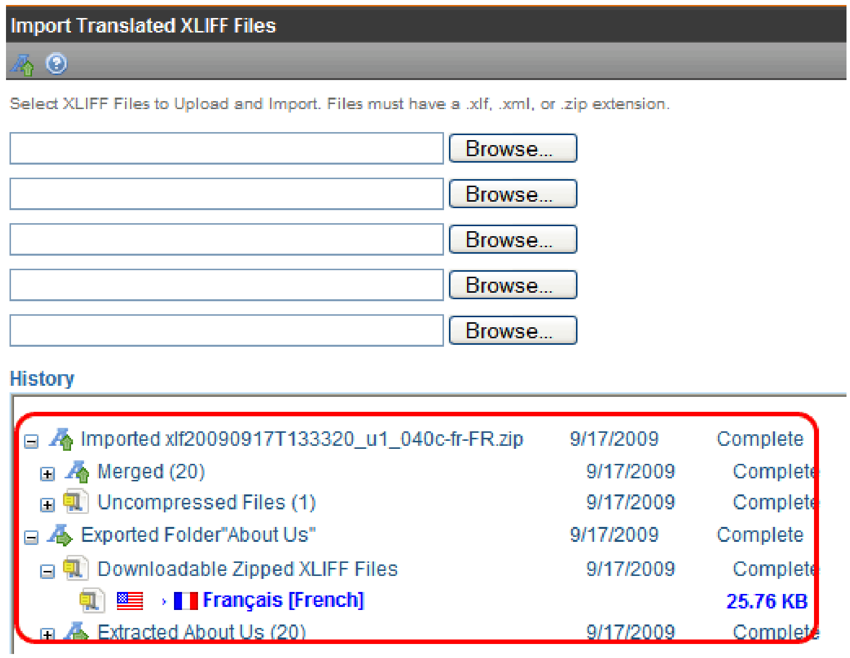
Importing Translated Files into Ektron CMS400.NET

To import translated files into Ektron CMS400.NET, follow these steps.

See Also: "Using the Language Export Feature" on page 14-13

Note: Only members of the Administrator User Group and those defined in the Manage Members for Role: XLIFF-Admin screen can create or import XLIFF files. See Also: "Using the Roles Screens" on page 15-33.

1. Go to **Workarea** > **Settings** > **Import XLIFF Files**.
2. Click the **Browse** button and navigate to the folder that contains the translated files.
3. Select the files to import.
4. Click the Upload and Import button ().
5. Ektron CMS400.NET creates new or updates existing foreign-language editions of the imported content/menu/taxonomy.
6. Information about the imported file appears in the history area of the Import XLIFF Files screen. You can click plus signs (+) to reveal increasing levels of information about the imported content.



When you import the file, the comment **Translated** appears next to it.

For each new edition:

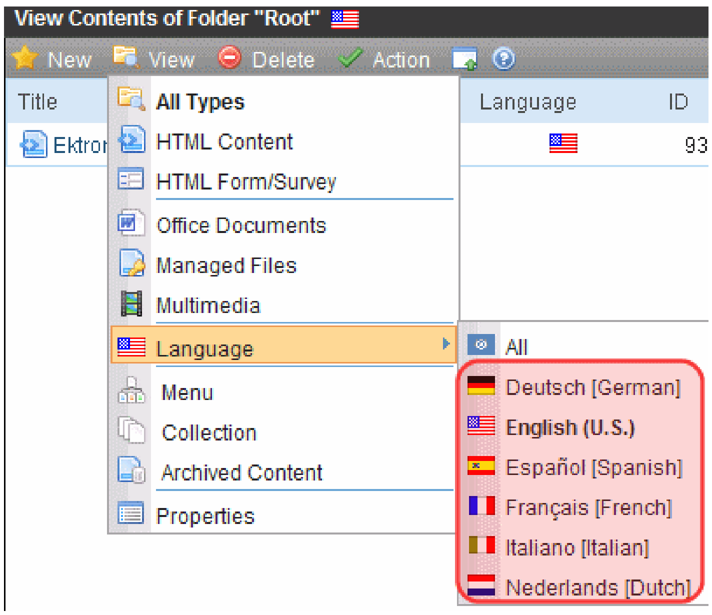
- If the content title is the same as the source edition, the next available number is appended to the title to distinguish it from the source. For example: **Henry Williams(1)**.
- its status matches the status of the source content. Typically, its status is checked out. When imported, it can enter the approval process just like other content.
- its history indicates it was checked in at the time the report was run
- for content, the following properties are inherited from the original content:
  - status
  - Smart Form
  - content searchable
  - approval method
- date created and last edit date are captured from when the content is imported
- the last user to edit is captured by user who imported the file

After you import the translation files, Ektron CMS400.NET removes them from the file system.

Note: If an error exists in any of the files, the erroneous files are moved into a subdirectory. The directory is created using a timestamp. For example: `uploadedFiles\localization\merged\xlf20060208T141841_u1\error\`.

Viewing Foreign Language Content

1. Navigate to the folder that contains the content.
2. Click **View** > **Language** and select the desired language.



3. Only content in that folder and the selected language appears.

You can perform the same activities with this content as any other content.

Applying Translated Metadata to Translated Content

Unfortunately, translated metadata is ignored when importing XLIFF files. This section describes how to have translated metadata applied to the translated content.

Background Information

Although metadata exists in the XLIFF files, it does not appear in the content's metadata even if metadata is defined for that language. This is because metadata definitions have unique IDs across languages.

Note: While a content ID is the same for a corresponding content block in other languages, the same is not true for metadata.

As a result, the ID for the source language (for example, English) metadata is not automatically mapped to metadata for other languages (for example, Spanish).

To solve this problem, create a mapping between the IDs of metadata definitions of different languages that are synonymous. For example, consider the following metadata definitions.

ID	Name	Language
102	Paper form number	en-US
104	Original page count	en-US
106	Número de papel de la forma	es-ES
108	Cuenta de la página original	es-ES
110	Estado de la minoría	es-ES

In this example, IDs 102 and 106 are synonymous as are 104 and 108. Definition 110, however, only exists in Spanish.

The mapping is stored in an XML file. The mapping informs the XLIFF import process that metadata for ID 102 in English corresponds to ID 106 in Spanish and likewise with 104 and 108.

Setting up the Process to Apply Translated Metadata to Content

1. Open the folder `site root/workarea/xslt/` and look for the file metadatadefinitions.xml. If it exists, go to step 2. If it does not, download it from Ektron at http://dev.ektron.com/uploadedFiles/DevCenter/Support/KB_Articles/XliffMetadata.zip.

   The zip file includes modified XSLT files that access the XML file.

2. Create metadata definitions in the other language(s). Be sure to use the same data type.

   To do this, log in, open the workarea, go to **Settings > Configuration > Metadata Definition**.

3. Make note of the definitions in the original language (for example, English).

4. Switch to view another language (for example, Spanish) and add a new definition. Assign it the same data type and other properties as the original. Make note of the new ID numbers.

   Create metadata definitions in all languages you wish to support. You may add other languages and define more metadata definitions at any time.

5. Edit workarea/xslt/metadataDefinitions.xml. For each Metadata Definition, enter a <dd> element within the <dl> element. The <dd> element has the following form.

```
<dd title="Name of the metadata definition">
<dfn id="ID" xml:lang="language-country code"/>
<dfn id="ID" xml:lang="language-country code"/>
:
</dd>
```

For example,

```
<dl>
<dd title="Paper form number">
<dfn id="102" xml:lang="en-US"/>
<dfn id="106" xml:lang="es-ES"/>
</dd>
<dd title="Original page count">
<dfn id="104" xml:lang="en-US"/>
<dfn id="108" xml:lang="es-ES"/>
</dd>
</dl>
```

The definition for ID 110 is not included because it applies to only one language.

Now that you have set up the xml file, the XLIFF import process accesses the metadataDefinitions.xml file to determine which definitions in the target language (for example, Spanish) correspond to the definitions in the source language (for example, English).

Additional Multi-Language Topics

- "Multi-Language Approval Chains" on page 14-23
- "Working with Tasks in a Multi-Language System" on page 14-24
- "Working with Collections in a Multi-Language System" on page 14-24
- "Working with Calendars in a Multi-Language System" on page 14-24
- "Working with Menus in a Multi-Language System" on page 14-25
- "Creating an External Link to a Page of Foreign Content" on page 14-25

Multi-Language Approval Chains

Just as you can create separate editions of content for each enabled language, you can set up a language-specific approval chain and method. When determining a folder's approval chain, first select a language then select users and groups with authority to approve content in that folder and that language.

The screen below shows the language selection drop-down list on the View Approvals screen.

Only users in the language-specific approval chain for a folder can approve content in that language.

You can also set a language-specific approval method. See Also:

Working with Tasks in a Multi-Language System

If you create content then add a task to it, the task can be in any enabled language. This would be helpful if, for example, you review English content then want to assign the task of translating it into another language in that language.

If you create a task then try to assign content to it, you can only choose from content in the language of the task.

Working with Collections in a Multi-Language System

In a multi-language Ektron CMS400.NET system, you can create a language-specific edition of each collection. For information about doing this, see "Working with Collections in a Multi-Language System" on page 9-113.

Working with Calendars in a Multi-Language System

Calendars can be created in any supported language. Once you enter the calendar and event information in the foreign language, the calendar display (that is, day and month names) automatically appears in that language. Also, regional conventions for first-last days of the week, and date and time formats are maintained.

Working with Menus in a Multi-Language System

Note: If you are not familiar with the Ektron CMS400.NET's menus feature, see "Working with Menus" on page 9-129.

You can create an edition of any menu in every supported language. When a site visitor selects a language, navigates to a page that has a menu and clicks the menu link, Ektron CMS400.NET displays the menu in the selected language if it is available. If a menu in that language is not available, nothing appears.

Before creating or translating a menu, it's a good idea to create or translate all content that will be on the menu. In this way, you can link these content items to the new menu. However, after creating a menu, you can always add new items to it.

For details about translating menus, see "Working with Menus in a Multi-Language System" on page 14-25.

Working with Taxonomies in a Multi-Language System

See "Multi-Language Support for Taxonomies" on page 9-236

Creating an External Link to a Page of Foreign Content

If another Web site links to a multilingual page on your site, the URL must include the language ID parameter. For example:

```
www.ektron.com/web-content-management-solutions.aspx?LangType=1036
```

Setting Up a Multilingual Web Site

Ektron CMS400.NET supports multilingual content. This section lists steps to follow when setting up such a site.

See Also: "Creating Web Pages that Support Several Languages" on page 14-27

Step	For details, see
1. In web.config, make sure multilingual support is enabled.	"Enabling/Disabling Support for Multiple Language Content" on page 14-4
2. Set a default content language, one that will be used by the majority of your site's content. If you had a previous version of Ektron CMS400.NET and selected a default language on the Database Upgrade Utility, be sure that default language matches the one in web.config.	"The Default Language" on page 14-7
3. Enable languages your site will support.	"Determining Which Languages are Available" on page 14-5
4. Add language selection function to templates.	"Viewing Your Site in Another Language" on page 14-4
5. Create a metadata definition for each supported language.	"Adding a Metadata Definition" on page 7-156
6. Create or translate content.	- "Adding HTML Content" on page 7-15 - "Translating Content" on page 14-8
7. Set up approval chains for new content.	"Multi-Language Approval Chains" on page 14-23
8. Set up multilingual collections.	"Working with Collections in a Multi-Language System" on page 14-24
9. Set up multilingual menus.	"Working with Menus in a Multi-Language System" on page 14-25
10. Modify text on templates.	"Modifying Page Content Based on Language Selection" on page 14-27
11. Translate graphics.	"Modifying Images Based on Language Selection" on page 14-28

Creating Web Pages that Support Several Languages

When thinking about setting up your Web site to support content in multiple languages, consider these three actions.

Action	For more information, see
Create language-specific content, menus, collections	"Translating Content" on page 14-8 "Working with Collections in a Multi-Language System" on page 14-24 "Working with Menus in a Multi-Language System" on page 14-25 After you create these items, have the page invoke that item dynamically. When Ektron CMS400.NET receives a request to display an item that includes a language and item id number, it returns the language-specific edition. To learn about letting the user select a language from a Web page, see "Viewing Your Site in Another Language" on page 14-4.
Adjust template content to user language	"Modifying Page Content Based on Language Selection" on page 14-27
Translate text in images	"Modifying Images Based on Language Selection" on page 14-28

Modifying Page Content Based on Language Selection

If a template's text should change according to a user's language selection, use a case statement to provide the language-specific content. A good example of this is the template used on the RC international sample site (Illustrated below).

Assume you want to create editions of the menu that runs across the header (**Home**, **Products**, etc.) in three languages:

- English
- French

- German

To do so, follow these steps.

Note: This procedure uses the header.asp file delivered with the RC international sample site as an example.

1. In the template file, declare each menu option a variable. For example:

Dim t_search, t_products, t_support, t_news, t_careers, t_calendar, t_home, t_login, t_site_lang, t_contact, t_copyright, calendar_id

2. Enter case statements that provide the value of each variable in each language. (1031 is the decimal code for German, 1036 for French.) The following illustrates how to do this for the search menu option.

```
Select Case ContentLanguage
Case "1031"
t_search = "Suche"
Case "1036"
t_search = "Recherche"
Case else
t_search = "Search"
End Select
```

Now, when a user visits a page controlled by this template and selects French or German as the site language, the page is refreshed and the translated values appear on the template.

Modifying Images Based on Language Selection

Many Web page templates also include images that require translation. You can set up templates to invoke images in the user-selected language by following these steps.

1. Add to the library each image that should change when the language changes. For example, if your company's tag line is translated into three languages, upload the three images into the library.

   It's a good idea to include the language in the title of the image. For example, tagline_ English, tagline_French.
2. Create a separate content block for each language-specific image. Each content block must have a unique ID number.
3. Insert the appropriate image into a content block for each language. For example, insert the tagline_English image into the English content block.
4. Insert the content blocks into the appropriate templates. For example, insert the English content block into the English template.

Using a Language Other than American English as the Default

Use this procedure if your site supports one language only, and it is not American English (1033).

To set your site's default language to something other than American English, follow these steps.

1. Install a new site. Do not log in at this point.
2. Open your site's web.config file (located in your site root folder.) Set `ek_EnableMultilingual` to zero (0). Set `ek_DefaultContentLanguage` to the four digit locale id for the desired language.
3. Log in to Ektron CMS400.NET.
4. Go to **Settings** > **Configuration** > **Language Settings**.
5. Enable the desired language, and disable all other languages.
6. Go to **Settings** > **Configuration** > **Setup**.
7. Make sure the desired language is the **Default Application Language**.
8. Go to **Settings** > **Users** > **Edit User Information**. Set the **User Language** to the desired language. Do *not* leave **App Default** as the value.
9. Repeat Step 7 for every Ektron CMS400.NET user.

Set the Language of Spell Checking

Since Ektron CMS400.NET provides two editors, there are two procedures for doing this.

- "Setting the Spell Check Language for eWebEditPro+XML" on page 14-29
- "Setting the Spell Check Language for eWebEdit400" on page 14-30

Setting the Spell Check Language for eWebEditPro+XML

To specify which dictionary to reference when checking spelling, specify a language in Microsoft Word, version 2000 or later. To do this, open Word and select **Tools** > **Language** > **Set Language**.

Setting the Spell Check Language for eWebEdit400

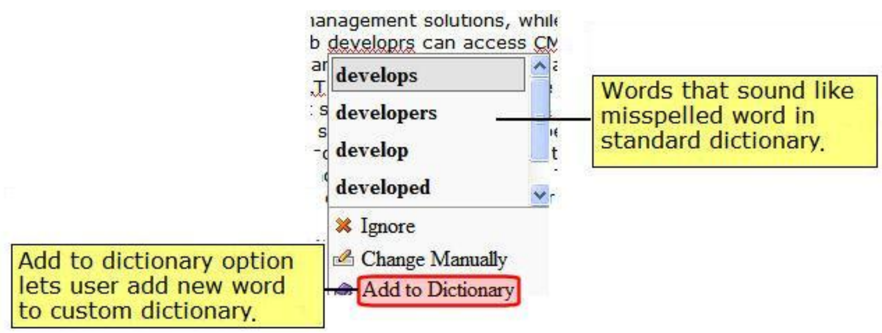
Note: "Checking Spelling" on page 7-36 provides basic information about spell checking. Please read that before reading this section.

eWebEdit400's spell checker refers to a *standard dictionary* of the content's language. So, for example, if the content is U.S. English, the U.S. English dictionary is referenced.

The spell checker also references a language-specific *custom dictionary*. Words are added to this list when a user stops at a misspelled word and chooses the **Add to Dictionary** option.

Both dictionaries reside on the server that hosts Ektron CMS400.NET.

The spell checker compares each word against both sources. If a word is in either one, the spell checker moves to the next word. If a word is missing from both sources, the spell check options shown below appear, and the user decides what to do.



The following topics provide more information about eWebEdit400's spelling dictionaries and custom word lists.

- "What Happens if No Dictionary Matches the Content Language" on page 14-30
- "List of Standard Dictionaries" on page 14-31
- "Accessing the Spell Check Dictionary Update Screen" on page 14-32
- "Editing eWebEdit400's Standard Spell Check Dictionaries" on page 14-32
- "Editing eWebEdit400's Custom Dictionary" on page 14-39

What Happens if No Dictionary Matches the Content Language

If eWebEdit400 does not have a dictionary that matches the content language, it proceeds through these steps *in the order shown below*.

1. If the language begins with en (for example, en-AU), use the en-GB dictionary.

If it begins with zh, use zh-CHS.

2. Each language has a *default version*, indicated by letters before the dash matching the ones after the dash. For example fr-FR. If the default version's dictionary is available, use it.
3. Use the first dictionary (alphabetically) that begins with the content language. For example, the content language is es-AR, but its dictionary does not exist. The first dictionary alphabetically beginning with es that is available is es-CO, so use that.
4. If none of the above is available, use en-US.

List of Standard Dictionaries

eWebEdit400 provides the following standard dictionaries.

Code	Language
uk-UA	Afrikaans
ar-AR	Arabic
bg-BG	Bulgarian
cs-CZ	Czech
da-DK	Danish
de-CH	German (Switzerland)]
de-DE	German
en-GB	English (Great Britain)
en-US	English (United States)
es-ES	Spanish
fr-FR	French
he-IL	Hebrew
it-IT	Italian
nl-NL	Dutch
nn-NO	Norwegian (Nynorsk)

Code	Language
pl-PL	Polish
pt-PT	Portuguese
pt-BR	Portuguese (Brazil)
ru-RU	Russian
sl-SL	Slovenian
sv-SE	Swedish
uk-UA	Ukrainian

Editing eWebEdit400's Standard Spell Check Dictionaries

The following topics explain how to access a screen for working with standard dictionaries, and how to update, edit, replace, and delete individual words as well as entire dictionaries.

- "Accessing the Spell Check Dictionary Update Screen" on page 14-32
- "Adding a Word" on page 14-33
- "Deleting a Word" on page 14-34

Note: There is no option for editing a word. Instead of editing, delete a word then add the correct version.

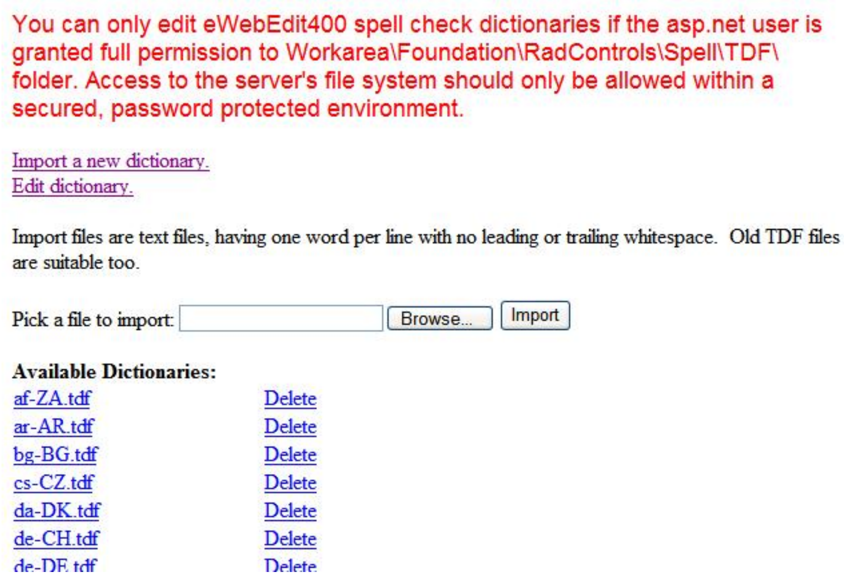
- "Adding a Word List" on page 14-36
- "Importing a Dictionary" on page 14-37
- "Deleting a Dictionary" on page 14-38
- "Replacing a Dictionary " on page 14-39

Accessing the Spell Check Dictionary Update Screen

eWebEdit400 provides a special screen that allows you to create, update, and delete the standard dictionaries. To access this screen, use this URL:

```
http://your server/site root folder/workarea/contentdesigner/dictionaryconfigurator/dictionaryconfigurator.aspx
```

This screen looks like this.



Note: If you want to remove the red text from the top of the screen, open the .aspx file and delete that text.

In order to use this screen. the ASP.NET user must be granted read and write permission to the following folder: `your server`*site root folder*\`Workarea\Foundation\RadControls\Spell\TDF`.

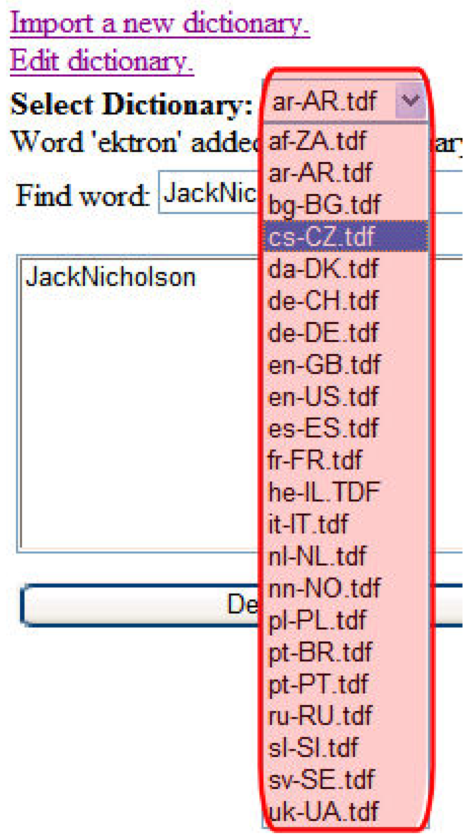
TIP!

Note: If ASP.NET user has full permission but you still cannot edit a dictionary, open the folder listed above, right click the TDF file and verify it is not read-only.

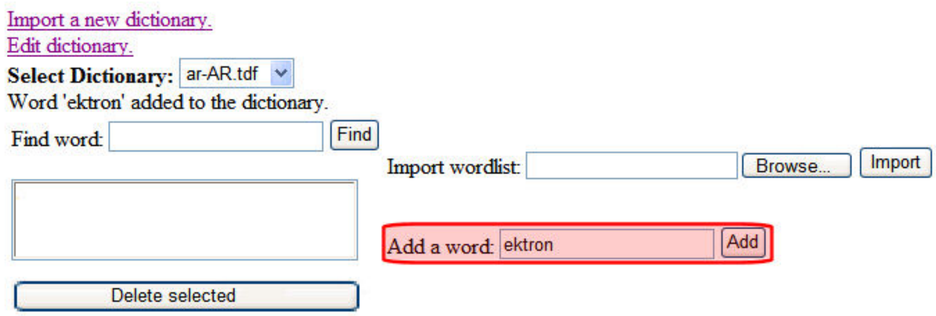
Adding a Word

To add a word to any dictionary, follow these steps.

1. Open the Dictionary Update screen. See "Accessing the Spell Check Dictionary Update Screen" on page 14-32.
2. Click **Edit Dictionary.**
3. At the **Select Dictionary** dropdown, choose the language of the dictionary you want to update. ("List of Standard Dictionaries" on page 14-31 describes the codes on the list.)



4. In the **Add a word** field in the lower right corner of the screen, enter the word to add.



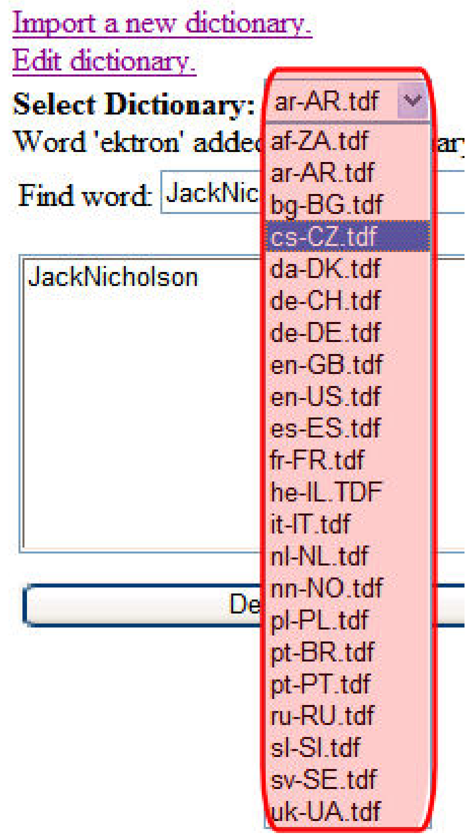
5. Click the **Add** button.

Note: Tip! Enter the word you just added into the **Find Word** field and click **Find** to verify that the word was successfully added.

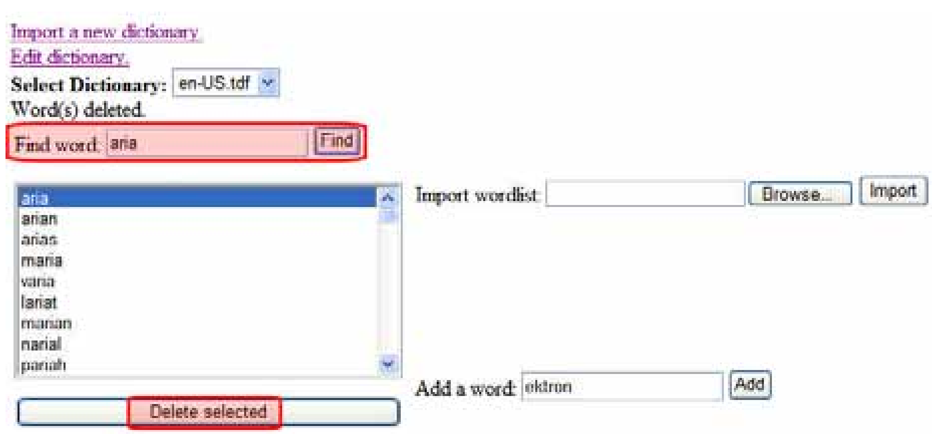
Deleting a Word

To delete a word from any dictionary, follow these steps.

1. Open the Dictionary Update screen. See "Accessing the Spell Check Dictionary Update Screen" on page 14-32.
2. Click **Edit Dictionary.**
3. At the **Select Dictionary** dropdown, choose the language of the dictionary you want to update. (The "List of Standard Dictionaries" on page 14-31 describes the codes on the list.)



4. In the **Find word** field in the top left of the screen, enter the word to delete.



5. Click the **Find** button.
6. In the results box below, click the word.
7. Click the **Delete Selected** button.

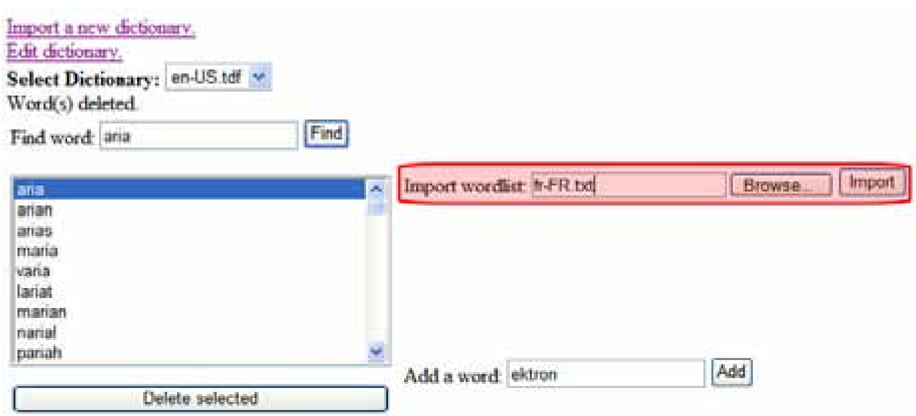
Note: Enter the deleted word into the **Find Word** field and click **Find** to verify that the word was successfully removed.

Adding a Word List

You may add a list of words to a standard dictionary. For example, you work in a hospital and want to add medical terms. While you can add words one at a time using "Adding a Word" on page 14-33, it is more efficient to place all words in a text file then import the file into a dictionary.

To add a list of words, follow these steps.

1. On your server, create a .txt file.
2. Place all words into the .txt file, one on each line.
3. Save the file using the language code of the dictionary you are updating. For example, if you are adding to the French dictionary, name the file fr-fr.txt. See Also: "List of Standard Dictionaries" on page 14-31
4. Open the Dictionary Configurator screen. See "Accessing the Spell Check Dictionary Update Screen" on page 14-32.
5. Click **Edit Dictionary.**
6. Next to **Import Wordlist**, click **Browse**.



7. Navigate to the text file you saved in Step 3.
8. Click the **Import** button.
9. All words on the list are added to the dictionary whose name matches the .txt file. For example, words in the fr-fr.txt file are added to the fr-FR.TDF dictionary file.

Note: While on the screen, enter one of the words in the word list into the **Find word** field, then click **Find** to verify that the import succeeded.

Importing a Dictionary

Typically, you want to import a dictionary because the language of some Ektron CMS400.NET content is not on the "List of Standard Dictionaries" on page 14-31. For example, your content is Japanese.

You could also delete a standard dictionary then import one to replace it if you have a word list that you consider superior to the standard dictionary. See Also: "Deleting a Dictionary" on page 14-38.

To import a dictionary, follow these steps.

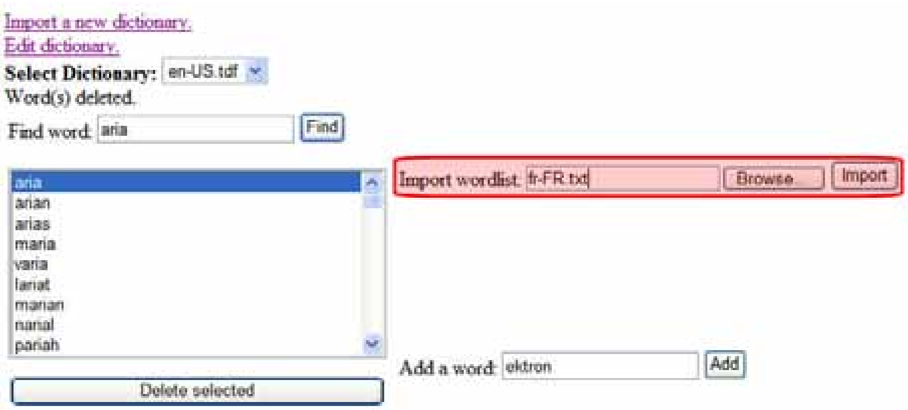
Note: The following procedure assumes the words do not yet exist in a .TDF file. If they do, open the Dictionary Configurator screen, click the Browse button, select the file, and click **Import**.

Part one: Create a Blank TDF File

1. On your server, use Notepad to create a blank .tdf file named after the language code of the dictionary you are importing. For example, if you are importing a French dictionary, name the file fr-fr.tdf. See Also: "List of Standard Dictionaries" on page 14-31
2. Open the Dictionary Configurator screen. See "Accessing the Spell Check Dictionary Update Screen" on page 14-32.
3. Next to the **Pick a file to import** field, click **Browse**.
4. Navigate to the .tdf file you created in Step 1.
5. Click the **Import** button. This action places the TDF file into the correct folder.

Part two: Create and Import the Word List

1. Follow the procedure described in "Adding a Word List" on page 14-36 to insert all dictionary words into a .txt file.
2. Click **Edit Dictionary**.
3. Next to **Import Wordlist**, click **Browse**.



4. Select the text file you created in Step 1.
5. Click the **Import** button.
6. All words in the list are added to the dictionary whose name matches the .txt file name.

TIP!

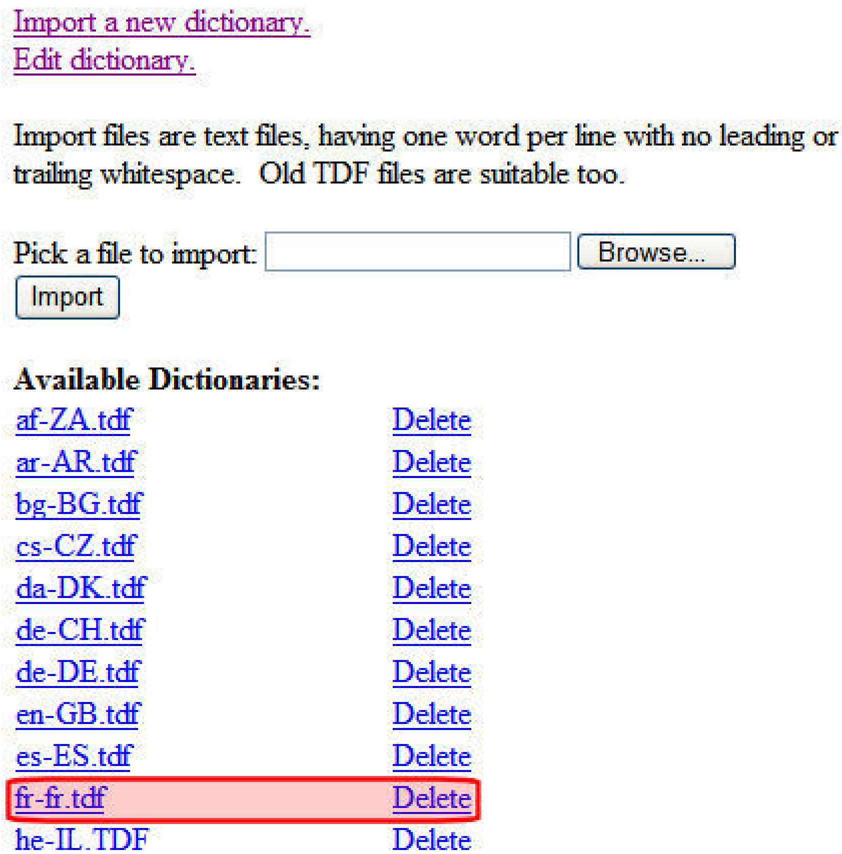
Note: Use the Edit dictionary screen to select the dictionary. Then, use the **Find word** field to verify that the import succeeded.

Deleting a Dictionary

You would typically delete a standard dictionary in order to replace it if you have a word list that you consider superior to the standard dictionary.

To delete dictionary, follow these steps.

1. Open the Dictionary Configurator screen. See "Accessing the Spell Check Dictionary Update Screen" on page 14-32.
2. In the available dictionaries list, find the language whose dictionary you want to import.



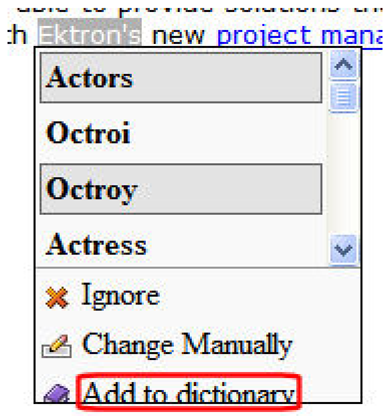
3. To the right of the language, click **Delete**.

Replacing a Dictionary

You would typically want to replace a standard dictionary if you have a word list that you consider superior to the one provided. The procedure for replacing a dictionary is documented in "Importing a Dictionary" on page 14-37.

Editing eWebEdit400's Custom Dictionary

A language's custom dictionary is created the first time a user uses the **Add to Dictionary** option while spell checking content in that language.



From then on, the dictionary is updated when anyone using that server edits content in that language and uses the **Add to Dictionary** option.

How the Custom Dictionary is Named

The name of the custom dictionary is formed by stringing together

- the language code of the content
- a dash (-)
- the word **custom**
- the file extension .txt

So, if the content is French, the file's name is fr-fr-custom.txt. The file is saved to the `root/Workarea/Foundation/RadControls/Spell/TDF` folder.

Editing the Custom Dictionary

Edit the custom dictionary using any application that updates .txt files, such as Notepad.

Character Encoding

The following Ektron Knowledge Base articles describe issues surrounding the display of special characters within Ektron CMS400.NET. Note that these articles refer to eWebEditPro, Ektron's WYSIWYG editor embedded within Ektron CMS400.NET.

Wherever these articles contain references to eWebEditPro's configuration data or file (config.xml), you should instead update the web.config file, located in your site's root folder.

- HOWTO: produce UTF-8 (www.ektron.com/developers/ewebeditpro_tutorials.cfm?id=403)

- INFO: Character Encoding (www.ektron.com/developers/ewebeditprokb.cfm?id=1807)
- INFO: Encoding special characters (www.ektron.com/developers/ewebeditprokb.cfm?id=384)

Translating the Workarea

When Ektron CMS400.NET is delivered, the Workarea is in English. If you want to translate it to another language, read this section.

Note: Ektron provides American English strings in a text file. You must translate them.

Prerequisites

- The alphabetical, four-character identifier of the country/ language into which you are translating. See CultureInfo Class from the MSDN Web site (`http://msdn2.microsoft.com/en-us/library/system.globalization.cultureinfo(vs.71).aspx`).
- The server that hosts Ektron CMS400.NET must have Visual Studio.NET

Procedure for Translating Workarea Strings

All Workarea text (that is, screen titles, Workarea menus, messages, alt text for buttons, etc.) is stored in a *resource file*. Resource files are installed to the `siteroot\Workarea\resources` directory.

Note: Workarea images that include text are stored in the `workarea/images/`*`language`* folder. For example, `Workarea\images\french_standard`.

Ektron CMS400.NET provides a resource files for the following languages. The English resource file is complete. The others are partially complete.

- German
- English (United States)
- Spanish
- French
- Italian
- Dutch - Netherlands

- Dutch - Belgium

Regardless of the list above, to translate your Workarea, translate the English file into the desired language.

Procedure Overview

A resource file is not human-readable. To make it so, use Microsoft's resgen utility. Next, translate the human-readable, .txt version of the file. Here is a portion of it.

```
add menu title=Add Menu
lbl ad serverip=Domain Controller IP
alt: remove collection items text=Click here to remove items from this collection
```

Notice that, for each string in the file, an English description appears first. The description includes information about where the text appears. For example, `btn` text appears on a button. Next is an equal sign (=), then English text.

Translate the text to the right of the equal sign. You can send the file to an agency or do it yourself.

Then, run the resgen utility on the .txt file again, indicating the translate-to language. This converts the file back to a machine-readable format. Finally, move that file to the appropriate language folder under `workarea/images`, and enable the new language in the Workarea.

Step by Step Instructions

To perform this procedure, follow these steps.

1. The resgen.exe utility is located in `C:\Program Files\Microsoft Visual Studio 8\SDK\v2.0\Bin`. Copy it to the `your web site\Workarea\resources` folder.
2. Go to **Windows Start button** > **Microsoft Visual Studio 2005** > **Visual Studio Tools** > **Visual Studio 2005 Command Prompt** to open a command window.

3. Within the command window, change the directory to the *your web site*\Workarea\resources folder. For example, cd C:\Inetpub\wwwroot\CMS400Min\Workarea\resources.
4. Insert the following text: resgen EKResource.en-US.resources *anyfilename*.txt

Note: You can assign any name to the .txt file.

5. A .txt file of resource strings converted to a human-readable format is created in the resources directory. (You assigned its name in Step 4.) Open the file.
6. Replace any single backslashes (\) with a double backslash (\\).
7. Translate the text following every equal sign (=). Be careful not to change any occurrences of n surrounded by double backslashes (\\n\\).

Note: You can send the file to a translation house or translate the strings yourself.

8. Save and close the .txt file.
9. Open the command window (as described in Step 2) and insert the following: resgen *anyfilename*.txt EKResource.two-character country code-two-character language code.resources

   Replace *anyfilename*.txt with the file you named in Step 4. In this example, the .txt file is named span_translation.txt.

   For example, to indicate that the Workarea is being translated into the Spanish/Spain, enter resgen.exe span_translation.txt EKResource.es-ES.resources.

   When the conversion is complete, **Writing Resource File ...Done** appears in the command window.
10. The Workarea\resources folder includes several resource files. If one exists for the translate-to language, it is overwritten. If one does not exist, it is created.

    To follow our example, the EkResource.es-ES.resources file was updated with changes you made in Step 7.
11. Move the updated resource file to the appropriate language folder under Workarea/images. To continue our example, move the file to the Workarea/images/spanish_traditional_Sort folder.

    If a folder does not exist for the new language, create one under Workarea/images.
12. Enable the new language in the Language Settings screen. See "Determining Which Languages are Available" on page 14-5
13. Make the new language the default language in the Configuration Setup screen. See See "Updating Setup Information" on page 19-3"Fields on the Application Setup Screen: Workarea Tab" on page 19-7.

LanguageAPI Server Control

The LanguageAPI server control lets a developer force a particular language for a Web site. You can do this by dropping the server control on the page and setting a language in the `SiteLanguage` property box. You can also override site language logic by programmatically using the LanguageAPI server control to detect the browser's language, and display the site in that language.

This subsection contains the following topics:

LanguageSelect Server Control vs. LanguageAPI Server Control

The LanguageSelect server control lets users view your site in the language they choose. The LanguageAPI server control, on the other hand, forces users to view a site in a particular language. For information on LanguageSelect, see "LanguageSelect Server Control" on page 14-46.

LanguageAPI Server Control Properties

The LanguageAPI server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
SiteLanguage	Sets the site language. Runs through the IsValid function to verify that the language is an active language in the system.	String
SiteLanguageID	Numeric value of the site language. This is the property you will use if you are using code behind to set the sites language ID.	Integer

Property	Value	Data Type
	Example: 1036 = French For a list of supported languages, go to Ektron CMS400.NET Workarea > Settings > Configuration > Language Settings.	

Code Behind Only Properties and Methods

The following is a list of LanguageAPI specific properties and methods that can only be used programmatically.

Property	Value	Data Type
CurrentLanguage	**Read only**. Returns the current language.	String
CurrentLanguageID	**Read only. Returns the current language ID.**	Integer
DefaultLanguage	**Read only. What the default language of the site is set to. For example, the demo site is "English (Standard)".**	String
DefaultLanguageID	**Read only. Returns the value that is the default language ID of the site. For example, the demo site is "1033" for English.**	Integer
GetLanguage	This method returns a string. Pass in a valid language ID and it will return the language name.	Integer Argument
GetLanguageID	This method returns an integer. Pass in a valid language name and it will return the language ID.	String Argument
IsValid	This method returns a boolean. You can pass in a language ID or a string and it will tell you if the system is supporting it.	Argument
LanguageIdList	**Read only**. Lists all the language IDs that are activated in Ektron CMS400.NET. For information on how to enable languages, see "Determining Which Languages are Available" on page 14-5.	Array of Integers
LanguageTitleList	**Read only**. Lists all the languages that are activated in Ektron CMS400.NET.	Array of Strings

Property	Value	Data Type
MultiLanguageEnabled	**Read only. Tells if the site supports multi-language mode.** **True = Multi-language enabled** **False = Multi-language not enabled** Multi-language is enabled by default. To disable it, see "Enabling/Disabling Support for Multiple Language Content" on page 14-4.	Boolean

Using the LanguageAPI Server Control Programmatically

This example uses a logo that is not managed through Ektron CMS400.NET. It retrieves the current language from the LanguageAPI control, and uses that information to choose the logo version to display. The codebehind looks like this.

```
Select Case LanguageAPI1.CurrentLanguageID
 Case 1031
 Image1.ImageUrl = "germanlogo.gif"
 Case 1033
 Image1.ImageUrl = "englishlogo.gif"
 Case 1036
 Image1.ImageUrl = "frenchlogo.gif"
End Select
```

LanguageSelect Server Control

The LanguageSelect server control displays a language selection dropdown list on an Ektron CMS400.NET Web page.

This control lets a site visitor select a language in which to view the site. Here is what the control looks like when published on a Web page.

It lists all languages selected on the **Settings > Configuration > Language settings** screen. (For more information, see Multi-Language Support.)

You can place this control in any location of any page on your site. On the sample site, it appears in the lower left corner of the home page.

This subsection contains the following topics:

LanguageSelect Server Control vs. LanguageAPI Server Control

The LanguageSelect server control lets users view your site in the language they choose. The LanguageAPI server control, on the other hand, forces users to view a site in a particular language. For information on LanguageAPI, see "LanguageAPI Server Control" on page 14-44.

LanguageSelect Server Control Properties

The following table explains the properties of the LanguageSelect control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also:	String

Property	Value	Data Type
	"Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	
Hide	Used to hide language select dropdown box and label in design time and run time. **True** = Hide language select dropdown box and label **False** = Show language select dropdown box and label	Boolean
LabelName	Lets you define the label next to the language select dropdown box.	String
Language	Set a language for the Language Select Box. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Chapter 15

Managing Users and User Groups

Introduction

Users are people who administer the Web site, create content, or publish content. Without users, the Web site would be blank. In Ektron CMS400.NET, you can add, edit, and delete users to and from the application through the Settings folder in the Workarea.

Every Ektron CMS400.NET user belongs to a User Group. User groups are used when creating permissions and an approval chain for content folders. User groups can be departments in your company (Human Resources, Sales, Engineering) or indicate a user's role (Publishers, Administrators, Editors, etc.).

Warning! If your system uses the Active Directory Integration Feature, proceed to "Active Directory Feature" on page 15-48 to learn about user management functions. This chapter only applies to systems that do not use Active Directory Integration.

Warning! If your system uses LDAP Authentication, proceed to "LDAP Authentication" on page 15-94. Some functionality in this chapter does apply to LDAP. The LDAP chapter explains which information is applied.

This section explains the most common actions that you will perform on users and user groups. These actions include:

- "Accessing the Users and User Groups Folders" on page 15-2
- "Custom User Properties" on page 15-12
- "Viewing a User" on page 15-10
- "Editing a User" on page 15-10
- "Deleting a User" on page 15-11
- "Creating a New User" on page 15-3

Note: Only members of the Administrators User Group and those defined in the Manage Members for Role: User Admin screen can view, add, or edit users and user groups.

Accessing the Users and User Groups Folders

All user and user group information is accessible from the Workarea.

Accessing the User Folder

To access the user folder in Ektron CMS400.NET, follow these steps.

1. Access the **Workarea > Settings > Users**.
2. All Ektron CMS400.NET users appear.

From this screen, you can add, edit, and delete users. These procedures are explained in the next sections.

Accessing the User Group Folder

To access the user group folder in Ektron CMS400.NET, follow these steps.

1. Access the **Workarea > Settings > User Groups**.
2. All user groups appear.

From this screen, you can add, edit, and delete user groups. These procedures are explained in the next sections.

Managing Users

Warning! If you are using Active Directory to Manage users, see "Associating User Information in AD with Ektron CMS400.NET" on page 15-61.

The following topics explain how to manage users.

Creating a New User

Warning! If you are using Active Directory to add a new user, see "Manually Adding AD User Information to Ektron CMS400.NET" on page 15-62. If you are using LDAP, see "Adding User Information from an LDAP Server to Ektron CMS400.NET" on page 15-99.

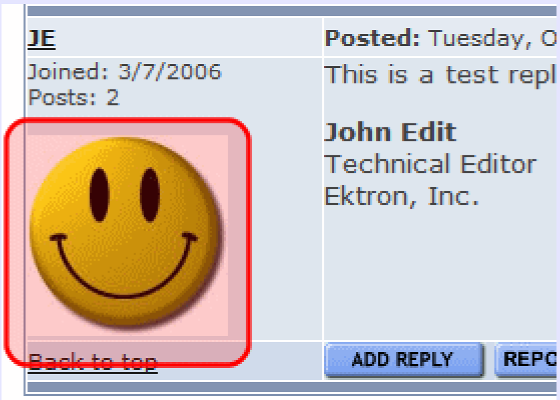
Before you can assign a user to a user group, you must add the user to the system. To create a new user, follow these steps.

1. Access the User folder, as described in "Accessing the Users and User Groups Folders" on page 15-2.
2. Click the Add User button ( ).
3. The Add a New User to the System screen appears.
4. Enter the following information about the user.

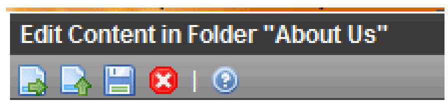
Note: Adminstrators group members can edit all fields for any user. Non-admin users can edit their own profiles only, and only fields indicated in the **Editable by non-admin users** column below.

Field	Description	Editable by non-admin user
General Tab (Tabs only appear when editing)		
Username	Insert a username for the user you want to create.	
Organization Organizational Unit Domain	These fields are only available when using LDAP Authentication. See Also: "Adding User Information from an LDAP Server to Ektron CMS400.NET" on page 15-99.	
First Name	Enter the first name of the user.	
Last Name	Enter the last name of the user.	
Display Name	The name that is used to identify a user in the Workarea and on the Web site. This can be different from the Username, which is the name used to log in. **Warning! Important:** This name needs to be unique inside CMS400.NET and it cannot be blank.	✓
Password	Enter a password for the user. See Also: "Password Management" on page 3-12.	✓
Confirm Password	Confirm the password by typing it again.	✓

Field	Description	Editable by non-admin user
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within Ektron CMS400.NET. The dropdown list is derived from the Language Settings screen, available from the **Settings > Configuration** folder. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. See Also: Multi-Language Support Note: If the selected language is not English, French or German, it is only supported after you download the Ektron CMS400.NET Language Support Program from Ektron and translate the Web site.	✓
Email Address	Enter the email address of the user. Notification email is sent to this address unless the **Disable E-mail Notification** field is checked. Also, this address identifies the user sending Instant email. See Also: "Instant eMail" on page 1-91	✓
Content and Forum Editor	Determines which editor will be used when this user - replies to a Discussion Board. See Also: "Using Discussion Boards on Your Web Site" on page 7-646 - edits content from the Ektron CMS400.NET Workarea or after signing into your Web site *if* the user is operating a Windows computer and the system administrator has set `UserPreferred` as the value of the web.config file's `ek_EditControlWin` key. See Also: "Setting the Editor for Ektron CMS400.NET Users" on page 7-21 Your choices are **eWebEditPro** and **eWebEdit400**. See Also: "Ektron CMS400.NET Editors" on page 7-20	✓

Field	Description	Editable by non-admin user
Avatar	An image or icon to represent you in the Forum. Type in a web path to image. For example: http://www.example.com/smileyface.gif  By default, the maximum file size of an avatar is limited to 200 kilobytes and the height and width of the avatar will be reduced 125 pixels preserving the aspect ratio. To change the file size limit, edit this file: C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb In this file, change the line shown below to the size file you wish to allow. For example, to allow 500kb files, change 200 to 500. If (numFileSize > 200) Then Remember, this number is in kilobytes. To change the default height and width of the avatar, edit this file: C:\intetpub\wwwroot\<YourSite>\App_ Code\VBCode\Utilities.vb In this file, change the following lines to the size you wish to allow. For example, to make avatars have a height and width of 166 pixels, change 125 to 166 in both these lines. Dim Width As Integer = 125 Dim Height As Integer = 125	✓
Disable Receiving of System Notification Email	Select to disable the email notifications for the user. If you do, the user does not receive the automatic email notification described in "Automatic eMail Notification" on page 1-86. However, this field has no effect on the user's ability to receive instant email.	✓
Address	Enter the address used to find this user's location when a search based on location is being performed.	✓

Field	Description	Editable by non-admin user
Latitude	The latitude used to find this user's location when someone performs a search based on location. Google maps provides a service that takes the address of user and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.	✓
Longitude	The longitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of content and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.	✓
Forum Signature	Adds a signature to this user's posts in the forum. The user does not see the signature in the editor. It is added after he clicks the **Post** button.	✓
Tags	Select from a predefined list of Tags that describe yourself. Or, create a new tag by clicking the **Click To Add A New Tag** link. Placing a check mark in the check box next to a tag activates it for your profile. See Also: "Tags" on page 16-228	✓
Workarea Tab (Tabs only appear when editing)		
Full Screen	When a check mark appears in this check box, the Workarea opens up to the size of the full screen. In addition, the Width and Height options are hidden.	
Width	If desired, change the width of the screen in which Ektron CMS400.NET appears for this user. The width in pixels must be between 400 and 2400. This field accommodates users who have larger monitors and/or prefer a smaller resolution, such as 1280 x 1024. If a check mark appears in the Full Screen check box, this option is hidden.	✓
Height	If desired, you can change the height of the screen in which Ektron CMS400.NET appears for this user. The height in pixels must be between 300 and 1800. This field accommodates users who have larger monitors and/or prefer a smaller resolution, such as 1280 x 1024. If a check mark appears in the Full Screen check box, this option is hidden.	✓

Field	Description	Editable by non-admin user
Display button caption in the title bar	Check this box if you want any button's caption text to appear in the screen title's bar whenever a user moves the mouse over the button. Note the word **Publish**, describing the button, in the illustration below.  If you do not check this box, the screen's title remains in the title bar when the user moves the mouse over the button, as illustrated below. 	✓
Landing Page after login	If you want one page in your Web site to appear after this user signs in, enter that page's URL. You might select a page that leads to a group of pages that you maintain. If you don't know the URL, navigate to the page, go to the browser address bar and select the text following the directory in which Ektron CMS400.NET resides. For example, if the browser address bar says `http://www.example.com/customers.aspx?id=945`, enter **customers.aspx?id=945**.	✓
Set smart desktop as the start location in the Workarea	If you want the Smart Desktop to appear as soon as this user enters the Workarea, click inside this check box. See Also: "Personalizing the Smart Desktop" on page 4-4 If you leave this check box blank, when this user enters the Workarea, he goes to the folder of the content specified at the **Landing Page after login** field.	✓
Inherit Task Permissions From User Groups	This area indicates your task permissions and whether you inherit them from user groups to which you belong. For more information, see "Task Permissions" on page 11-3.	
Custom Tab		
Any custom user properties	See "Custom User Properties" on page 15-12	✓

Field	Description	Editable by non-admin user
Activities Tab (Tabs only appear when editing)		
Note: Note: If you disable Notifications, the **Activities** tab (which lets the user pick Notifications to receive and send) disappears.		
Colleagues Sub Tab	Select the notifications you want to receive when a colleague performs an activity, and the agent that transmits the notification. For example, if you want to receive email notifications when a colleague posts a blog message, you would place a check mark in the box for **Blog Post** in the email column. See Also: "Notifications" on page 16-129	✓
Groups Sub Tab	Select notifications you want to receive when a member of a community group performs an activity relating to the group, the agent that transmits the notification. For example, you want to receive email notifications when a co-member of a community group posts a blog message to group's blog. To enable this, would place a check mark in the box for **Group Blog Post** in the email column. See Also: "Notifications" on page 16-129 This tab sets preferences for all community groups. **For Developers:** Ektron has created a UserGroupPreferences user control that a you can add to a community group's profile page that allows users to specify notification preferences for individual groups. This control comes with CMS400.NET and is located in: `[Drive:]\[webroot]\[siteroot]\Workarea\Notifications\Controls` To see this user control in an example site, download Ektron's **eIntranet** starter site. http://www.ektron.com/cms400-web-cms.aspx?id=5748 In this site, when a logged in member of a community group accesses his group's profile page, there is an **Edit Group Notifications Preferences** link. Clicking this link opens a thick box which contains the user control. When the user selects his preferences, they are stored for that group only.	✓
Privacy Sub Tab	Select notifications you want publish when performing various activities on the Web site. For example, if you want to publish notifications when you posts a blog message to your blog, place a check mark in the box for **Blog Post** in the **Publish** column. See Also: "Notifications" on page 16-129	✓

Note: If email notification is turned off in the setup page, you are notified when editing, adding, or viewing a user.

5. Click the Save button ( ).
6. The View Users in Group Everyone screen appears with the new user included in the table.

Note: When you add a new user, he is automatically placed in the Everyone user group. To assign users to other groups, see "Assigning Users To User Groups" on page 15-30.

7. Continue this process until you add all users of your Web site, or are allowed to depending on your license.

Note: Contact Ektron Sales for pricing of adding more users to your license.

Viewing a User

After adding a user, you can view that information. While viewing a user, you can edit or delete the user.

To view a user, follow these steps.

1. Access the user folder as described in "Accessing the User Folder" on page 15-3.
2. Click the **Username** of the user you want to view.
3. The View User Information screen is displayed.

   To learn about the fields, see "Enter the following information about the user." on page 15-4.

From the View User screen, you can edit or delete users. These actions are described in the next sections.

Editing a User

Warning! If you are using Active Directory to edit a user, see "Editing User Information in Ektron CMS400.NET" on page 15-81.

When editing a user, you can change the username, first name, last name, password, user language, and email address. Also, while editing, you can change three fields that were not available when the user was created.

- Account Locked
- Work Page Size
- Landing Page after login

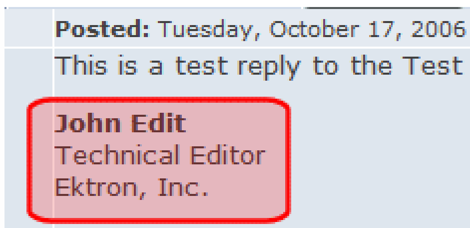
To edit a user, follow these steps.

1. Access the view user screen of the user you want to edit as described in "Viewing a User" on page 15-10.

2. Click the **Username** of the user you want to edit.
3. The View User Information screen is displayed.
4. Click the Edit button ( ).
5. The Edit User screen is displayed. To learn about most fields, see "Enter the following information about the user." on page 15-4.

   The following fields are only available when editing a user.

.

Field	Description
Account Locked	See "Restricting Login Attempts" on page 3-9
Content and Forum Editor	See "Content and Forum Editor" on page 15-5
Forum Signature	Adds a signature to your posts in the forum. You do not see the signature in the editor. It is added after you click the **Post** button. 
Work Page Size	See "Workarea Page Size" on page 19-8
Landing Page after login	See "Landing Page after login" on page 15-11

6. Make the necessary changes to the user information.
7. Click the Update button ( ).

Deleting a User

Warning! If you are using Active Directory to delete a user, see "Deleting Users" on page 15-81.

When you need to remove a user from the application, you can easily do it from the User's Folder in the Workarea.

Warning! Once a user is deleted from the database, he is deleted permanently. The process cannot be undone.

To delete a user, follow these steps.

1. Access the view user screen for the user you want to delete, as described in "Viewing a User" on page 15-10.
2. Click the **Username** of the user you want to delete.
3. The View User Information screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.
6. Click **OK**.

Removing Users from User Groups

Warning! If you are using Active Directory to remove a user from a group, see "Removing Users from a Group" on page 15-59.

Note: Removing a user from a user group does not delete the user from Ektron CMS400.NET. Also, you cannot remove users from the Everyone group.

To remove a user from a user group, follow these steps.

1. Access the User Groups folder, as described in "Accessing the Users and User Groups Folders" on page 15-2.
2. Click the User Group that includes the user you want to remove.
3. Members of the selected group appear.
4. Click the user to remove.
5. The View User Information screen is displayed.
6. Click the Delete button ( ) to delete the user from the group.
7. A confirmation message is displayed. Click **OK**.

Custom User Properties

Custom User Properties allow you to create custom fields. These custom fields appear on the User Properties and Membership User Properties screens, and on the Membership server control. They are used to define information about a user beyond the standard Ektron CMS400.NET user properties, such as Username, First Name, Password and email Address.

Examples of Custom User Properties might be:

- employee ID
- phone number
- phone extension

- instant message screen name
- position
- start date
- department
- birthday
- the IP address of the user’s machine

Your ability to create and manage custom user properties is explained through the following topics.

- "The View Custom Properties Screen" on page 15-13
- "Adding a Custom User Property" on page 15-14
- "Editing Custom User Properties" on page 15-23
- "Deleting a Custom User Property" on page 15-24
- "Setting the Custom User Properties Order" on page 15-24
- "Using Custom User Properties for Non-English Languages" on page 15-26

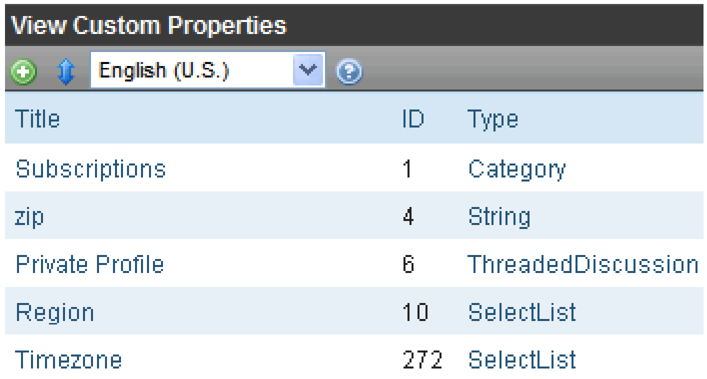
Note: Only members of the Administrator User Group can work with Custom User Properties.

The View Custom Properties Screen

Use the View Custom Properties screen to create custom properties for users and membership users. From the View Custom Properties screen, you can:

- add a new custom property. See "Adding a Custom User Property" on page 15-14
- edit a custom property. See "Editing Custom User Properties" on page 15-23
- reorder the way custom properties appear on the users and membership users screen. See "Setting the Custom User Properties Order" on page 15-24
- work with custom properties in different languages. See "Using Custom User Properties for Non-English Languages" on page 15-26

Below is an example of the View Custom Properties screen.

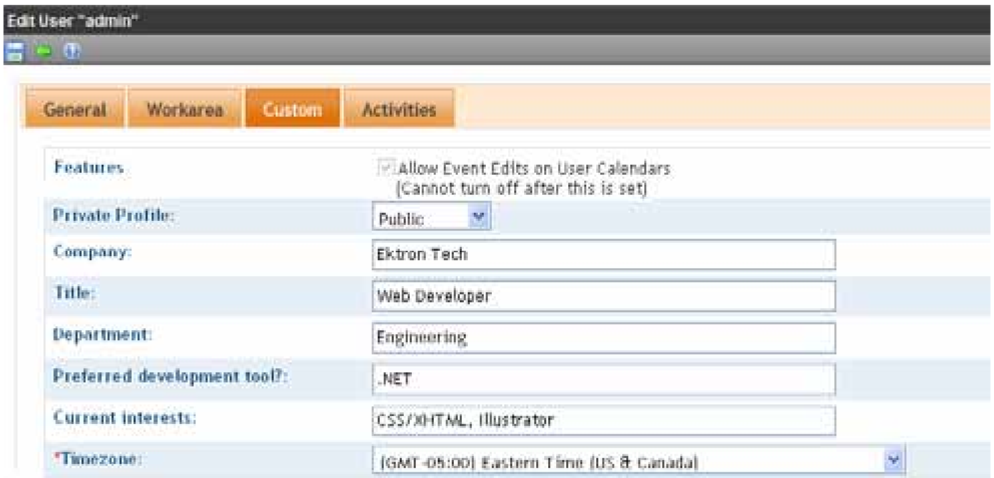


The table below describes the View Custom Properties screen.

Buttons, Dropdown Boxes or Fields	Description	For More Information
Add button ( )	Add custom user properties.	"Adding a Custom User Property" on page 15-14
Reorder button ( )	Change the order in which the custom properties appear on the Users or Membership User Properties screen.	"Setting the Custom User Properties Order" on page 15-24
Language Selection Dropdown List (English (U.S.))	Allows you to view custom user properties by language.	"Viewing Custom User Properties By Language" on page 15-28
Title Field	Displays the title of a custom user property. When viewing by language, the title changes to the title used in a specific language if it has been defined. Click a **Title** to edit the property. Note: The title and label are the same field. On some screens, **Title** is used; on others **Label** is used.	"Editing Custom User Properties" on page 15-23
Type Field	Shows the Type that was chosen for a custom user property.	"Type" on page 15-16

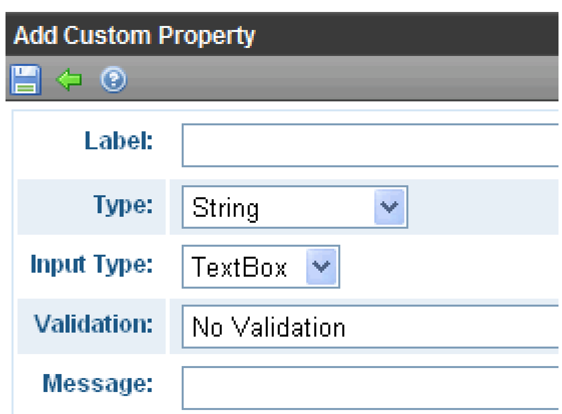
Adding a Custom User Property

After you add a custom user property, it appears on all User and Membership User Information screens, under the **Custom Tab**. When new users and membership users are added, custom user properties appear during the creation process.



Follow these steps to add a custom user property.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Choose the standard language used in your Ektron CMS400.NET Workarea.
3. Click the **Add Property** button ( ).
4. The Add Custom Property screen appears.



5. Complete the screen according to the table below.

The Custom User Properties Fields

The following table describes the custom user properties fields

Field	Description	More Information
Label	Title of the property you are adding. For example, Employee ID. Note: The Title and Label are the same field. On some screens the word Title is used, on others the word Label is used.	
Type	The property's data type. Once a type is selected and saved, you cannot change it. You must delete the custom property and re-enter it.	"The Type Field" on page 15-16
Input Type	Choose how a user is able to enter a response to the property.	"The Input Type Field" on page 15-18
Validation	Ensures the right type of data is entered in a text box or text area.	"Validation" on page 15-18
Min Value	If desired, enter the minimum value you want to allow. The Min Value only appears when the following Validations are used: Numeric Only, Date Only and U.S. Zip Code. The following is an example of a Date Only Min Value: **01/01/1900**.	
Max Value	If desired, enter the maximum value you want to allow. The Max Value only appears when the following Validations are used: Numeric Only, Date Only and U.S. Zip Code. The following is an example of a Date Only Max Value: **01/01/1987**.	
Message	A message that appears when information entered in a user property violates the validation criteria. For example, if the validation is U.S. Zip Code, you might use the following message: **Please enter a valid zip code**	

6. Click the **Save** button ().
7. The new property appears on the View Custom Properties screen.

The Type Field

The following table describes the types available in the Type field.

Types	Description	Input Types Available	Validations Available
String	Accepts all alpha, numeric, and symbol characters	- Text Box - Text Area - Hidden	All validations See Also: "Validation" on page 15-18
Boolean	Accepts a true or false response	- Check Box	None
Numeric	Accepts numbers only	- Text Box	- No Validation - Cannot be blank - Numeric Only - U.S. Zip Code - Dollar Amount
Date	Only a date can be entered.	- Text Box	- No Validation - Cannot be blank - Date Only
SelectList	Select a response from a list of choices. See Also: "SelectList Field" on page 15-20	NA	NA
Multi SelectList	Select any number of responses from a list of choices. See Also: "MultiSelectList Field" on page 15-22	NA	NA

Types	Description	Input Types Available	Validations Available
Category	A system-defined type that appears when the first subscription is created. One entry covers all subscriptions. See Also: "Defining Subscriptions" on page 20-18.	NA	NA

The Input Type Field

The following table describes possible responses to the **Input Type** field.

Input Type	Description	An Option When Used With
Text Box	Creates a standard text box. Below is an example of a text box.	String Numeric Date
Text Area	Creates a multi-lined area for entering text. Typically used when more than one line of text needs to be added. Below is an example.	String
Hidden	Hides the input field. This can be used by an administrator to add additional values at postback time. This requires a developer to add client-side JavaScript. Note: If you change a String field's **Input Type** from **Text Box** or **Text Area** to **Hidden**, then sign in as a member of the Administrators group, the field and its value still appear on the user's profile.	String
Check Box	Creates a checkbox. Used when the field requires a boolean (true / false) response. Below is an example of a check box. ☑ = True ☐ = False	Bool-ean

Validation

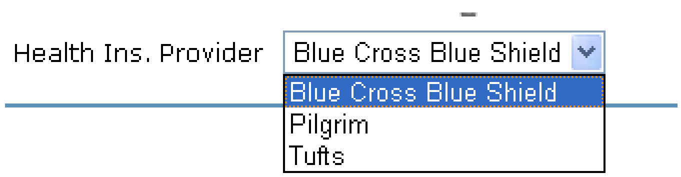
The following table describes the validations available in the **Validation** field.

Validation	Description	An Option When Used With
No Validation	The entry is not checked.	String Numeric Date
Cannot be blank	A response must be entered.	String Numeric Date
Numeric Only	The response must be a number.	String Numeric
Text Only	The response must be characters.	String
Date Only	The response must be entered in the following format: mm/dd/yyyy.	String Date
Email Only	The response must be entered as an Email address. For example, username@domain.domainextention.	String
Credit Card Only	The response must be entered as a credit card number. For example, nnnn nnnn nnnn nnnn	String
Social Security Only	The response must consist of nine digits in this pattern: nnn-nn-nnnn.	String

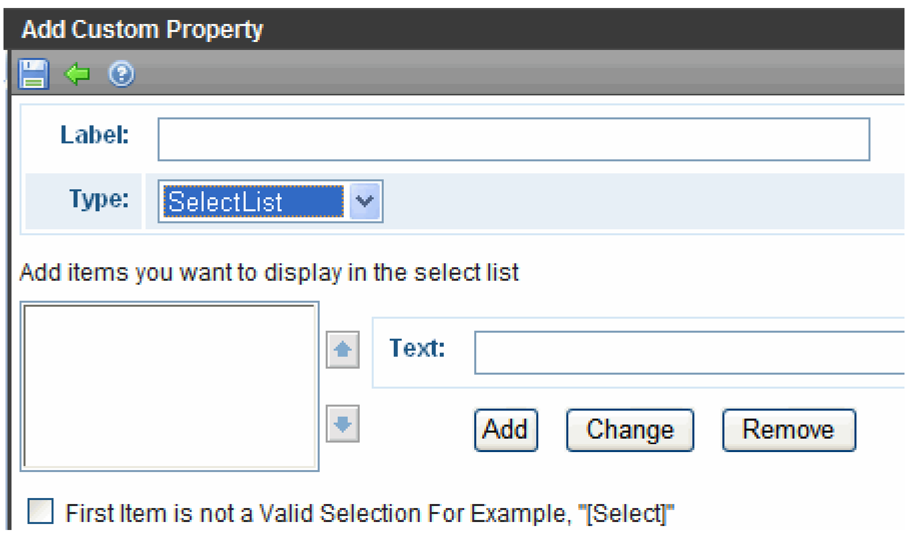
Validation	Description	An Option When Used With
U.S. State Code	A two letter state code. For example: NH = New Hampshire.	■ String.
U.S. Zip Code	The response must consist of 5 (nnnnn) or 9 digits separated by a dash after the fifth (nnnnn-nnnn). Note: If you use the Numeric Type, you cannot have a dash or space when using a nine digit Zip Code	■ String ■ Numeric
Valid US Phone Number	The response must consist of a 10 digits in this pattern: nnn-nnn-nnnn.	■ String
Canadian Postal Code	The response must consist of 6 (xnx nxn) alpha or numeric characters with a space after the first three characters.	■ String
Time HH:MM or HH:MM:SS or HH:MM:SS.mm	Time is entered in one of the following three formats. **HH:MM** - Hours and Minutes 09:30 **HH:MM:SS** - Hours, Minutes and Seconds 09:30:45 **HH:MM:SS.mm** - Hours, Minutes, Seconds and milliseconds 09:30:45.002	■ String
IP Address	The response must be in the form of an IP address.	■ String
Dollar Amount	This validation works differently depending on the Type used. If used with the *String* Type, you can have a dollar sign ($) along with the money amount in the text field. When used with the *Numeric* Type, you are not allowed to have a dollar sign ($) in the text field. The following are examples of each type with validation: **String** - $3.00 **Numeric** - 3.00	■ String ■ Numeric
Canadian Social Insurance Number	The response must consist of nine digits in this pattern (nnn nnn nnn).	■ String

SelectList Field

Use a **SelectList** field to present the user completing the User Information or Membership User Properties screen with a list of choices. See example below.



When you create a custom user property and specify its type to be **Select List**, the screen changes as shown below.



Completing a SelectList Field Entry

To add an item to the list, enter its text in the **Text** field, then click the **Add** button. Added items then appear in the larger box on the left.

You can then

- *remove* any item from the list by clicking it. It appears in the **Text** field. Click **Remove**.
- *change* the text of any list item by clicking it. It appears in the **Text** field. Make changes then click **Change**.
- *change the sequence* of list items by selecting an item then clicking the up or down arrow to move the item

Using the First List Item to Prompt a Response

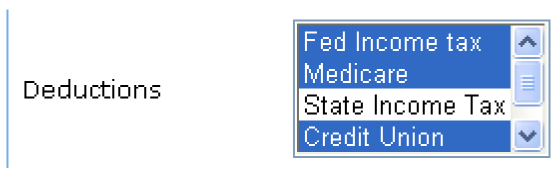
You can use the first list item to prompt the user to make a selection instead of being a valid response. For example, the first list item may say **Select from a list of choices**. To do this, check the **First item is not a valid selection for example, "[Select]"** check box.

If you do, the field has an asterisk (*) next to it (indicating it is required) on the User Information and Membership User Properties screens. The user completing the screen must choose any selection other than the first item. If he tries to file the screen without choosing a different item, the following error message appears:

Please fill in all required fields (*)

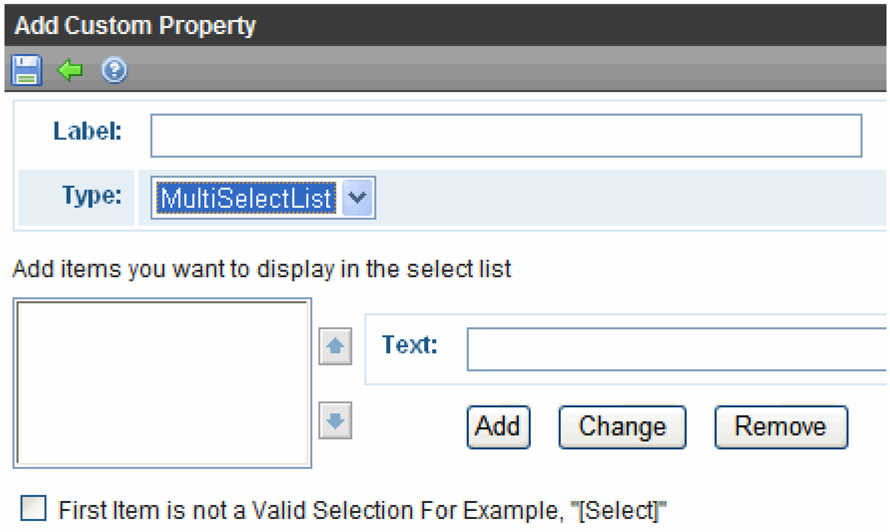
MultiSelectList Field

Use a **MultiSelectList** field to present the user completing the User Information or Membership User Properties screen with a list of choices. The user can choose as many responses as appropriate. See example below.



Selected items are indicated by a blue background.

When you create a custom user property and specify its type to be **MultiSelect List**, the screen changes as shown below.



For information about completing the screen, see "Completing a SelectList Field Entry" on page 15-21.

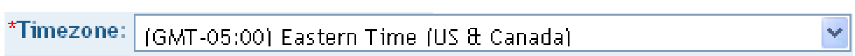
Features Field

This field is automatically included in the User or Member profile Custom Tab. The field included in this section is provided to allow the profile owner to edit events on a web calendar. Once this is checked, it cannot be unchecked.

For more information about Web Calendar, See Also: "Adding Web Calendar Events" on page 7-562.

Time Zone Field

The **Time Zone** property field is a special field used by the Web Calender feature.



Select the time zone of the User or Member here. When they are logged in, appointment times will show in this time zone. For more information, See Also: "Adding Web Calendar Events" on page 7-562.

Editing Custom User Properties

When you click a custom user property's title, you are brought to the Edit Custom Property Screen. From this screen, you can edit and delete a custom property or create a version of the custom property in a non-English language.

When you edit a custom user property, the changes are applied to all users and membership users. These changes are also applied to any other language versions of the custom properties that exist.

To learn how to:

- edit a custom user property. See "Editing a Custom User Property" on page 15-23.
- delete a custom property. See "Deleting a Custom User Property" on page 15-24.
- create a custom property for a non-English language. See "Create a Custom User Property for a Non-English Language" on page 15-26.

Editing a Custom User Property

When editing a custom user property, the changes are available to users and membership users when the save button is clicked.

Follow these steps to edit a custom user property.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Click the **Title** of the Custom User Property you want to edit.
3. Choose the field you want to change. You can edit the following fields:

- Label
- Input Type
- Validation
- Min Value
- Max Value
- Message

For descriptions of these fields, see "The Custom User Properties Fields" on page 15-15.

Note: You cannot edit the **Type** field. If you need to change the type, you must delete the custom user property and create a new one.

Warning! If you delete a custom user property, it is removed from all users and membership users. Any information that has been collected about users and membership users for that property will be lost. In addition, any language versions of the custom user property are deleted.

4. Click the **Save** button ( ).
5. When you click a user or membership user, you see your changes.

Deleting a Custom User Property

If you delete a custom user property, it is removed from all users and membership users. Any information that has been collected about users and membership users for that property will be lost. In addition, any language versions of the custom user property are deleted.

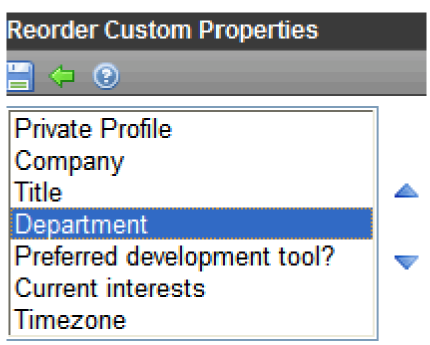
Follow these steps to delete a custom user property.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Click the **Title** of the custom user property you want to delete.
3. Click the **Delete** button ( ).
4. A dialog box appears asking if you are sure you would like to delete the item.
5. Click **OK**.
6. The View Custom Properties screen appears, and the property is no longer available.

Setting the Custom User Properties Order

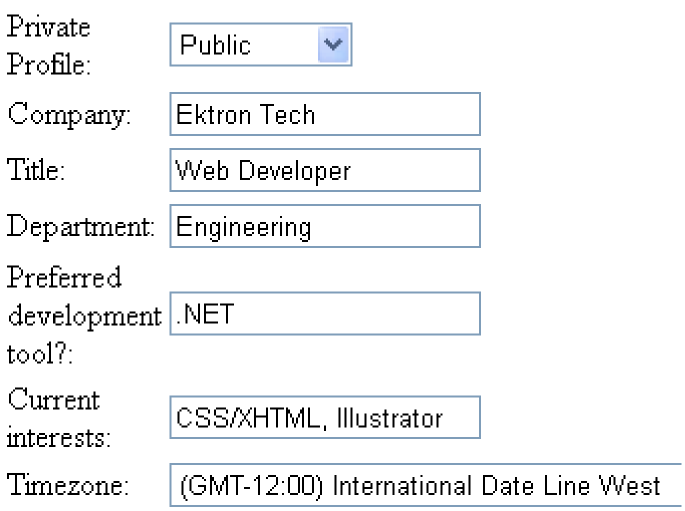
From the View Custom Properties screen, you can set the order in which the properties appear on the User and Membership Users Properties screen. To set the custom user properties order, complete these steps.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Click the **Reorder** button ( ).
3. The Reorder Custom Properties screen appears.



4. Click a property.
5. Click the **Up** or **Down** arrows to move the property up or down the list.
6. Click the **Save** button ( ).

7. On the View Custom Properties screen, you now see the properties in the new order. If you go to the User or Membership User Properties screen, the order of the properties there now reflects the changes.



Using Custom User Properties for Non-English Languages

Like content, custom user properties have a language attribute. This is useful if you have users or membership users that only use a specific language. It can also be used if you want a custom user property to appear in the language in which the user is signed in.

Unless a language other than English is defined for a custom user property, the property defaults to the English version. For example, if you have two properties called Birthday and

Phone Number in English and you can translate the French version of Birthday to Anniversaire, when you view the properties in French, you see the English version of Phone Number and the French version of Birthday.

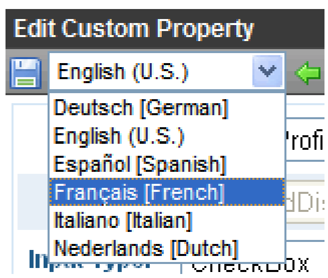
Create a Custom User Property for a Non-English Language

When creating a custom user property, it must be created in English then translated to the desired language. This is done by editing the property, changing languages, filling out the Translate Custom Property Label screen and saving the property.

Warning! All custom user properties in languages other than English are tied to the English version of the property. If you delete the English version of the property, all other language versions of the properties are deleted also. However, you can remove a non-English language version of the custom properties without deleting the English version. See "Removing a Non-English Custom User Property Title" on page 15-27

The following steps illustrate how to translate the Title/Label of a property into French.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Choose a custom property to be defined in another language.
3. Choose a language from the language select dropdown box.

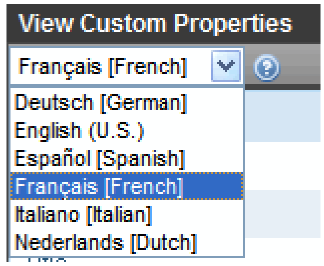


4. The Translate Custom Property Label screen appears.
5. Enter a **Label** for the property in the language you have chosen. For example, if you are creating a French version of a Birthday custom user property, you would enter Anniversaire in the label text field. For information on the Label property, see "Label" on page 15-16
6. Click the **Save** button ().

Removing a Non-English Custom User Property Title

Removing a non-English version of a custom user property title does not remove the english version of the property. When you remove the non-English version of a property, you are basically removing the label for that specific language in the custom property.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Choose the language in which the custom user property appears from the **Language Dropdown Box**.



3. Click the **Title** you want to delete.

4. The Translate Custom Property Label screen appears.
5. Click the **Delete** button ( ).
6. A dialog box appears asking if you would like to remove the translated custom property title.
7. Click **OK**.
8. The English version of the Edit Custom Property screen appears.
9. Click the **Back** button ( ).

Warning! Do not click the delete button on the Edit Custom Property screen. This action deletes the English version of the custom user property. If you click the delete button, you lose all information collected by the property and all language versions of the property.

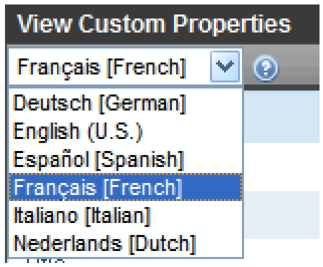
Viewing Custom User Properties By Language

From the View Custom Properties screen, you can view the custom users properties by languages. When viewing by languages, it is important to remember that if there is only an English version of the property, the English version appears in all the languages.

All custom user properties, in languages other than English, are tied to the English version of the property. If you delete the English version of the property, all other language versions of the properties are deleted.

To view the custom user properties by language, follow these steps.

1. In the Workarea, click **Settings** > **Configuration** > **User Properties** > **User Properties**.
2. Choose the language in which to view the properties from the language dropdown box.



3. The View Custom Languages screen for that language appears.

Note: In the example below, some properties have not been translated, so the English versions appear instead.

Managing User Groups

Warning! If you are using Active Directory to manage user groups, see "The Screens of the Active Directory Feature in User Authentication Mode" on page 15-82.

The following topics explain how to manage User Groups.

- "Creating a New User Group" on page 15-30
- "Assigning Users To User Groups" on page 15-30
- "Viewing the Users in a User Group" on page 15-31

- "Editing a User Group" on page 15-31
- "Deleting a User Group" on page 15-32
-

Creating a New User Group

Warning! If you are using Active Directory to create a new user group, see "Adding User Groups" on page 15-60.

To create a new User Group in Ektron CMS400.NET, follow these steps.

1. Access the User Groups folder in the administrator Workarea, as described in "Accessing the User Group Folder" on page 15-3.
2. Click the Add User Group button ( ).
3. The Add a New User Group to the System screen is displayed.
4. Enter a name and brief description of the user group you want to create.
5. Click the Save button ( ).

Assigning Users To User Groups

Warning! If you are using Active Directory to assign a user to a user group, see "Adding a User to a Group" on page 15-60.

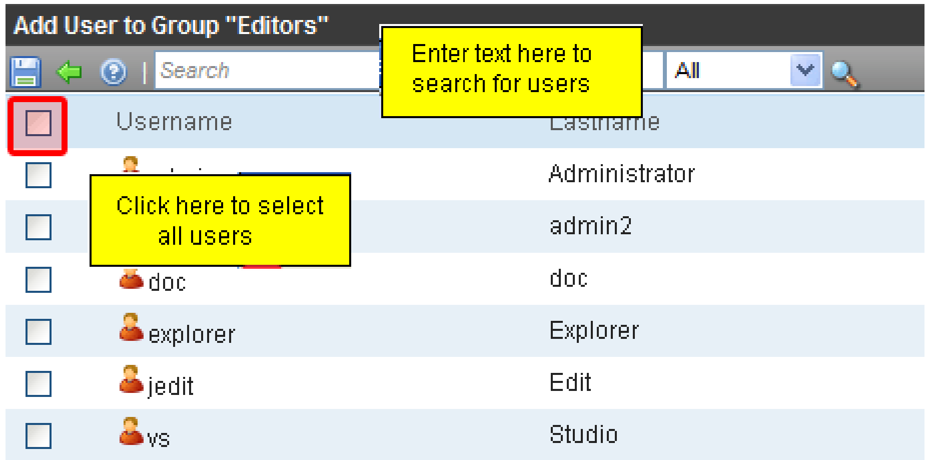
To add a user to a user group, follow these steps.

1. Access the **Workarea** > **Settings** > **User Groups**.
2. Click the user group to which you want to add a user.
3. The View Users in Group screen appears with all current group members.

Note: When you create a new user group, no user is initially assigned to it.

Note that you can select any number of users by checking the box to the left of their name. To select all users, check the box in the column header row.

You can also sort the display by **Username**, **Lastname** or **Firstname**.



And, you can enter characters into the **Search** field and find only users that match them. For example, you could enter **bill**, click the **Search** button, and see only users with those characters in their name.

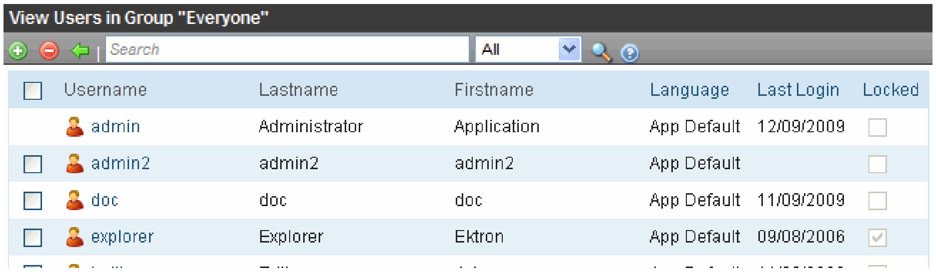
4. Click the Add User button ( ).
5. Users who do not belong to the group appear.
6. Click the user you want to add.
7. A confirmation message is displayed.
8. Click **OK**.
9. The selected user is now a member of the selected group.
10. Continue this process until you add all users into User Groups.

Viewing the Users in a User Group

To view a list of users who are members of a user group, follow these steps.

1. Access the User Group folder in the administrator Workarea, as described in "Accessing the User Group Folder" on page 15-3.
2. Click the user group whose members you want to view.
3. The View Users in Group screen appears with a list of users who are members of the group.

From this screen, you can edit or delete user groups, as well as add and remove users to and from the user group.



Editing a User Group

When editing a User Group, you can only change its name.

Note: You cannot edit the default Administrators and Everyone user groups.

To edit a user group, follow these steps.

1. Access the View Users in Group screen for the user group you want to edit, as described in "Viewing the Users in a User Group" on page 15-31.
2. Click the User Group you want to edit.
3. The View Users In Group screen is displayed.
4. Click the Edit button ( ).
5. The Edit User Group screen is displayed.
6. Make the necessary changes.
7. Click the Update button ( ).

Deleting a User Group

Warning! If you are using Active Directory to delete a user group, see "Deleting a User Group" on page 15-60.

When you do not need a User Group anymore, you can delete it from the system.

Note: You cannot delete the Administrator and Everyone groups.

To delete a user group, follow these steps.

1. Access the View Users in Group screen for the user group you want to delete, as described in "Viewing the Users in a User Group" on page 15-31.
2. Click the User Group you want to delete.
3. The View Users In Group screen is displayed.
4. Click the Delete button ( ).

5. A confirmation message is displayed.
6. Click **OK**.
7. The User Group is deleted from the Ektron CMS400.NET Web site.

Removing Users from User Groups

See "Removing Users from User Groups" on page 15-12.

Defining Roles

Ektron CMS400.NET contains an Administrators User Group. Any user who is a member of that group automatically has full administrator privileges. See Also: "Guidelines for Using the Folder-User Admin Role" on page 15-37

The Roles feature lets you assign *limited* or *specific* administrator privileges to users who should not have full administrator privileges. For example, you can let certain users create, redirect, or remove tasks but deny them other privileges normally granted to administrators.

Best Practice

When creating new user groups to use with roles, assign names as a mnemonic aid for the role, especially for folder-specific rules. For example, the Marketing Folder Admins user group could be used for all role members who can administer the marketing folder.

Note: The Permissions Table lets you control which users can manage a folder's properties, its content, library items, and create or edit collections. (See Also: "Folder Permissions" on page 5-43) So, together, the Roles feature and the Permission Table give you the ability to assign administrative privileges to users who are not members of the Administrators group.

This section explains the use of Roles through the following topics.

- "Using the Roles Screens" on page 15-33
- "Guidelines for Using the Folder-User Admin Role" on page 15-37
- "List of Administrator Privileges" on page 15-39

Using the Roles Screens

Use the Roles screens to assign limited administrator privileges. To access the Roles screens, go to the Ektron CMS400.NET Workarea and select **Settings** > **Roles**.

Note: In the screens listed below, you can select users or groups. However, you can never select the Administrators group, because that group already has all permissions.

The following table describes the Roles screens.

Screen	Lets you give a user or user group the ability to	For more information, see
System-Wide Roles		
Alias-Admin	This user has all the permissions that a member of the administrators group has, such as the ability to - Turn aliasing on and off - View all manual aliases - Activate or deactivate manual aliases - Change the primary alias - Create automatic aliases - Create RegEx aliases	"URL Aliasing" on page 10-1
Alias-Edit	- View and assign a manual alias to content - View secondary aliases	"Permissions for Working with Aliasing" on page 10-19
Business Rule Editor	Create or edit Business Rules and Rulesets	"Business Rules" on page 12-1
Calendar-Admin	Create, edit and delete calendars	
Collection and Menu Admin	Create, edit and delete Collections and Menus via the **Content** tab Note: To manage permissions for creating collections and menus via the folder's New > Collection or New> Menu option, use folder permissions. See Also: "Folder Permissions" on page 5-43	"Collection Permissions" on page 9-114; "Working with Menus" on page 9-129
Collection Approver	If approval is required for a collection, approve changes to it, including the deletion of a collection.	"Setting up Approval for Collections" on page 9-116
Commerce Admin	Access the eCommerce screens in the Ektron CMS400.NET Workarea.	”eCommerce” on page 17-1

Screen	Lets you give a user or user group the ability to	For more information, see

Community	Lets role members perform the following community activities:
	- Set system default preferences
	- View and create new
	  – Activity Types
	  – Agents
	  – Messages
	- Enable or Disable Notifications
		"Notifications" on page 16-160

Community Group Admin	Create, edit and delete and manage all Community Groups.	"Community Groups" on page 16-113
Community Group Create	Create and manage Community Groups. A user with this role can only manage community groups he has created.	"Community Groups" on page 16-113
Message Board Admin	A user with this role can approve pending comments or delete existing comments on a message board. Message board comments for users and community groups are administered on the Web site. Message Board comments for content can be administered on the Web site or from the Content Report screen in the Workarea.	"Content Rating" on page 7-743 and "MessageBoard Server Control" on page 16-97
Metadata-Admin	View, create and edit metadata definitions	"Working with Metadata" on page 7-146
Smart Forms Admin	Create or edit Smart Forms	"Working with Smart Forms" on page 7-288
Synchronization Admin	Access the **Workarea > Settings > Configuration > Synchronization** screen, which lets the user perform all synchronization activities, such as - manage sync configurations and profiles - run a sync - perform content and folder-level sync	"Synchronizing Servers Using eSync" on page 18-1
Task Create	Create tasks	"Task Permissions" on page 11-3

Screen	Lets you give a user or user group the ability to	For more information, see
Task Delete	Delete tasks	"Task Permissions" on page 11-3
Task Redirect	Redirect tasks	"Task Permissions" on page 11-3
Taxonomy Administrator	Create and manage taxonomies	"Taxonomy" on page 9-200
Template Configuration	View, create, update, and delete system templates	"Creating/Updating Templates" on page 7-184
User-Admin	Create, view, edit, and delete users and user groups	"Managing Users and User Groups" on page 15-1
XLIFF-Admin	Use the Language Xport feature, which copies content into XLIFF files that can be submitted to a translation agency.	"Using the Language Export Feature" on page 14-13
Folder Specific Roles		
Folder-User Admin	View and edit folder properties. These users can update properties, permissions, the approval chain, metadata, Web alerts, purge history, etc. For example, create a user group and give it permission to manage the top-level marketing folder. Members of the group can do everything to that folder and its subfolders, but lack authority over other folders. See Also: "Guidelines for Using the Folder-User Admin Role" on page 15-37	"Folder Properties" on page 5-13
Move or Copy	Move or copy content. An Ektron best practice is to create a User Group for this purpose, then assign the group to this role. Ektron recommends against assigning the role to individual users. After assigning the User Group here, go to the folders whose content these users will be allowed to move or copy, and assign to that User Group at least Read Only and Traverse permissions. See Also: "Folder Permissions" on page 5-43	"Moving or Copying Content" on page 7-113

Screen	Lets you give a user or user group the ability to	For more information, see
Custom Permissions	Used by a developer to extend Ektron CMS400.NET's standard features	"Guidelines for Using a Custom Role" on page 15-37

Guidelines for Using the Folder-User Admin Role

When setting up users and groups for administrative access over folders, keep these in mind.

- After being identified on the Manage Members for Role: Folder User Admin screen, users or groups must also be given at least Read-Only permission for individual folders on the **Folder Properties** > **View Permissions for Folder** screen. See Also: "Folder Permissions" on page 5-43
- You *must* use the same identity on the Manage Members for Role: Folder User Admin and Folder properties screens. So, if a user group is listed for the role, use the same group when assigning folder permissions, not simply a group member. Conversely, if individual users are listed on the role screen, they must be specified in the folder permission.
- Ektron *strongly* recommends adding only user groups to the Folder User Admin role, not individual users.

If you set up an individual user as a role member, he could accidentally receive administrative rights to other folders.

Guidelines for Using a Custom Role

Note: The developer sample page installed with the sample site (`http://`*site root*`/cms400developer/developer/default.aspx`) demonstrates how to use custom roles. From the home page, click **Roles > Custom Roles**.
To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`.

The custom permissions role lets your Web developer create a site page, and then restrict access to that page's content (or areas with a page) to users assigned to a custom role.

Items you could show and hide could be as simple as a content block. But they could be more complicated, such as displaying buttons and fields for one user group, and something completely different for another.

Custom roles have no effect inside the workarea.

Examples of Custom Roles

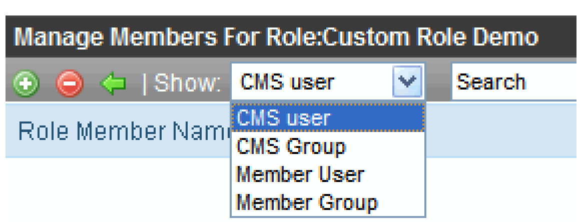
- Most of your site visitors belong to different political parties, while some are not registered with any party. By checking the user's ID against custom roles, you could present registered voters with selections for their party's primary, and prevent unregistered voters from participating.
- Your CMS site visitors fall into two categories: suppliers and buyers. You could check the current user against a custom role and show buyers one set of data and suppliers a different set.
- On your eCommerce site, registered students see a list of coupons that are not displayed for anyone else. Or, only registered adults can order age-controlled items, such as tobacco or alcohol.
- Control your pages' background colors, images, and skins based on custom roles. For example, mothers get family-oriented background images while teenagers get rock images and related styling.

Steps for Setting up a Custom Role

To set up a custom role, follow these steps.

1. Set up user groups and add to them users who will have some level of access to the custom page. See Also: "Creating a New User Group" on page 15-30

   To continue the above example, create one group of auditors (who will have read-only access), and another group of administrators (who will have edit access).
2. Create an Ektron CMS400.NET folder to hold the content that will appear on the custom page. Use the folder's permission table to assign users and groups appropriate access to the folder's content. See Also: "Folder Permissions" on page 5-43
3. Set up a Custom role. To do this, go to **Workarea** > **Settings** > **Roles** > **Custom Permissions**.
4. Create a new role.
5. From the Manage Custom Roles screen, click the role you created.
6. From the user type selector, click the type of users you want to add to the role.



7. Click the Add button ( ).

8. Check the box next to the users or groups that you want to add to the role.
9. Your Web developer creates the custom page. See Also: "Information about Custom Roles for your Developer" on page 15-39
10. You create content to appear on the custom page. Place the content in the folder you created in Step 2.

Information about Custom Roles for your Developer

The API provides two methods that determine if the current user is logged in, and if he is a member of the Administrators group. The methods let you test customizable roles with conditions outside the standard Is-Logged-In / Is-Admin tests.

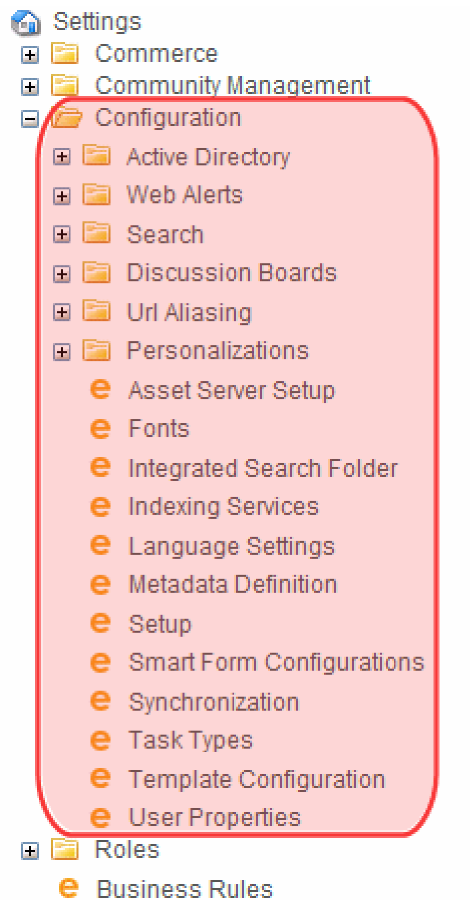
API methods are listed below.

Method	Returns
`GetRolePermissionSystem(RoleName As String, nUserId As Long)`	a Boolean value indicating if the user belongs to the system-wide custom role
`GetRolePermissionFolder(RoleName As String, nFolderId As Long, nUserId As Long)`	a Boolean value indicating if the user belongs to the custom role for the given folder. The procedure for assigning a user to a custom role is "Guidelines for Using a Custom Role" on page 15-37

Usage is demonstrated in the Developer sample file `site root\CMS400Developer\Developer\Roles\CustomRoles.aspx.vb`.

List of Administrator Privileges

Administrator privileges include access to most screens that appear when you select **Settings** > **Configuration.**



Administrators can also

- edit folder properties (including Web alerts, metadata, permissions, and the approval chain)
- manage aliasing features, such as turn aliasing on or off, activate and deactivate manual aliases, and create automatic aliases
- manually alias content
- add, edit, or delete a calendar
- add, edit, or delete a business rule
- create, view, edit, and delete metadata definitions
- create, view, edit, and delete taxonomies
- create, redirect, and delete tasks
- require a collection to go through an approval process
- export content for translation to another language using XLIFF
- run an eSync
- access the eCommerce Module

Screen Descriptions for Online Help

Manage Members for Role: Alias Admin

Use this screen to determine which users or user groups have the following abilities related to aliasing.

- Turn aliasing on and off
- View all manual aliases
- Activate or deactivate manual aliases
- Change the primary alias
- Create automatic aliases
- Create RegEx aliases

Note: Members of the administrators group also have these abilities.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "URL Aliasing" on page 10-1; "Defining Roles" on page 15-32

Manage Members for Role: Alias-Edit

Use this screen to determine which users or user groups are allowed to assign a manual alias to content, as well as view its secondary aliases.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "URL Aliasing" on page 10-1; "Defining Roles" on page 15-32

Manage Members for Role: Analytics Viewer

Use this screen to determine which users or user groups are allowed to view Analytics data.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Analytics" on page 7-752; "Defining Roles" on page 15-32

Manage Members for Role: Business Rule Editor

Use this screen to determine which users or user groups can work with Business Rules. For example, a Business Rule Editor can create a new ruleset, or edit an existing one.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Business Rules" on page 12-1; "Defining Roles" on page 15-32

Manage Members for Role: Calendar-Admin

Use this screen to determine which users or user groups are allowed to create, edit and delete calendars.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: ; "Defining Roles" on page 15-32

Manage Members for Role: Collection and Menu Admin

Use this screen to determine which users or user groups are allowed to create, edit and delete collections and menus.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Working with Menus" on page 9-129; "Working with Collections" on page 9-99; "Defining Roles" on page 15-32

Manage Members for Role: Collection Approval

Use this screen to determine which users or user groups are allowed to approve collections. (Collections can be set to require approval.)

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Setting up Approval for Collections" on page 9-116; "Defining Roles" on page 15-32

Manage Members for Role: Commerce Admin

Use this screen to determine which users or user groups are allowed use the eCommerce feature from within the Ektron CMS400.NET Workarea (**Settings** > **Commerce**.)

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "eCommerce" on page 17-1; "Defining Roles" on page 15-32

Manage Members for Role: Community Admin

Use this screen to determine which users or user groups can perform the following community activities:

- Set system default preferences
- View and create new
  - Activity Types
  - Agents
  - Messages
- Enable or Disable Notifications

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Notifications" on page 16-129; "Micro-messaging Server Control" on page 16-175; "Defining Roles" on page 15-32

Manage Members for Role: Community Group Admin

Use this screen to determine which users or user groups are allowed to edit and delete Community Groups. These users have the same privileges as the group Administrator and members of the Administrators group.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Community Groups" on page 16-91; "Defining Roles" on page 15-32

Manage Members for Role: Community Group Create

Use this screen to determine which users or user groups are allowed to Create Community Groups.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Community Groups" on page 16-91; "Defining Roles" on page 15-32

Manage Members for Role: Metadata-Admin

Use this screen to determine which users or user groups are allowed to view, create and edit metadata definitions.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Working with Metadata" on page 7-146; "Defining Roles" on page 15-32

Manage Members for Role: Multivariate Tester

Use this screen to determine which users or user groups are allowed to perform Multivariate testing.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Multivariate Testing" on page 13-1; "Defining Roles" on page 15-32

Manage Members for Role: Smart Forms Admin

Use this screen to determine which users or user groups are allowed to create and edit Smart Form configurations.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Working with Smart Forms" on page 7-288; "Defining Roles" on page 15-32

Manage Members for Role: Task-Create

Use this screen to determine which users or user groups are allowed to create tasks.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Creating a Task via the Content Folder" on page 11-23 and "Creating a Task from the Web Site" on page 11-22; "Defining Roles" on page 15-32

Manage Members for Role: Task-Delete

Use this screen to determine which users or user groups are allowed to delete tasks.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Deleting a Task" on page 11-34; "Defining Roles" on page 15-32

Manage Members for Role: Task-Redirect

Use this screen to determine which users or user groups are allowed to assign tasks to other users.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Editing a Task" on page 11-29; "Defining Roles" on page 15-32

Manage Members for Role: Taxonomy Administrator

Use this screen to determine which users or user groups are allowed to view, create, delete and edit Taxonomies.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Taxonomy" on page 9-200; "Defining Roles" on page 15-32

Manage Members for Role: Template Configuration

Use this screen to determine which users or user groups are allowed to view, create, delete and edit System Templates.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Creating/Updating Templates" on page 7-184; "Defining Roles" on page 15-32

Manage Members for Role: User Admin

Use this screen to determine which users or user groups are allowed to create, view, edit, and delete users and user groups.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Managing User Groups" on page 15-29; "Defining Roles" on page 15-32

Manage Members for Role: XLIFF-Admin

Use this screen to determine which users or user groups are allowed to use the Language Xport feature, which copies content into XLIFF files that can be submitted to a translation agency.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Using the Language Export Feature" on page 14-13; "Defining Roles" on page 15-32

Manage Members for Role: Synchronization Admin

Use this screen to determine which users or user groups are allowed to perform all synchronization activities. These involve all screens available via **Settings** > **Configuration** > **Synchronization**, as well as the content and folder-level **Synchronize** options.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Synchronizing Servers Using eSync" on page 18-1; "Defining Roles" on page 15-32

Manage Members for Role: Message Board Admin

Use this screen to determine which users or user groups are allowed to approve pending comments or delete existing comments on a message board.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Content Rating" on page 7-743 and "MessageBoard Server Control" on page 16-76; "Defining Roles" on page 15-32

Manage Members for Role: Folder User Admin

Use this screen to determine which users and groups can view and edit folder properties. These users can update properties, permissions, the approval chain, metadata, web alerts, purge history, etc.

Note: After being identified on the Manage Members for Role: Folder User Admin screen, users or groups must also be given permission for individual folders on the Folder Properties > View Permissions for Folder screen.

For example, create a user group and give it permission to manage the top-level marketing folder. Members of the group can do everything to that folder and its subfolders, but lack authority over other folders.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Folder Properties" on page 5-13; "Defining Roles" on page 15-32

Manage Members for Role: Move or Copy

Use this screen to determine which users or user groups are allowed to move or copy content.

To add members, click the Add toolbar button ( ). To remove members, click the Drop toolbar button ( ).

See Also: "Move or Copy" on page 15-36; "Defining Roles" on page 15-32

Manage Custom Roles

Use this screen to extend Ektron CMS400.NET's standard Roles feature. After creating roles on this screen, you can manipulate the roles using the developer API.

To add a custom role, click the Add toolbar button ( ). To remove a custom role, click the Drop toolbar button ( ).

See Also: "Defining Roles" on page 15-32

Active Directory Feature

The Active Directory feature allows you to retrieve user and user group information from the Microsoft Windows Active Directory (AD) into Ektron CMS400.NET. As a result, you can administer user information from one place only, and users need to remember only one password/username combination to sign on to the network and Ektron CMS400.NET.

To learn more about Active Directory, see http://www.microsoft.com/windowsserver2003/technologies/directory/activedirectory/default.mspx.

This feature is described through the following top-level topics.

Setup Guidelines

Warning! Ektron strongly recommends configuring a secure socket layer (SSL), especially if you are using Active Directory Integration. SSL encrypts passwords that are otherwise sent as clear text to the Ektron CMS400.NET server .See Also: "Configuring SSL" on page 1-124

The two ways to set up Active Directory are contrasted in the table below. Below the table are instructions for each setup option.

Method	When to Use	How setup is done
Advanced Domains	■ You are using a firewall ■ The Ektron CMS400.NET server need not be part of an Active Directory domain ■ You are connecting to multiple Active Directory domains, even ones that do not see each other	Ektron CMS400.NET Workarea. For setup instructions, see "Setting Up Active Directory via the Advanced Domains Method" on page 15-49.
Legacy	You are using auto discovery and Active Directory single signon.	The domain connects to the AD domain within the web.config. For setup instructions, see "Setting Up Active Directory via the Legacy Method" on page 15-50

Setting Up Active Directory via the Advanced Domains Method

1. Make sure each AD user to be used in Ektron CMS400.NET is defined correctly in the Active Directory. Remember that, when you enable AD integration, logon name and domain are copied from AD to Ektron CMS400.NET.

2. If you have multiple domains in your Active Directory Forest, decide if you want Ektron CMS400.NET to reference all domains or if you want to choose a specific one. (You will use this when completing the **Domain** field of the Active Directory Setup Screen.)

3. Set the following elements in the Web.config.
   - Set the `ek_ADEnabled` element to **true**. It should look like this:

```
<add key="ek_ADEnabled" value="true"/>
```

   - Set the `ekADAdvanced` element to **true**. It should look like this:

```
<add key="ekADAdvanced" value="true"/>
```

   - Set the `ek_AUTH_Protocol` element to **LDAP**. It should look like this:

```
<add key="ek_AUTH_Protocol" value="LDAP"/>
```

4. Set up your domains on the Edit Domains screen. See "The Edit Domains Screen" on page 15-64.
5. Configure the AD setup page. See "The Active Directory Setup Screen" on page 15-66.
6. Assign AD groups to Ektron CMS400.NET user groups. See "Copying User Groups from AD to Ektron CMS400.NET" on page 15-56.

Setting Up Active Directory via the Legacy Method

1. Make sure each AD user to be used in Ektron CMS400.NET is defined correctly in the Active Directory. Remember that, when you enable AD integration, logon name and domain are copied from AD to Ektron CMS400.NET.
2. If you have multiple domains in your Active Directory Forest, decide if you want Ektron CMS400.NET to reference all domains or if you want to choose a specific one. (You will use this when completing the **Domain** field of the Active Directory Setup Screen.)
3. Set the following elements in the Web.config.
   - For the `authentication` element, change the value of the `impersonate` attribute to **false**. It should look like this:

```
<identity impersonate="false" userName="" password=""/>
```

   - Set the `ek_ADEnabled` element to **true**. It should look like this:

```
<add key="ek_ADEnabled" value="true"/>
```

   - Make sure the `ekADAdvanced` element is set to **false**. (This is the default value.)
   - Set the `ek_AUTH_Protocol` element to **GC**. It should look like this:

```
<add key="ek_AUTH_Protocol" value="GC"/>
```

   - declare a domain account through `ek_adusername` and `ek_adpassword`. It should look like this:

```
<add key="ek_ADUsername" value="[username]@domain" />
<add key="ek_ADPassword" value="YourPasswordHere" />
```

Note: Before entering the password, encrypt it using Ektron's password encryption utility. To access that utility, go to the Windows **Start** menu **> All Programs > Ektron >** *current release* **> Utilities > Encrypt Email Password**.

4. Configure the AD setup page. See "The Active Directory Setup Screen" on page 15-66.
5. Assign AD groups to Ektron CMS400.NET user groups. See "Copying User Groups from AD to Ektron CMS400.NET" on page 15-56.

Implementing Active Directory Integration

The Active Directory feature has two implementation modes, described in the following table. Choose the mode that best meets your needs.

.

Mode	Information Shared between AD and CMS	How to Implement	For more information, see
user authentication only	■ user logon name ■ domain ■ pass-word	On the Active Directory Setup screen, check **Enable Active Directory authentication**.	"User Authentication Only Mode" on page 15-80
active directory integration	■ user logon name ■ domain ■ pass-word ■ user's first and last name ■ email address ■ user groups ■ user's group mem-berships	On the Active Directory Setup screen, check **Enable Active Directory authentication** and **Enable Active Directory integration**. You may also want to check **Enable automatic addition of user from AD** and **Enable automatic addition of user to groups**.	"Active Directory Integration" on page 15-53

Active Directory Integration

This section covers the following topics:

How Information is Transferred from AD to Ektron CMS400.NET

Ektron CMS400.NET does not write to the AD – it only reads from it. This results in the following changes to how user information is handled within Ektron CMS400.NET.

- Once you enable AD integration, all changes to user and user group information must be made in the AD -- the Ektron CMS400.NET Edit User and User Group screens change to primarily view screens.
- When adding a new user or user group to Ektron CMS400.NET, you can only select users and groups in the AD. If the user or user group does not exist in the AD, create them there first, and then import the user or group into Ektron CMS400.NET.

Which Information is Transferred from AD to Ektron CMS400.NET

Ektron CMS400.NET accesses the following AD user information.

- Authentication (password, user logon name, and domain) for signing in to Ektron CMS400.NET.

The password is not stored in Ektron CMS400.NET – the application only refers to the password during sign in.

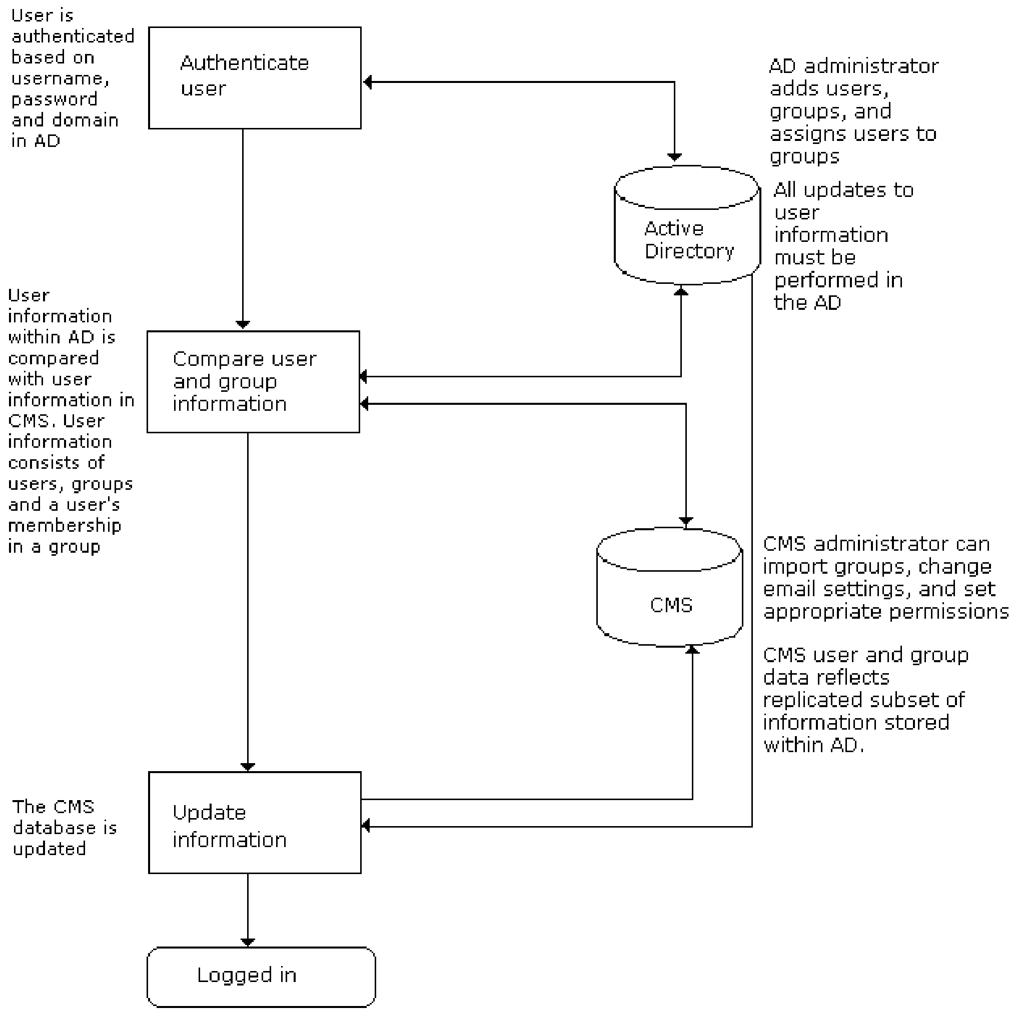
- User information, listed in the following table

User logon name (pre-Windows 2000)	sAMAccountName	Domain and Username Note: Users can share a name in different domains. For example, juser/example.com and juser/example.net. Otherwise, user names must be unique.
Last Name	sn	Lastname
First Name	givenName	Firstname
Email	mail	email Address

- user group information, listed in the following table.

Group Name (pre-Windows 2000)	cn	Domain and User group name Note: User groups can share a name in different domains. For example, editors/example.com and editors/example.net. Otherwise, user group names must be unique.

The following diagram illustrates the components of the Active Directory feature.



Overview of Active Directory Integration

Copying User Group Information from AD to Ektron CMS400.NET

This section explains how a user's group membership is copied from the AD to the Ektron CMS400.NET system when integration is first enabled, and then on an ongoing basis. Once assigned to a group, the user automatically receives all Ektron CMS400.NET privileges and workflow responsibilities associated with it.

Note: The Active Directory has two kinds of user groups: security and distribution. Ektron CMS400.NET does not distinguish between them – as long as a user is a member of either kind of group, group information is imported to Ektron CMS400.NET.

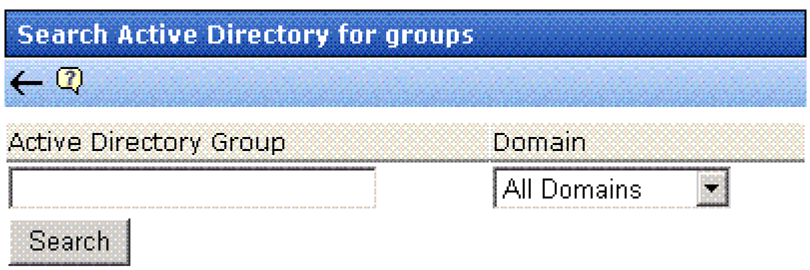
This section explains the following topics.

- "Copying User Groups from AD to Ektron CMS400.NET" on page 15-56
- "Associating a User's AD Group Information with Ektron CMS400.NET" on page 15-57
- "Mapping the Administrator Group" on page 15-58
- "User Belongs to AD Group that Does Not Exist in Ektron CMS400.NET" on page 15-59
- "User Belongs to Ektron CMS400.NET Group that Does Not Exist in AD" on page 15-59
- "Removing Users from a Group" on page 15-59
- "Adding User Groups" on page 15-60
- "Adding a User to a Group" on page 15-60
- "Replacing a User Group" on page 15-60
- "Deleting a User Group" on page 15-60

Copying User Groups from AD to Ektron CMS400.NET

Before using the AD integration feature, copy all AD groups you will use in your Web site into Ektron CMS400.NET. To do that, follow these steps.

1. From the left side of the Workarea, click **Settings** > **User Groups**.
2. Click the Add Groups button ( ).
3. The Search Active Directory for Groups screen appears.



4. From the **Domain** drop-down list, select the domain from which you want to add a user group.

Note: The Active Directory Setup screen can restrict AD integration to one domain. If it does, you can only search within that domain.

5. Enter as much information as you know into the Active Directory Group field.
6. Click the **Search** button.
7. A new screen displays all groups that satisfy the search criteria.
8. Click the check box under the **Add** column to add the user group to Ektron CMS400.NET.

9. Click the Save button ( ).

Associating a User's AD Group Information with Ektron CMS400.NET

When Integration is First Enabled

Ektron CMS400.NET *User Database Already Exists*

If **Auto Add User To Group** is checked (on the Active Directory Setup screen), a user's group membership is first copied from the AD to Ektron CMS400.NET when a user logs in or is added. At this time, any AD group memberships overwrite Ektron CMS400.NET group memberships *except* the Everyone group, to which all users belong.

Note: The Everyone group, unlike other Ektron CMS400.NET groups, is not associated with an AD group. It is an all-encompassing group with no special permissions.

If a user belongs to an AD user group that does not exist in Ektron CMS400.NET, nothing happens because the feature assumes that all AD groups are not meaningful in Ektron CMS400.NET.

If a user belongs to an Ektron CMS400.NET user group that does not exist in AD, the discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. From these screens, you can copy the AD group information into Ektron CMS400.NET.

See Also: "Associating User Group Membership with Active Directory User Group Membership" on page 15-73 and "Associating Groups with Active Directory Groups" on page 15-73

To learn how membership is updated from then on, see "After Integration is Enabled" on page 15-57.

Ektron CMS400.NET is Being Installed, so No User Groups Exist

Follow the procedure described in "Copying User Groups from AD to Ektron CMS400.NET" on page 15-56 to copy AD user groups to Ektron CMS400.NET. As users in those groups are added to Ektron CMS400.NET, their group membership is copied from AD to Ektron CMS400.NET.

After Integration is Enabled

A user's group membership is updated in Ektron CMS400.NET when all of the following are true:

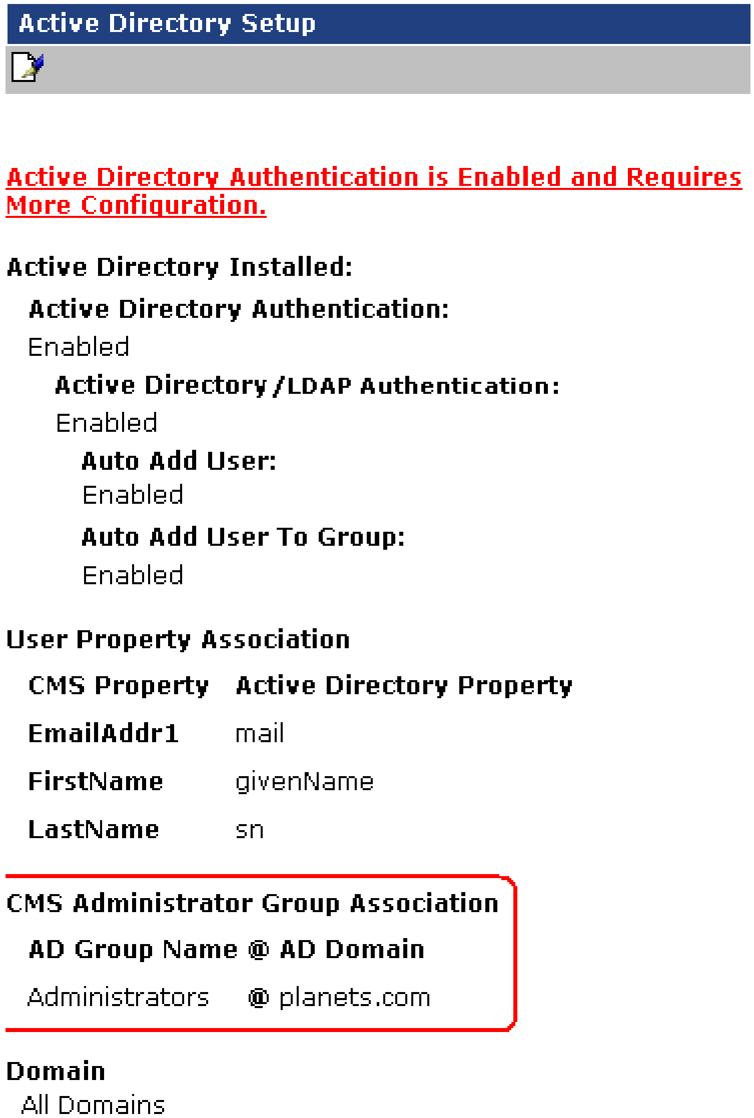
- The **Enable automatic addition of user to groups** field is checked on the Active Directory Setup screen

- A user is added to Ektron CMS400.NET or his group membership changes in the Active Directory
- The user logs in or someone clicks on the Refresh button ( ) on the user's View User Information screen

On the other hand, if **Enable automatic addition of user to groups** field is *un*checked, you can add the user to groups and remove him from groups independently of his AD group memberships.

Mapping the Administrator Group

On the Ektron CMS400.NET Active Directory Setup screen, you can identify an AD user group that maps to the Ektron CMS400.NET Administrator group.



Administrators have access to all functions documented in this documentation. (Unlike other Ektron CMS400.NET user groups, whose names are copied from the AD, the Administrator and Everyone group names cannot be changed.)

For example, if the AD has a user group named CMSAdmin whose members should have the privileges of Ektron CMS400.NET administrators, assign that group to Administrators on the Active Directory Setup screen. If such a group does not exist in AD yet, you should create it and then assign it on the Active Directory Setup screen.

Note that only one AD group can be mapped to the Ektron CMS400.NET Administrator group -- you cannot have an AD administrator group within each AD domain.

See Also: "The Active Directory Setup Screen" on page 15-66

User Belongs to AD Group that Does Not Exist in Ektron CMS400.NET

If user is assigned to an AD user group that does not exist in Ektron CMS400.NET, nothing happens. The AD integration feature assumes that an Ektron CMS400.NET administrator only maintains user groups that are meaningful to Ektron CMS400.NET, and not all AD groups may be meaningful to Ektron CMS400.NET.

Note: If a user belongs to a user group that is given Membership permissions, but also to a group that has CMS permissions, the user will only receive Membership permissions if logged into Ektron CMS400.NET.

User Belongs to Ektron CMS400.NET Group that Does Not Exist in AD

If a user was a member of a user group in Ektron CMS400.NET before integration was enabled, but does not belong to that group in the AD, this discrepancy is flagged on the Active Directory Setup and Active Directory Status screens.

If the user should belong to the AD group, add the group membership within the AD. Then, refresh the user on these screens to copy AD group information into Ektron CMS400.NET.

See Also: "Associating Groups with Active Directory Groups" on page 15-73

Removing Users from a Group

If you delete a user from an AD group, the user is automatically removed from the associated Ektron CMS400.NET group the next time the user's information is updated (as explained in "Copying User Group Information from AD to Ektron CMS400.NET" on page 15-55).

Adding User Groups

Once AD integration is enabled, you can only add new user groups in the AD. In Ektron CMS400.NET, use the Search Active Directory for Groups screen to copy an AD user group to Ektron CMS400.NET. You can only add groups that do not already exist in Ektron CMS400.NET. This procedure is described in "Copying User Groups from AD to Ektron CMS400.NET" on page 15-56.

Adding a User to a Group

You cannot add a user to a user group within Ektron CMS400.NET -- you must do so in the Active Directory.

Replacing a User Group

If you realize that you have associated the wrong AD user group with an Ektron CMS400.NET user group, you can replace the user group. Follow these steps to do so.

1. From the left side of the Workarea, click **User Groups**.
2. Click the user group that you want to replace.
3. Click the Associate Ektron CMS400.NET Group with Different AD Group button ( ).
4. Select a group to replace the group you selected in Step 2.
5. Click the Save button ( ) to finalize the change.

Deleting a User Group

Deleting a User Group in AD

If you delete a user group in AD and users are assigned to the group within Ektron CMS400.NET, the group is not automatically deleted in Ektron CMS400.NET. However, any Ektron CMS400.NET users who were members of the group are no longer members the next time their Ektron CMS400.NET information is updated. The discrepancy is flagged on the Active Directory Setup and Active Directory Status screens.

Deleting a User Group in Ektron CMS400.NET

If you delete a user group in Ektron CMS400.NET and users are assigned to that group within AD, nothing happens. This is because the AD Integration Feature assumes that, in Ektron CMS400.NET, the administrator only sets up user groups that are meaningful to Ektron CMS400.NET, and some AD groups are not meaningful to Ektron CMS400.NET.

Associating User Information in AD with Ektron CMS400.NET

A key component of the Active Directory Integration feature is to maintain consistent information between the AD and Ektron CMS400.NET. This section explains the transfer of user information between AD and Ektron CMS400.NET when integration is first enabled and on an ongoing basis.

This section covers the following topics.

- "Automatically Copying AD User Information When Integration is First Enabled" on page 15-61
- "Automatically Copying AD User Information after Integration is Enabled" on page 15-62
- "Manually Adding AD User Information to Ektron CMS400.NET" on page 15-62

- "Editing User Information in Ektron CMS400.NET" on page 15-63
- "Deleting Users" on page 15-63
- "Replacing a User" on page 15-63

Automatically Copying AD User Information When Integration is First Enabled

Ektron CMS400.NET Database Already Implemented

If **Enable automatic addition of user from AD** is checked on the Active Directory Setup screen, user information is copied from the AD to Ektron CMS400.NET when that user logs in or is added to Ektron CMS400.NET.

See Also: "The Active Directory Setup Screen" on page 15-66

The first time the user information is copied, the AD information overwrites all Ektron CMS400.NET information. To learn how information is updated from then on, see "Copying User Group Information from AD to Ektron CMS400.NET" on page 15-55.

If two or more AD users have the same Ektron CMS400.NET user logon name but different domains (for example, JDoe in Eng.Example.com and JDoe in Mkt.Example.com) and that username (JDoe) also exists in Ektron CMS400.NET, the Active Directory Setup and Active Directory Status screens indicate this discrepancy by the following message:

CMS users need to be associated with Active Directory users.

Click the message to proceed to the Associate Ektron CMS400.NET Users to Active Directory Users screen and associate an AD user with the Ektron CMS400.NET user.

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 15-72

Ektron CMS400.NET is Being Installed, so No User Database Exists

Go to the Search Active Directory for Users Screen and select AD users that will use Ektron CMS400.NET. When you add a user, the user information is copied from the AD to Ektron CMS400.NET.

See Also: "The Search Active Directory for Users Screen" on page 15-76

Note: You can only select AD users that do not already exist in Ektron CMS400.NET. Also, the Active Directory Setup screen can restrict AD integration to one domain. If it does, you can only search for users within that domain.

Automatically Copying AD User Information after Integration is Enabled

User information is copied from the AD to Ektron CMS400.NET when either of these events occurs:

- the user logs in
- someone clicks the Refresh button ( ) on the user's View User Information screen

See Also: "The View User Information Screen" on page 15-74

If a user's last name, first name, email field, or group membership changed in the AD, those changes are copied to Ektron CMS400.NET. However, if a user's *logon name* changed in the AD, that change is not copied to Ektron CMS400.NET because Ektron CMS400.NET uses that field to identify the user. Instead, that discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. You should proceed to the Associate Ektron CMS400.NET Users to Active Directory Users screen, where you can update the AD user associated with the Ektron CMS400.NET user.

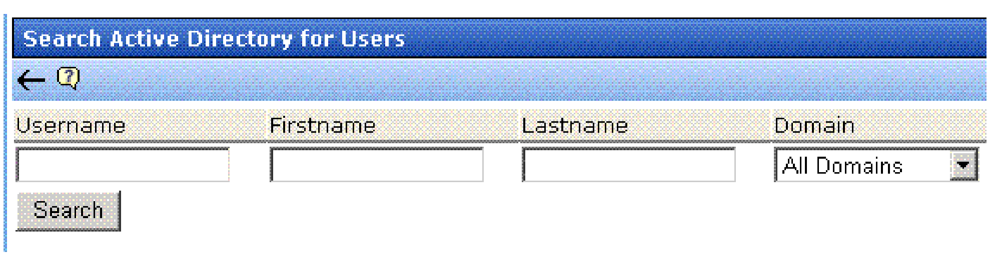
See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 15-72

Manually Adding AD User Information to Ektron CMS400.NET

Before using the AD integration feature, add all AD users that will use your Web site to Ektron CMS400.NET. This can be done automatically, as explained "Automatically Copying AD User Information When Integration is First Enabled" on page 15-61.

If you want to manually add an AD user to Ektron CMS400.NET, follow these steps.

1. From the left side of the Workarea, click **Users**.
2. Click the Add Users button ( ).
3. The Search Active Directory for Users screen appears.



4. From the **Domain** pull-down list, select the domain from which you want to add a user.
5. Enter as much information as you know into the other fields.
6. Click the **Search** button.

7. A new screen displays all users that satisfy the search criteria.
8. Click the check box under the **Add** column to add users to Ektron CMS400.NET.
9. Click the Save button ( ).

Editing User Information in Ektron CMS400.NET

Because Ektron CMS400.NET does not write to the AD, you can only change the **User Language** and **Disable email Notifications** fields within the Ektron CMS400.NET Edit User screen. You must edit all other user fields from the AD.

Deleting Users

If a user is deleted in AD, Ektron CMS400.NET does not automatically delete the user. However, the user's login fails because he cannot be authenticated.

The user remains in Ektron CMS400.NET, and the discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. You should delete the user from Ektron CMS400.NET using the Delete User function.

See Also: "Deleting a User" on page 15-11

Note: If you mistakenly delete all users with administrative privileges, you can still sign in using the builtin user's username and password. For more information, see "BuiltIn User" on page 19-11.

Replacing a User

If you associate the wrong AD user with a Ektron CMS400.NET user, you can replace the user. If you do, all Ektron CMS400.NET privileges and workflow responsibilities assigned to the old user transfer to the new one.

Follow these steps to associate a Ektron CMS400.NET user with a new AD user.

1. From the left side of the Workarea, click **Users**.
2. Click the user you want to replace.
3. Click the Associate CMS User with Different AD User button ( ).
4. Select a user to replace the user you selected in Step 2.
5. Click the Save button ( ).

When you complete this procedure, the first user is deleted from Ektron CMS400.NET.

The Screens of the Active Directory Feature in Active Directory Integration Mode

The Active Directory feature uses the following screens:

- "The Edit Domains Screen" on page 15-64
- "The Active Directory Setup Screen" on page 15-66
- "The Active Directory Status Screen" on page 15-71
- "The View Users Screen" on page 15-74
- "The View User Groups Screen" on page 15-76

This section explains how to use each screen.

The Edit Domains Screen

Use this screen to identify each network domain you will use with Ektron CMS400.NET's Active Directory feature. You would use this when you want to define domains, as opposed to using auto discovery to find them.

This feature is described through the following subtopics.

- "Enabling the Edit Domains Screen" on page 15-64
- "Accessing the Edit Domains Screen" on page 15-65
- "Fields of the Edit Domains Screen" on page 15-65
- "How Domains are Used" on page 15-66

See Also: "Active Directory Feature" on page 15-48

Enabling the Edit Domains Screen

To have the Edit Domains screen appear, set the following web.config file values as shown below.

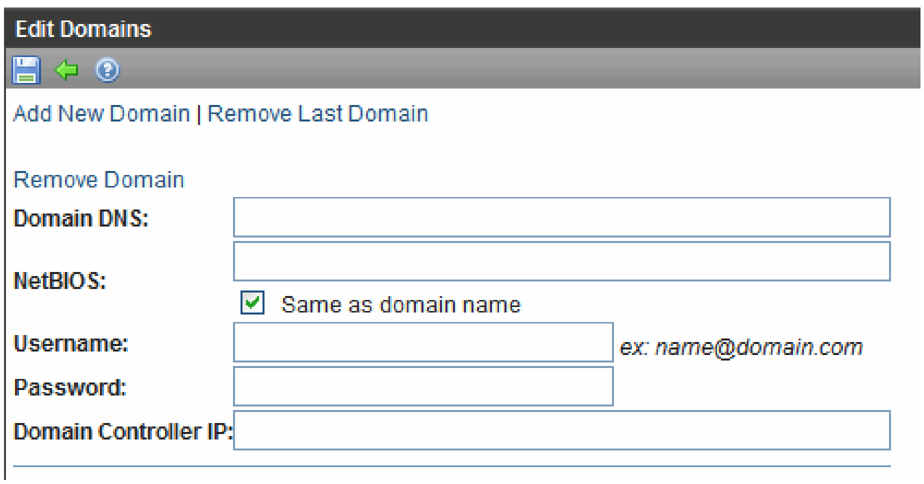
web.config value	Setting
ek_ADEnabled	True
ek_ADAdvancedConfig	True
ek_ADUsername	blank (username entered in Edit Domains screen)

web.config value	Setting
ek_ADPassword	blank (username entered in Edit Domains screen)
ek_AUTH_Protocol	LDAP

Accessing the Edit Domains Screen

After you modify web.config as described above, access the Edit Domains screen by going to **Workarea** > **Settings** > **Configuration** > **Active Directory** > **Domains**.

Below is a sample of the screen.



The screen lets you add new domains, modify existing ones, or delete obsolete ones.

Fields of the Edit Domains Screen

When defining a domain, enter the following information.

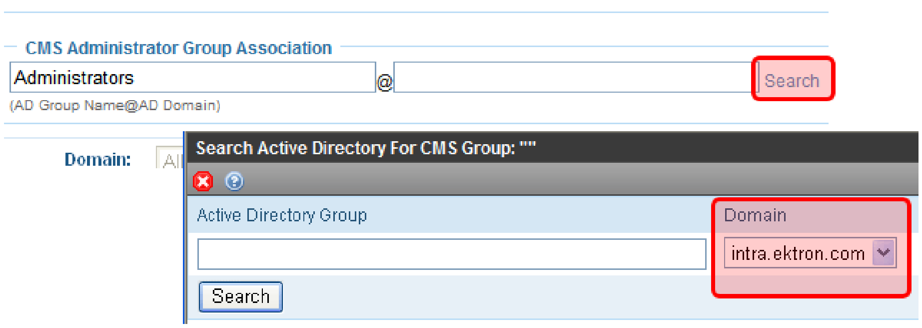
Field	Description
Domain DNS	Enter the domain's DNS. Contact your server administrator for this information. For example, **corp.example.com**.
NetBIOS	If your NetBios is the same as your domain name, leave the checkbox box checked. Otherwise, uncheck the box and enter your NetBIOS setting. Contact your server administrator for this information.

Field	Description
Username	Enter the name of the user with permission to sign on to the domain server. The name is in the format *username@domainDNS*. For example, **jsmith@corp.example.com**.
Password	Enter the password of the user identified above.
Domain Controller IP	Enter the IP address or DNS name of your domain controller. Note: If using Active Directory across a firewall, the IP address should be that of the firewall. On the firewall, traffic on port 389 (LDAP) should be allowed.

How Domains are Used

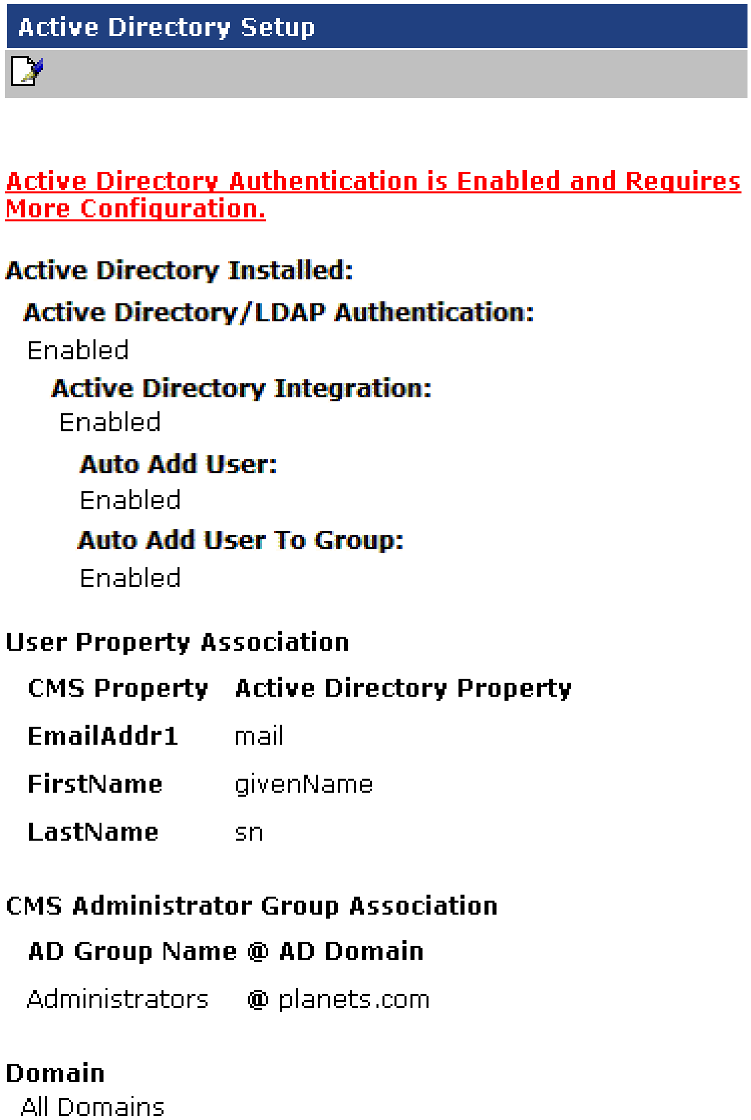
Domains defined on this screen are referenced when defining the user group that maps to the hard coded Ektron CMS400.NET administrator group. See Also: "The Screens of the Active Directory Feature in Active Directory Integration Mode" on page 15-64

While defining the user group, first select a domain. Ektron CMS400.NET creates a selection list of Active Directory user groups in that domain. In this way, you must choose a user group within the selected domain.



The Active Directory Setup Screen

The Active Directory Setup screen (illustrated below) lets you enable and disable the Active Directory feature, as well as determine other aspects of AD management, such as whether users and groups are automatically updated. To access the screen, click **Settings** > **Configuration** > **Active Directory** > **Setup** from the left panel of the Workarea.



The following table describes the fields on the screen.

See Also: "Messages Near the Top of the Active Directory Setup Screen" on page 15-70

Field	Description	For more information, see
Active Directory Installed		
Disable Active Directory and LDAP Authentication	Disables the use of Active Directory and LDAP Authentication.	"Disabling AD Integration" on page 15-78

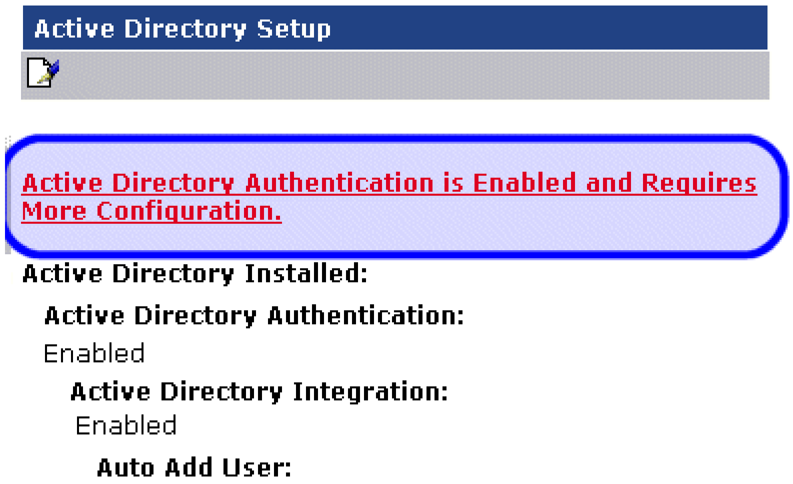
Field	Description	For more information, see
Enable LDAP Authentication	If enabled, you need to fill out the following five fields. These fields are explained in the LDAP Authentication chapter.	"Enabling LDAP" on page 15-95
LDAP Server	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 15-95
Port	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 15-95
Organization	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 15-95
Domain	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 15-95
Organizational Unit	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 15-95
Active Directory Authentication	If enabled, user authentication is functional, and you can enable the following three fields.	"User Authentication Only Mode" on page 15-80 For information on LDAP, see "LDAP Authentication" on page 15-94
Active Directory Integration	If enabled, the Active Directory feature is functional. Note: Can only be enabled if Active Directory Authentication is enabled.	"Active Directory Integration" on page 15-53
Auto Add User	If enabled, user information is copied from the AD to Ektron CMS400.NET when that user logs in or when the user is added to Ektron CMS400.NET. Note: Can only be enabled if Active Directory Integration is enabled.	"Associating User Information in AD with Ektron CMS400.NET" on page 15-61
Auto Add User To Group	If enabled, a user's group membership is first copied from the AD when a user logs in or is added. Note: Can only be enabled if Active Directory Integration is enabled.	"The Screens of the Active Directory Feature in Active Directory Integration Mode" on page 15-64
User Property Mapping		

Field	Description	For more information, see
FirstName	Enter the Active Directory Property that maps to the user's first name in Ektron CMS400.NET. By default, this is set to `givenName`, but you can change it to any AD property.	MSDN Library (http://msdn.microsoft.com/library/default.asp)> Active Directory, ADSI and Directory Services > Directory Services > Active Directory > Active Directory Reference > Active Directory User Interface Mappings.
LastName	Enter the Active Directory Property that maps to the user's last name in Ektron CMS400.NET. By default, this is set to `sn`, but you can change it to any AD property.	same reference as FirstName (above)
EmailAddr1	Enter the Active Directory Property that maps to the user's last name in Ektron CMS400.NET. By default, this is set to `mail`, but you can change it to any AD property.	same reference as FirstName (above)
Ektron CMS400.NET Administrator Group Mapping		
AD Group Name @ AD Domain	Enter the Active Directory user group and domain name that maps to the hard coded Ektron CMS400.NET administrator group. If you do not have an AD user group that includes all Ektron CMS400.NET administrators, you should create one and enter its name and domain here.	"Mapping the Administrator Group" on page 15-58

Field	Description	For more information, see
Domain	If you want to restrict the search of new users and groups to one AD domain, select that domain. If you do, the Search Active Directory for Users and Search Active Directory for Groups screens let you search in the selected domain only. Also, if any Ektron CMS400.NET user or group names include a domain (for example, admin@saturn.example.com) that is excluded by your selection, those users/groups are flagged on the Active Directory Setup and Active Directory Status screens because the names now include an invalid domain.	

Messages Near the Top of the Active Directory Setup Screen

Message	Explanation
Active Directory Authentication is Enabled and Requires More Configuration.	Some Ektron CMS400.NET users are not associated with AD users. Also, if you are using full active directory integration mode, user groups and/or user group relationships may not be associated.
Active Directory Authentication is disabled, but needs further configuration	Some Ektron CMS400.NET users and/or groups are no longer unique. This happens because, in the AD, users and groups can share a logon name as long as their domains are different. But, when AD authentication is disabled, two Ektron CMS400.NET users or groups can no longer share a name -- each must be unique.



If you see either message, click it. You proceed to the Active Directory Status screen, which helps you resolve the discrepancies.

See Also: "The Active Directory Status Screen" on page 15-71

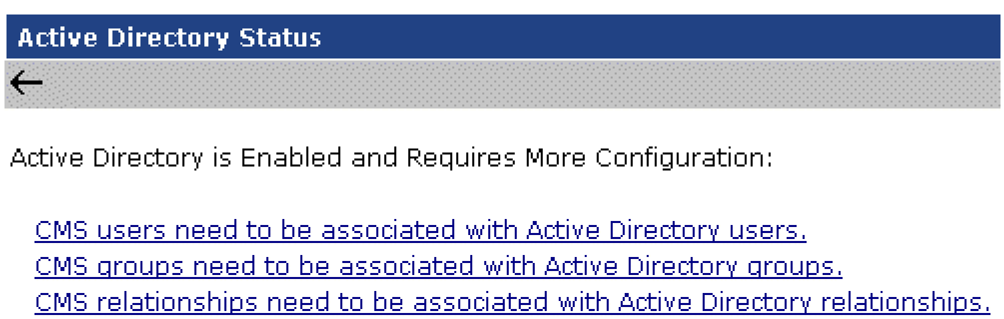
The Active Directory Status Screen

Use the Active Directory Status screen to resolve the following discrepancies between Ektron CMS400.NET and AD.

- an Ektron CMS400.NET user needs to be associated with an AD user
- an Ektron CMS400.NET user group needs to be associated with an AD user group
- an Ektron CMS400.NET user's group membership need to be associated with the same AD user's group membership

To access the screen, click **Configuration** > **Active Directory** > **Status** from the left panel of the Workarea.

.



There are several reasons why such discrepancies may occur. To learn more about why

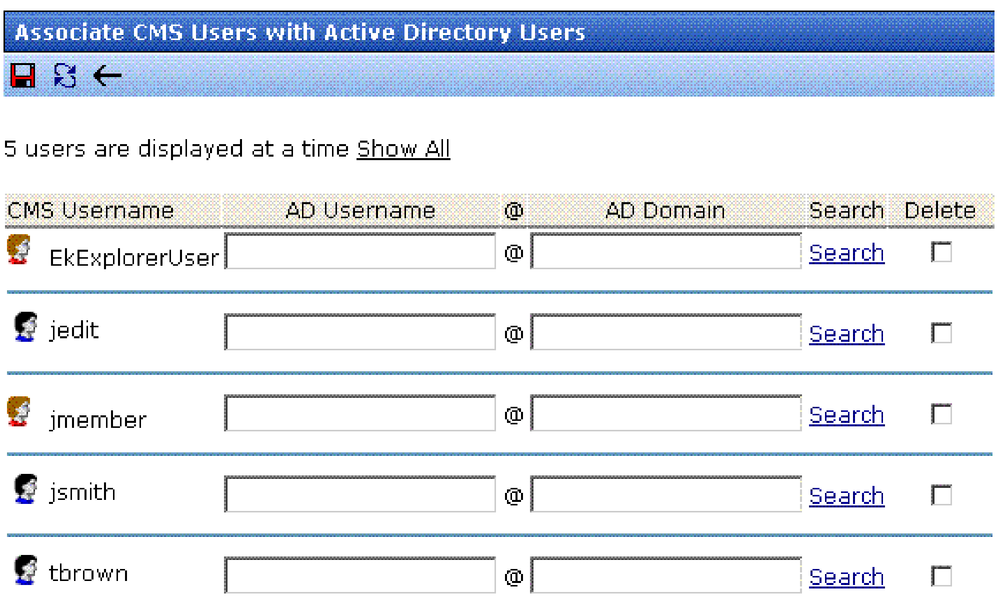
- an Ektron CMS400.NET user is not associated with an AD user, read "Associating User Information in AD with Ektron CMS400.NET" on page 15-61.
- an Ektron CMS400.NET user's group membership is not associated with the user's AD group membership, read "Associating a User's AD Group Information with Ektron CMS400.NET" on page 15-57
- an Ektron CMS400.NET group is not associated with an AD group, read "The Screens of the Active Directory Feature in Active Directory Integration Mode" on page 15-64

If you click any link on the Active Directory Status screen, a new screen appears that allows you to resolve the discrepancy. For information on how to use these screens, see the following topics.

- "Associating Ektron CMS400.NET Users with Active Directory Users" on page 15-72
- "Associating User Group Membership with Active Directory User Group Membership" on page 15-73
- "Associating Groups with Active Directory Groups" on page 15-73

Associating Ektron CMS400.NET Users with Active Directory Users

If you click **CMS users need to be associated with Active Directory users** on the Active Directory Status screen, the Associate Ektron CMS400.NET Users with Active Directory Users screen appears (illustrated below). Use this screen to associate Ektron CMS400.NET users with AD users.



If a user with the same username exists in the AD, that name and domain appear by default in the **AD Username** and **AD Domain** fields. If the user exists in the more than one AD domain (as illustrated in the first example above), select a domain from the pull-down list.

If there is no default and you know the AD user name to associate with an Ektron CMS400.NET user, enter that in the **AD Username** and **AD Domain** fields. If you do not know the AD username, click **Search** to find the user in the AD.

If you decide to change the username in AD to match the Ektron CMS400.NET username, make the change in the AD. Then, click the Refresh button ( ) to update Ektron CMS400.NET and resolve the discrepancy.

Finally, if a user should not exist in Ektron CMS400.NET, click the box under the **Delete** column to delete the user from Ektron CMS400.NET.

After you make all necessary changes, click the Save button ( ).

Associating User Group Membership with Active Directory User Group Membership

If you click **CMS relationships need to be associated with Active Directory relationships** on the Active Directory Status screen, the Associate Ektron CMS400.NET Relationships with Active Directory Relationships screen appears (illustrated below). Use this screen to coordinate Ektron CMS400.NET user group membership with AD user group membership.

The screen displays a user's group membership that exists in Ektron CMS400.NET, but does not exist in the AD.

See Also: "Associating a User's AD Group Information with Ektron CMS400.NET" on page 15-57

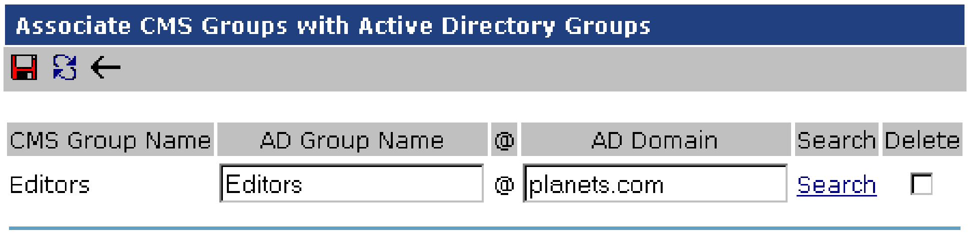
After viewing the discrepancy on the screen, you have two choices:

- To associate the user with the same user group in AD, go to the AD and assign the user to the group. Then, return to this screen and click the Refresh button ( ) to update the user group information in Ektron CMS400.NET.
- To remove the user's group membership in Ektron CMS400.NET, check the box under the **Delete** column and click the Save button ( ).

Associating Groups with Active Directory Groups

If you click **CMS groups need to be associated with Active Directory groups** on the Active Directory Status screen, the Associate Ektron CMS400.NET User Groups with Active Directory

Groups screen appears (illustrated below). Use this screen to associate Ektron CMS400.NET groups with AD groups.



If a group with the same groupname exists in the AD, that name appears by default in the **AD Group Name** field. If the group exists in the more than one domain within the AD, select a domain from the pull-down list.

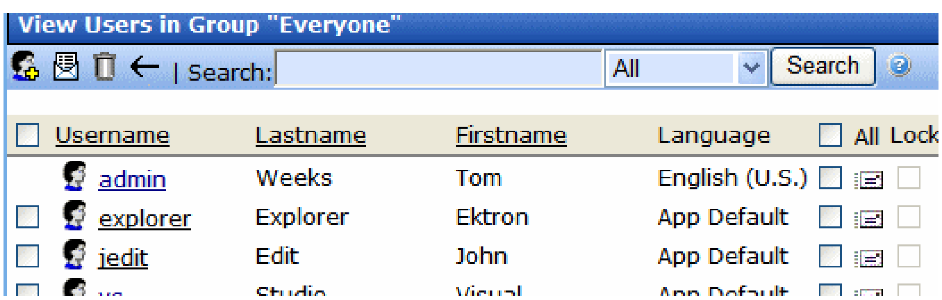
If there is no default and you know the AD group name to associate with an Ektron CMS400.NET group, enter that in the **AD Group Name** and **AD Domain** fields. If you do not know the AD groupname, click **Search** to find the group in the AD.

Finally, if this group should not exist in the Ektron CMS400.NET database, click the box under the **Delete** column to delete the group from Ektron CMS400.NET.

After you make all necessary changes, click the Save button ( ) to save them.

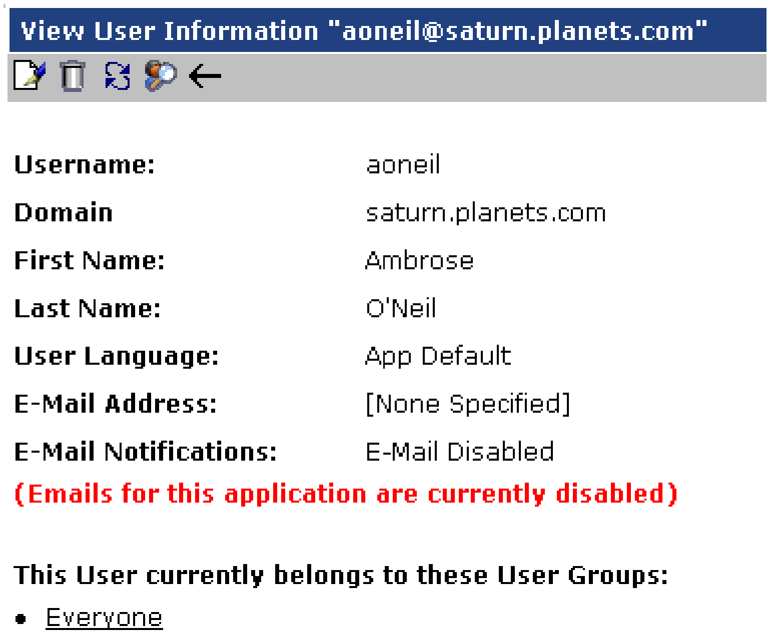
The View Users Screen

The View Users screen (illustrated below) lists all users in the Ektron CMS400.NET database. To access the screen, click **Users** from the left panel of the Workarea. To view more information for a user, click that user to move to the View User Information screen.



The View Users screen also provides a toolbar button ( ) that lets you add AD users to the Ektron CMS400.NET database. When you click it, the Search Active Directory for Users Screen appears.

The View User Information Screen



The View User Information Screen displays the user's

- username and domain
- first and last name
- language
- email address and whether the user receives email notifications
- user groups

If you are using *user authentication mode*, **username** and **domain** can only be edited in the AD. You can edit all other fields on this screen.

If you are using *full AD Integration mode*, you can only edit **language** and whether the user receives email notifications. You must edit the other fields in the AD.

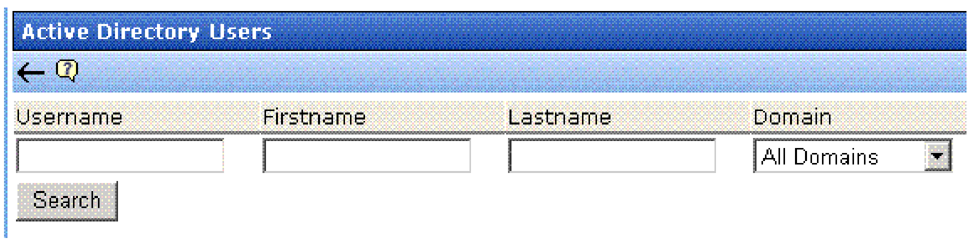
The screen also displays the following buttons.

Button	Description
	Edit information on screen
	Delete user See Also: "Deleting Users" on page 15-63
	Retrieve latest information from AD into Ektron CMS400.NET See Also: "Copying User Group Information from AD to

Button	Description
	Ektron CMS400.NET" on page 15-55 Note: This toolbar button does not appear if you are using user authentication mode.
	Replace user See Also: "Replacing a User" on page 15-63
	Return to previous screen

The Search Active Directory for Users Screen

Use this screen to add AD users to Ektron CMS400.NET. To access the screen, click **Users** from the left panel of the Workarea, then click the Add button ( ).



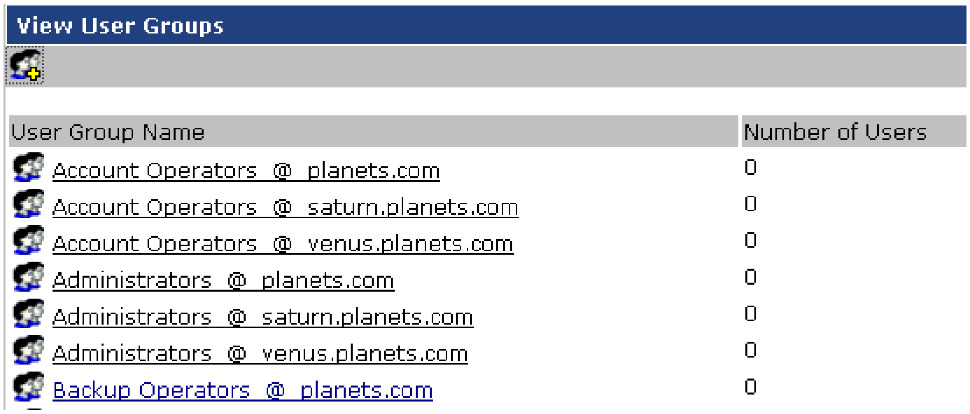
Enter as much search criteria as you know to reduce the number of users that the search yields. For example, if you know that the user's last name is Jackson and the user is in the planets domain, enter those criteria and you will get fewer hits.

When the Active Directory Users screen appears, click the box next to users that you want to create in Ektron CMS400.NET. Then, click the Save button ( ) to copy their information into Ektron CMS400.NET.

The View User Groups Screen

The View User Groups Screen displays all AD user groups that have been copied into Ektron CMS400.NET. (See "Copying User Groups from AD to Ektron CMS400.NET" on page 15-56).

To access the screen, click **User Groups** from the left panel of the Workarea.



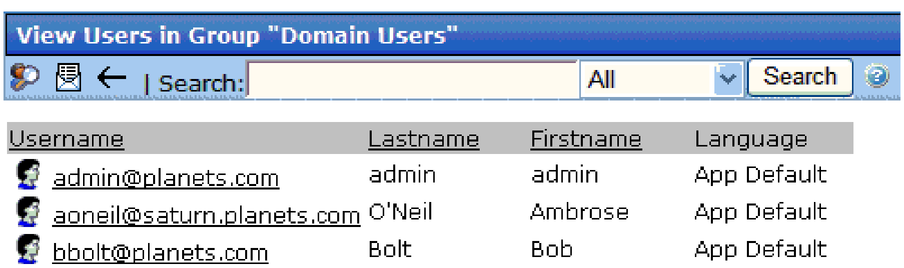
To view more information for a group, click that group to move to the View Users in Group screen.

The View User Groups screen also provides a toolbar button () that lets you add AD groups to the Ektron CMS400.NET database. When you click it, the Search Active Directory for Groups screen appears.

View Users in Group Screen

The View Users in Group Screen displays, for each user in the group

- username and domain
- first and last name
- language

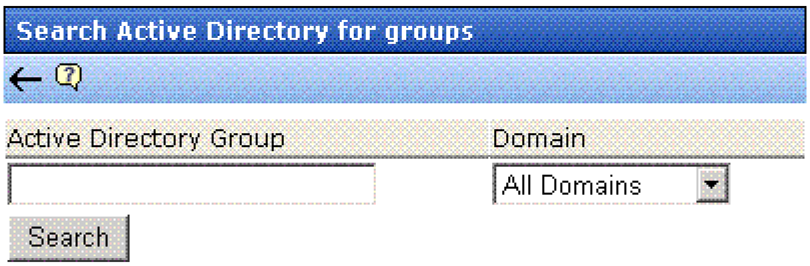


The screen also displays the following buttons.

Button	Description
	Replace group See Also: "Replacing a User Group" on page 15-60

Button	Description
	Return to previous screen

The Search Active Directory for Groups Screen



Use this screen to add AD groups to Ektron CMS400.NET. Enter as much search criteria as you know to reduce the number of groups that the search yields.

Note: You can only select AD groups that do not already exist in Ektron CMS400.NET. Also, the Active Directory Setup screen can restrict AD integration to one domain. If it does, you can only search for groups within that domain.

For example, if you know that a group begins with S and is in the planets domain, enter those criteria and you will get fewer hits.

After you click Search, a new screen appears listing all AD groups that satisfy the search criteria. Click the box next to groups that you want to create in Ektron CMS400.NET. Then, click the Save button ( ) to copy their information.

Disabling AD Integration

If you decide to disable AD authentication or integration, edit the Active Directory Setup screen and uncheck the box next to **Enable Active Directory Authentication** or **Enable Active Directory Integration**.

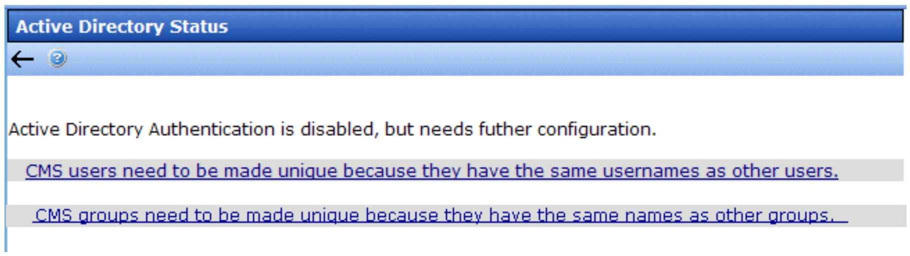
See Also: "The Active Directory Setup Screen" on page 15-66

If you do this, and any users or groups share the same name within different domains, the following message appears on the screen.

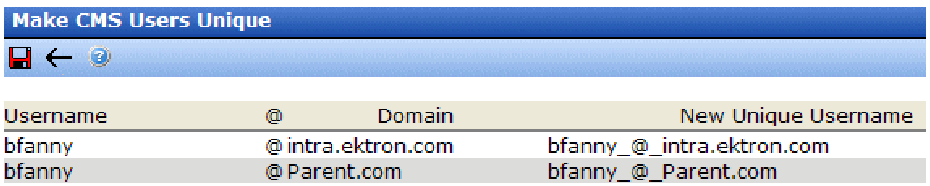
Active Directory Authentication is disabled, but needs further configuration

For example, two users are named JJackson@example.net and JJackson@example.com. When AD was enabled, the domain names made the two users unique. However, when you disable integration, the domain names are dropped, so the user names are now identical. You need to make the users unique.

If you click the message (above) on the Active Directory Setup screen, you move to the Active Directory Status screen. The following messages may appear.

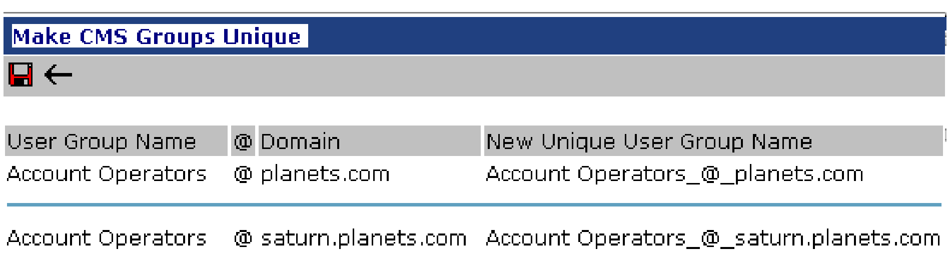


Click the message to proceed to the Make Ektron CMS400.NET Users Unique screen (illustrated below).



This screen lists all users whose user names are not unique and suggests a new, unique Ektron CMS400.NET username. The new name consists of the user name, underscore, at sign (@), underscore, the domain name. So, for example, JJackson@example.net would appear as JJackson_@_example.net.

The same is true for user groups. For example, if you had two groups name Account Operators, one in the example.com domain and another in the saturn.example.com domain, the Make Ektron CMS400.NET Groups Unique screen would look like this.



Ektron recommends that you accept the suggested new names. Click the Save ( ) button to do so.

One advantage of using the new name format is that, if you later decide to re-enable AD integration, the software can automatically associate the AD and Ektron CMS400.NET users or groups.

User Authentication Only Mode

In user authentication mode, the sharing between AD and Ektron CMS400.NET is limited to user logon name, domain, and password.

The following topics explain how to work with user authentication mode.

- "How Information is Transferred from Active Directory to Ektron CMS400.NET" on page 15-80
- "Which Information is Transferred from Active Directory to CMS400.NET" on page 15-80
- "User Groups" on page 15-81
- "Adding User Information from AD to Ektron CMS400.NET" on page 15-81
- "Editing User Information in Ektron CMS400.NET" on page 15-81
- "Deleting Users" on page 15-81
- "Replacing a User" on page 15-81
- "The Screens of the Active Directory Feature in User Authentication Mode" on page 15-82
- "Disabling AD Authentication" on page 15-82

How Information is Transferred from Active Directory to Ektron CMS400.NET

Ektron CMS400.NET does not write to the AD – it only reads from it. This results in the following changes to how the username, domain, and password are handled within Ektron CMS400.NET.

- Changes to user logon name, domain and password must be made in the AD — you cannot update these fields in the Ektron CMS400.NET Edit User screens.
- When adding a new user to Ektron CMS400.NET, you can only select AD users. If the user does not exist in the AD, create the user there, and then import the user into Ektron CMS400.NET.

Which Information is Transferred from Active Directory to CMS400.NET

CMS refers to the following AD sign-in authentication information during sign-in: password, user logon name, and domain. Note that the password is not stored in CMS — CMS only refers to the password during sign-in.

User Groups

User authentication mode has no effect on user groups. To learn more about user groups, see "Managing User Groups" on page 15-29.

Adding User Information from AD to Ektron CMS400.NET

See "Manually Adding AD User Information to Ektron CMS400.NET" on page 15-62

Changing the User Login Name in AD

If a user's *logon name* changes in the AD, it no longer matches the Ektron CMS400.NET logon name. This discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. You should proceed to the Associate Ektron CMS400.NET Users to Active Directory Users screen, where you can update the user information.

Alternatively, you could

1. Go to the View User Information screen.
2. Select the user whose AD name changed.
3. Click the Associate the Ektron CMS400.NET user with Different AD user toolbar button ().
4. Select the AD user and domain.

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 15-72

Editing User Information in Ektron CMS400.NET

Ektron CMS400.NET does not write to the AD. This means that you can only change the **Username** and **Domain** fields from the AD.

You can change the **First Name**, **Last Name**, **email Address**, **User Language** and **Disable email Notifications** fields on the Ektron CMS400.NET Edit User screen.

Deleting Users

See "Deleting Users" on page 15-63

Replacing a User

See "Replacing a User" on page 15-63

Warning! If you replace a user in user authentication-only mode, the user's first name, last name, and email address are not overwritten with information in the active directory.

The Screens of the Active Directory Feature in User Authentication Mode

Since the scope of user authentication mode is limited, only some fields on the AD screens are used. For example, on the Active Directory setup screen, the only relevant fields are authentication and domain.

See Also: "The Active Directory Setup Screen" on page 15-66

Also, on the Active Directory Status Screen, only one discrepancy message may appear:

CMS user needs to be associated with an AD user

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 15-72

The View Users Screen works the same for both modes.

See Also: "The View User Information Screen" on page 15-74

Disabling AD Authentication

See "Disabling AD Integration" on page 15-78

Logging into a System that Uses AD Integration

Because usernames and passwords are stored in the AD by domain, the AD sign on procedure requires you to select a domain name. So, if AD integration is enabled, the sign on screen includes a drop-down list that prompts the user to select a domain.

Note: Your organization determines AD domain names .

For more information about logging in, see "Logging into an Ektron CMS400.NET Web Site" on page 3-2.

This feature is explained through the following topics.

- "Single Sign On" on page 15-83
- "Setting up Single Sign On" on page 15-84

Single Sign On

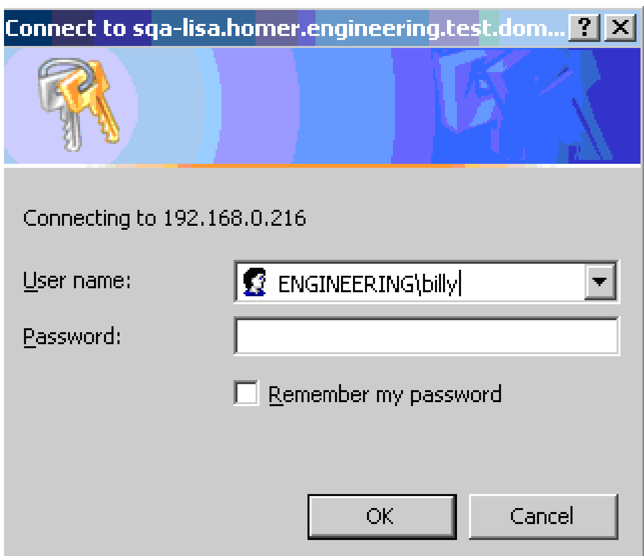
You can implement a Single Sign On feature that lets a user bypass the Login screen. The feature retrieves the user's Windows login information from the server to authenticate access to Ektron CMS400.NET.

How Single Sign on Works

The feature uses a variable called `User.Identity.Name`. This holds the user's account\domain in Active Directory, and has the format `[domain]\[username]`. For example, `EKTRON1\skearney`. This variable is set when a user authenticates against a Windows server.

When a user clicks the login server control, if the variable is passed and Active Directory is enabled, the server control opens the autologin.aspx page. Next, the opening window refreshes just like a normal login, except the user is not prompted to enter a username, password, and domain.

However, if the user's computer is not on a domain, not on the same domain as Ektron CMS400.NET, or does not include the Ektron CMS400.NET server as a trusted site, the following login screen appears.



If Active Directory is not enabled, the normal login.aspx page appears.

Setting up Single Sign On

The Single Sign On login process uses the autologin.aspx file (in the `workarea/SSO` directory) . Once set up, user authentication is enabled from any domain that this server can reach. For example, if Ektron CMS400.NET is located in a third level domain, users from third, second, and first level domains can authenticate.

- "Setting up Single Sign On Using IIS6" on page 15-85
- "Setting up Single Sign On Using IIS7" on page 15-89

After completing these procedures, enable Active Directory within Ektron CMS400.NET (if it isn't already enabled). See Also: "Setup Guidelines" on page 15-49

Ektron recommends turning on the auto add options (user and group).

Setting up Single Sign On Using IIS6

Setting up Single Sign On with IIS 6 involves these procedures.

- "Modifying Web.config for Single Sign On" on page 15-85
- "Adjusting Security Settings for the Site Root Folder" on page 15-85
- "Adjusting Security Settings for autologin.aspx" on page 15-87
- "Adjusting the Login Server Control" on page 15-88

Modifying Web.config for Single Sign On

1. Open your site root folder.
2. Open the web.config file.
3. Find the `ek_AUTH_protocol` element.
4. Change its value to **GC**. It should look like this:

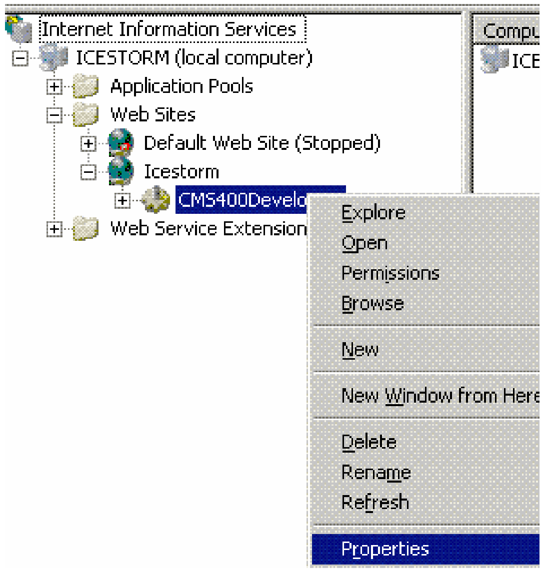
```
<add key="ek_AUTH_Protocol" value="GC" />
```

5. Find the `authentication` element.
6. Change the value of the `impersonate` attribute to **true**. It should look like this:

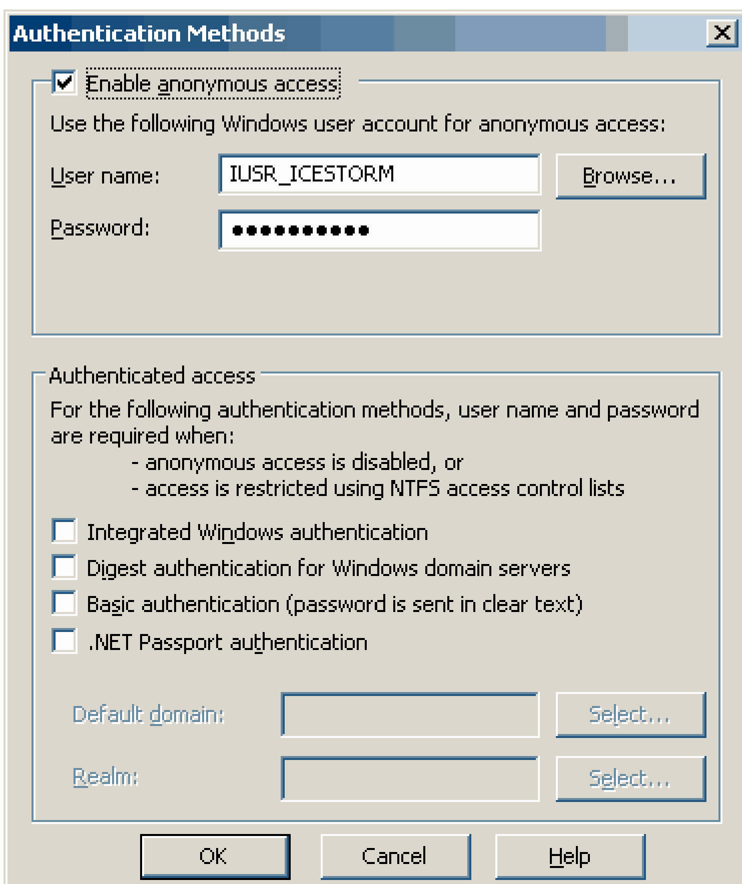
```
<authentication mode="Windows" />

<identity impersonate="true" userName="" password=""/>
```

Adjusting Security Settings for the Site Root Folder

1. Go to **Windows Control Panel > Administrative Tools > Internet Information Services**.
2. Within IIS, go to **Web Sites** and select your Ektron CMS400.NET site.
3. Right click your Ektron CMS400.NET site folder and select **Properties**.

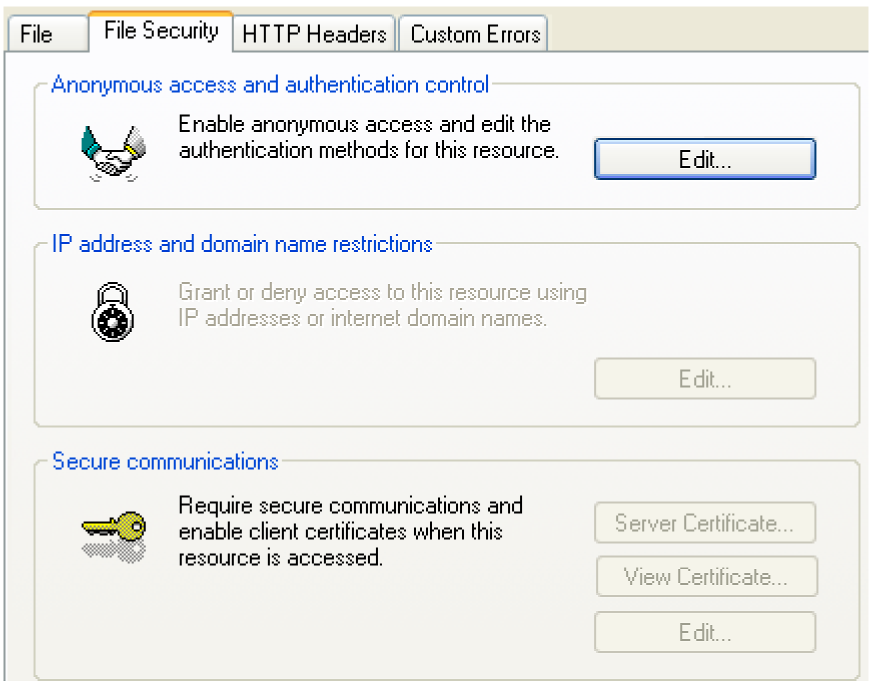


4. Click the **File/Directory Security** tab then the top **Edit** button.
5. Uncheck everything except **Anonymous Access**. The **Account used for anonymous access** should specify a domain account, preferably the root of the Active Directory tree.

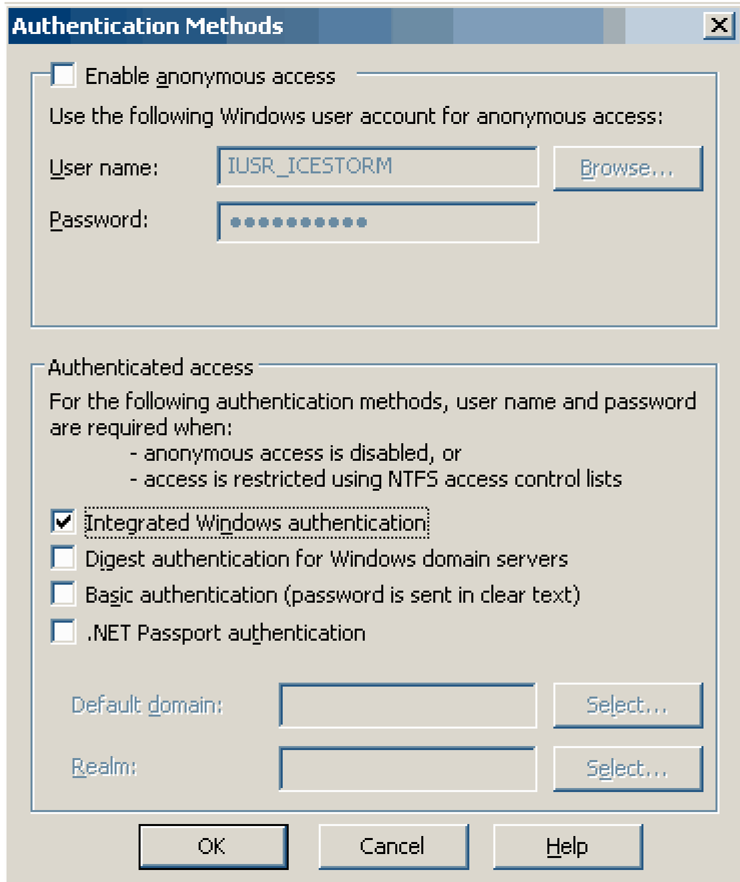


Adjusting Security Settings for autologin.aspx

1. Go to **Windows Control Panel** > **Administrative Tools** > **Internet Information Services**.
2. Within IIS, go to **Web Sites** > ***your Web site's root folder*** > **Workarea** > **SSO** > **autologin.aspx**.
3. Right click autologin.aspx and select **Properties**.
4. Click the **File security** tab and the top **Edit** button.



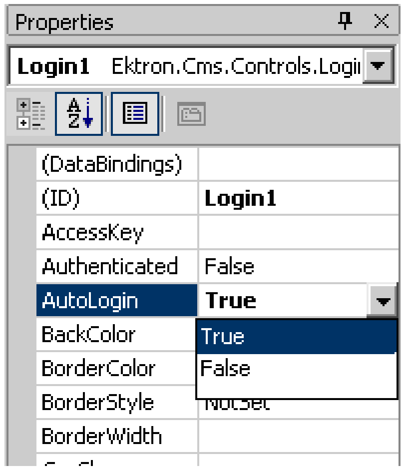
5. Under **Authenticated Access**, uncheck all except **Integrated Windows Authentication**.



As a result, autologin.aspx will pass credentials from the logged-in user's desktop.

Adjusting the Login Server Control

In Visual Studio.NET, open the Login server control and set the AutoLogin property to **True**.



Setting up Single Sign On Using IIS7

- "Modifying Web.config for Single Sign On" on page 15-85
- "Adjusting Security Settings for the Site Root Folder" on page 15-85
- "Adjusting Security Settings for autologin.aspx" on page 15-87
- "Adjusting the Login Server Control" on page 15-88

After completing these procedures, enable Active Directory within Ektron CMS400.NET (if it isn't already enabled). See Also: "Setup Guidelines" on page 15-49

Ektron recommends turning on the auto add options (user and group).

Modifying Web.config for Single Sign On

1. Open your site root folder.
2. Open the web.config file.
3. Find the `ek_AUTH_protocol` element.
4. Change its value to **GC**. It should look like this:

```
<add key="ek_AUTH_Protocol" value="GC" />
```

5. Find the `authentication` element.
6. Change the value of the `impersonate` attribute to **true**. It should look like this:

```
<authentication mode="Windows" />

<identity impersonate="true" userName="" password=""/>
```

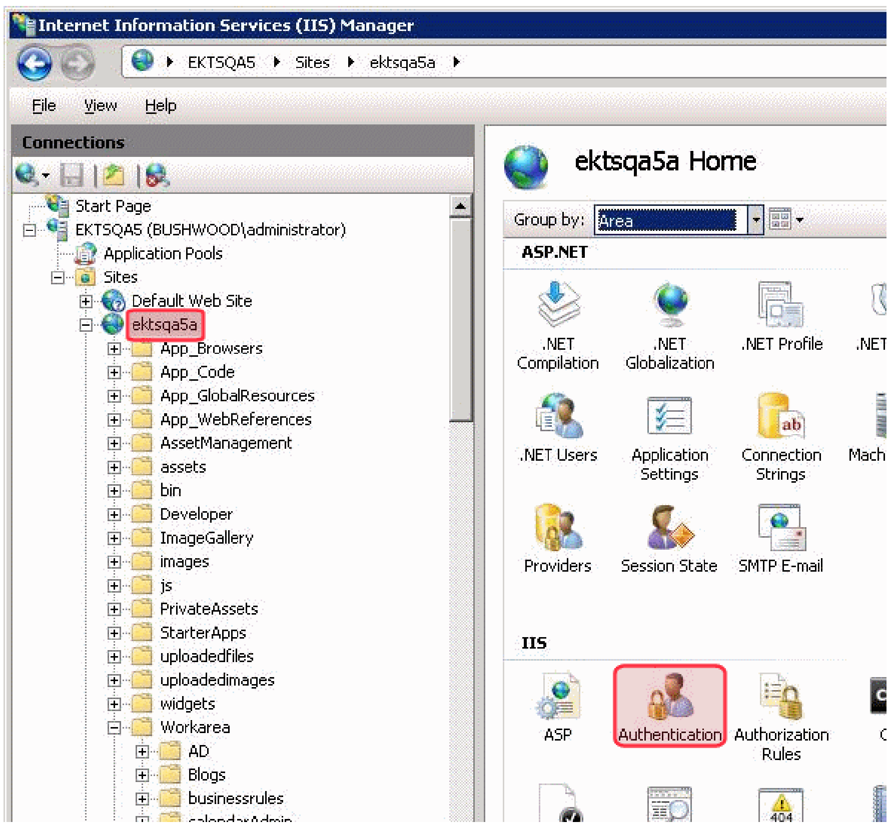
7. Comment out the following lines.

```
<!-- <httpModules>
<add name="DigestAuthenticationModule"
type="Ektron.ASM.EkHttpDavHandler.Security.DigestAuthenticationModule,Ektron.ASM.EkHttpDavHandler
 " />
```

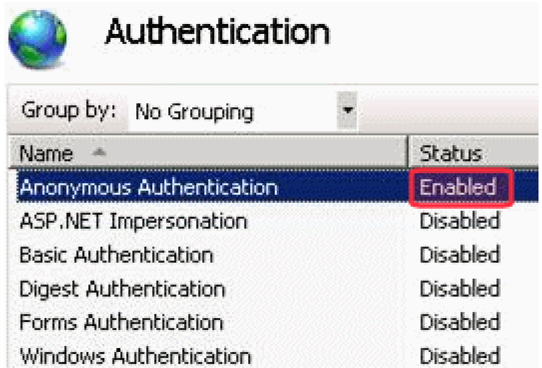
```
<add name="ScriptModule" type="System.Web.Handlers.ScriptModule, System.Web.Extensions,
Version=1.0.61025.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35" />
</httpModules>

-->
```

Adjusting Security Settings for the Site Root Folder

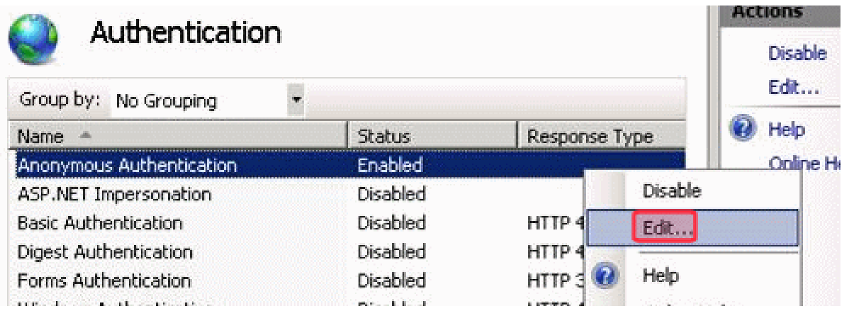
1. Go to **Windows Control Panel > Administrative Tools > Internet Information Services**.
2. Within IIS, go to **Sites** and select your Ektron CMS400.NET site.
3. From the right panel, select **Authentication**.



4. On the Authentication screen, enable **Anonymous Authentication**.



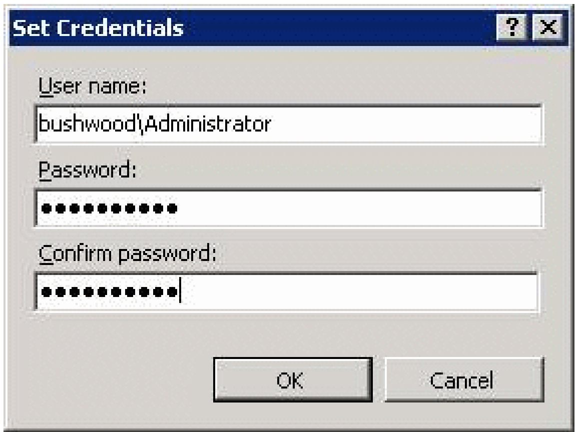
5. Select **Anonymous Authentication** and click **Edit**.



6. Set the credentials to a specific user with a domain account, preferably the root of the Active Directory tree.

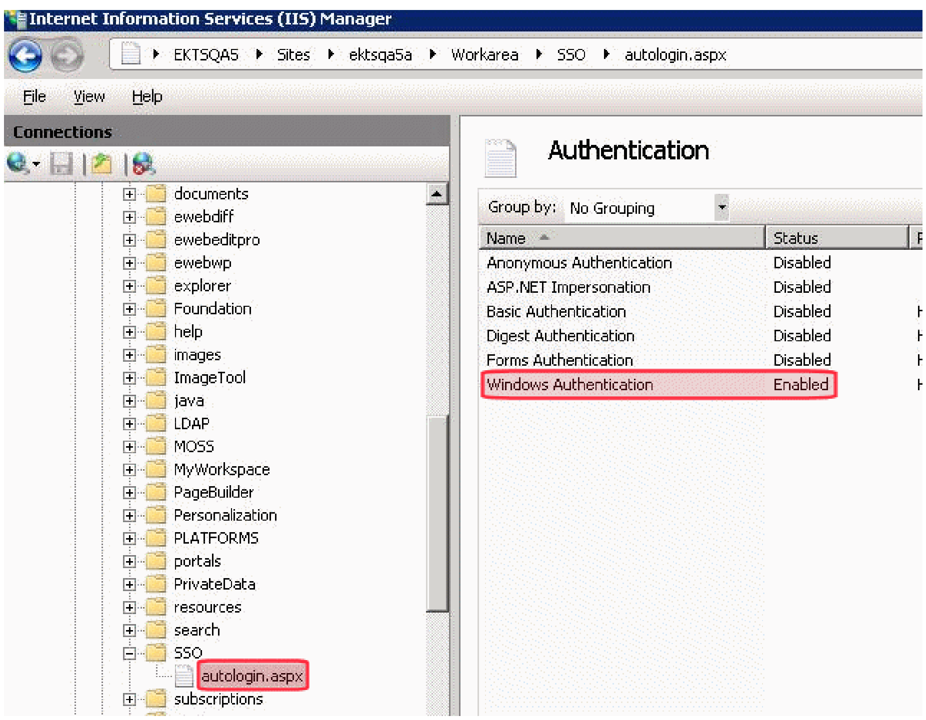
   Click **Set** to select the user.

7. Enter the username and password. Confirm the password.



Adjusting Security Settings for autologin.aspx

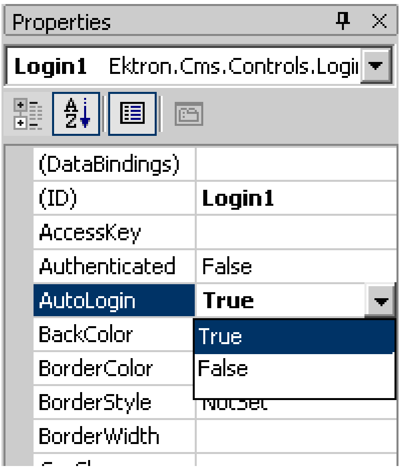
1. Go to **Windows** > **Control Panel** > **Administrative Tools** > **Internet Information Services**.
2. Within IIS, go to **Web Sites** > ***your Web site's root folder*** > **Workarea** > **SSO** > **autologin.aspx**.
3. From the right panel, enable **Windows Authentication**.



As a result, autologin.aspx will pass credentials from the logged-in user's desktop.

Adjusting the Login Server Control

In Visual Studio.NET, open the Login server control and set the AutoLogin property to **True**. (Server Controls are explained "Introduction to Ektron CMS400.NET Server Controls" on page 21-2.)



LDAP Authentication

LDAP is short for Lightweight Directory Access Protocol. It is a set of protocols that enable corporate directory entries to be arranged in a hierarchical structure which reflects geographic and organizational boundaries.

Ektron CMS400.NET's LDAP feature lets you retrieve user Login information from an LDAP server to Ektron CMS400.NET. As a result, you can administer user information from one place, and users only need to remember one password/username combination to sign on to the network and Ektron CMS400.NET.

The hierarchical structure of LDAP authentication can look a few different ways. For example, if you had the following LDAP structure, the domain would typically span multiple countries.

Note: Here is a list of the abbreviations: CN = Common Name, OU = Organizational Unit, O = Organization, DN = Distinguished Name.

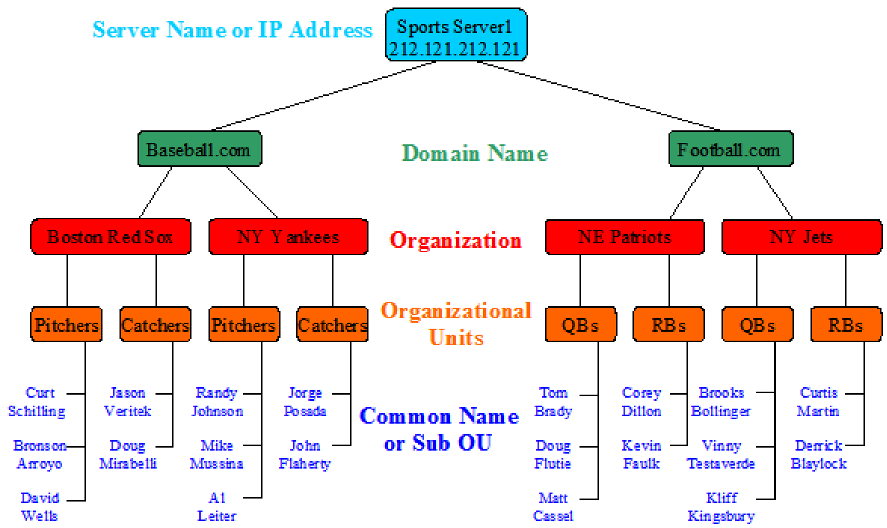
CN=Pitchers Name, OU=Pitchers, O=Baseball Team, C=US, DN=example.com

By changing the order of C and DN, the hierarchy indicates that the domain example.com is located in the US.

CN=Pitchers Name, OU=Pitchers, O=Baseball Team, DN=example.com, C=US.

In some instances, it may be necessary to have an Organization appear below an Organizational Unit. This might happen if you have your Organization Unit has it own Organizations.

Below is a visual example of an LDAP hierarchical structure.



This chapter covers the following topics:

Using LDAP with Ektron CMS400.NET

Note: Active Directory and LDAP are not the same. While they can perform some similar functions, LDAP when used with Ektron CMS400.NET only verifies user login information and creates the user in the everyone group. Active Directory can be used to verify user login information only or it can become completely integrated with Ektron CMS400.NET. To learn more about using Active Directory with Ektron CMS400.NET, see "Active Directory Feature" on page 15-48.

The following sections explain how to use LDAP with Ektron CMS400.NET.

Enabling LDAP

You enable LDAP through the Active Directory Setup screen. To enable the LDAP functionality in Ektron CMS400.NET, follow these steps. See Also: "The Active Directory Setup Screen" on page 15-105

Warning! Before enabling LDAP in Ektron CMS400.NET, make sure your LDAP server is set up and ready for use. Be sure to include an Ektron CMS400.NET administrator account for yourself. Once you enable LDAP, the only account available to access Ektron CMS400.NET without LDAP authentication is the BuiltIn account. For more information on the BuiltIn account, see "BuiltIn User" on page 19-11.

1. In the *webroot**siteroot*\web.config file, change the following line:

   ```
   <add key="ek_AUTH_Protocol" value="None"/>
   ```

   becomes

   ```
   <add key="ek_AUTH_Protocol" value="GC"/>
   ```

2. Save and close the `Web.config` file.
3. In the Workarea, navigate to the **Settings** > **Configuration** > **Active Directory** > **Setup**.
4. Click the **Edit** button ( ).

5. On the Active Directory Setup screen, choose **Enable LDAP Authentication**.
6. Fill in the following fields.

Field	Description	For more information, see
Type	Choose the type of LDAP authentication you are using. Note: Depending on your choices, the fields below may be required or disallowed. The following choices are available: - Active Directory (LDAP) - Domain allowed, Organization is not. - Novell eDirectory/NDS - Organization allowed, Domain is not. - Sun Iplanet/JSDS - Domain allowed, Organization is not. - Other - Allows both Domain and Organization	"Using Active Directory for LDAP" on page 15-97
LDAP Server	The IP Address or name of the LDAP server.	
Port	The LDAP server port that Ektron CMS400.NET communicates with. If you are unsure, consult the documentation provided with your Directory Service (such as, Novell, iPlanet, Microsoft, or Red Hat).	
Organization	The name of your company or organization. For example, Ektron, Inc. This field can be blank if you enter a domain in the **Domain** field.	
Domain	The name of the domain you are using. For example, www.ektron.com. This should be the same name you used when you received your license key. This field can be blank if you enter an organization in the **Organization** field.	
Path	The next levels below your Organization or Domain. These can include multiple levels of Organizational	

Field	Description	For more information, see
	Units. For example, Content Editors, Marketing, East Coast.	
Add	Enter your the path you would like access to in the text field and click the **Add** link. When adding Organizational Units, the paths are comma separated and run from specific to general. For example, ou=Amherst,ou=New Hampshire,o=US Do not add individual Common Names here. Only add Organizational Units that contain the people who should have access to Ektron CMS400.NET. **Warning! Important**: You can have additional Organizations below your Organization Units as long as the path on your LDAP server is the same.	"Adding an Organizational Unit During Setup" on page 15-98 To add a single individual from a different Organizational Unit, see "Adding User Information from an LDAP Server to Ektron CMS400.NET" on page 15-99
Delete	Choose any Organizational Unit from the multi-selection box and click the **Delete** link.	

7. Click the Save button ( ).

Using Active Directory for LDAP

In the *webroot**siteroot*\Web.Config file, add the Username and Password for `ek_ADUsername` and `ek_ADPassword`. For example:

```
<add key="ek_ADUsername" value="mwright@ektron.com" />

<add key="ek_ADPassword" value="mypasswordisthis" />
```

When using LDAP to connect to Active Directory, use the following settings in the Workarea.

Note: LDAP using AD is NOT the same as AD integration. LDAP integration (independent of server type) does not support groups, only user authentication.

Field	Needed Information
Type	Active Directory (LDAP)
LDAP Server	[IP Address of the AD domain controller]
Port	389
Organization	[leave this blank]
Domain	[dns name of the AD domain] For example: intra.ektron.com
Organizational Unit	[any OUs that you want to draw users from] For example: Support,Users,Ektron Corporate also Engineering,Users,Ektron Corporate

Adding an Organizational Unit During Setup

Things to consider when adding Organizational Units are:

- Should everyone in the OU have access to Ektron CMS400.NET?

Once LDAP is enabled, users are added to the everyone group upon login. While everyone in the OU has access to Ektron CMS400.NET, every user does not necessarily have permission to edit content. To control permissions, set up user groups, adding each user to a group, and assigning permissions to the group. For more information on user groups, see "Managing Users and User Groups" on page 15-1. For more information on assigning permissions, see "Folder Permissions" on page 5-43.

- Do users in other Organizational Units need access?

Sometimes, managers or editors are in a different OU. They need to be added manually, or you need to add their OU.

When adding an Organizational Unit, several entries might cover the same hierarchical path. For example, you might have:

- ou=Pitchers,ou=Players,o=Team
- ou=Players,o=Team
- o=Team

This allows you to authenticate users listed in Pitchers, Players, and Team.

Adding User Information from an LDAP Server to Ektron CMS400.NET

Users at each level are automatically available for adding to Ektron CMS400.NET. You do not have to be at the OU or CN level to add a user. If a user is at the DC or OU level, they are available.

There are three ways to add LDAP user information to Ektron CMS400.NET.

- Have the user log in after LDAP is enabled. As a result, the user appears in the Users list and is added to the Everyone group.

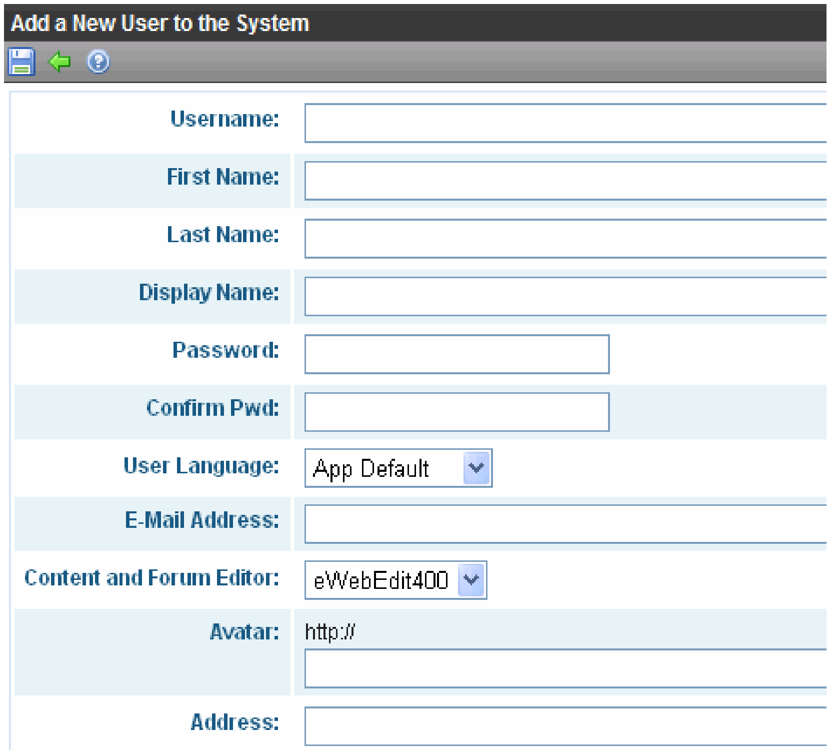
Note: After a user logs in, some fields on the Add User screen can be filled in manually, such as first and last name. For a description of these fields, see "Fill out the fields according to the table below." on page 15-101.

- Search an LDAP server for LDAP users using the LDAP Search feature. See Also: "Searching an LDAP Server for Users" on page 15-99
- Add the user's LDAP information manually. See Also: "Steps to Manually Add an LDAP User" on page 15-101.
- A combination of browsing for the user, then manually completing the remaining fields. See Also: "Using the Browse Feature to Add an LDAP User" on page 15-103

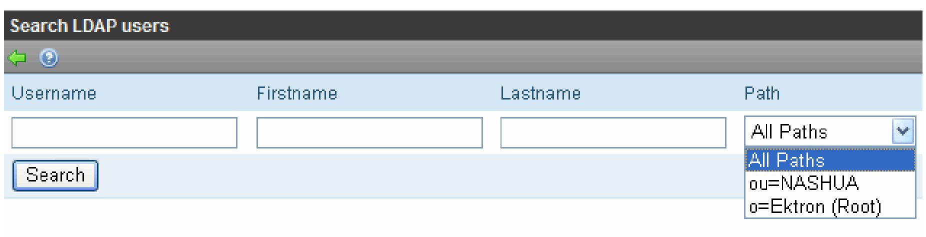
Searching an LDAP Server for Users

The following steps explain how to search for a user on an LDAP server an add them to the CMS400.NET.

1. Enable LDAP by following the instructions in "Enabling LDAP" on page 15-95.
2. From the left side of the Workarea, click **Users**.
3. Click the Add Users button ( ).
4. The Add a New User to the System screen appears.



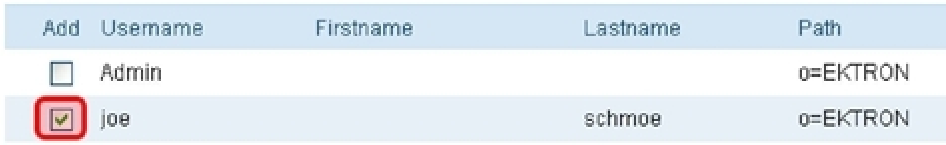
5. Click the Browse LDAP button ( ).
6. The Search LDAP Users screen appears.



7. Enter search criterion for any of the categories to search.

- **Username** - the username of the user on the LDAP server.
- **Firstname** - the first name of the user on the LDAP server.
- **Lastname** - the last name of the user on the LDAP server
- **Path** - select a path from the drop down list. The paths that are available are the same paths that are enabled when configuring the CMS400.NET for use with your LDAP server. If you select a path and enter no other information, you get back all of the users in that path.

8. Click the **Search** button.
9. The search returns any users that match the criteria entered.
10. Click the check box next to the user to be added.

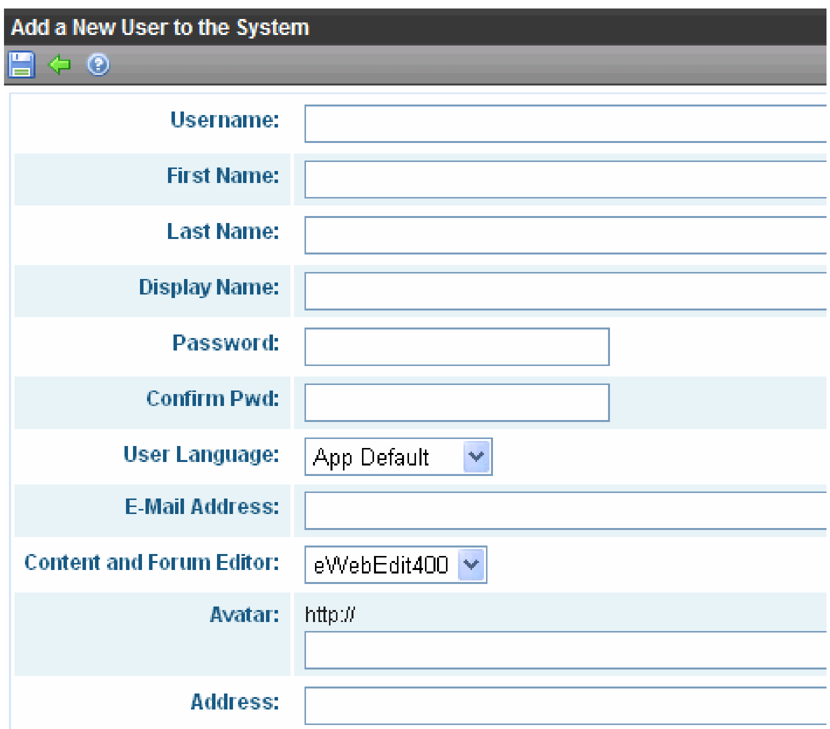


11. Click the Save button ()
12. The user is now added to Ektron CMS400.NET and added to the Everyone group. To learn about how to assign this user to a specific group, see "Assigning Users To User Groups" on page 15-30.

Steps to Manually Add an LDAP User

The following steps explain how to add an LDAP user manually.

1. Enable LDAP by following the instructions in "Enabling LDAP" on page 15-95.
2. From the left side of the Workarea, click **Users**.
3. Click the Add Users button ().
4. The Add a New User to the System screen appears.



5. Fill out the fields according to the table below.

Field	Description
Username	The username of the person logging in, as found on the LDAP server.
Path	The path on the LDAP server to the user. For example: `ou=Amherst,ou=New Hampshire,o=US,dc=local`
First Name	The first name of the user.
Last Name	The last name of the user.
Display Name	The name of the user that is displayed in the Forums when using Discussion Boards feature. See Also: "Discussion Boards" on page 7-596
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within Ektron CMS400.NET. The dropdown list of choices at this field is derived from the Language Settings screen, available from the Settings > Configuration folder. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. See Also: Multi-Language Support Note: If the selected language is not English, French or German, it is only supported after you download the Ektron CMS400.NET Language Support Program from Ektron and translate the Web site.
E-Mail Address	Enter the email address of the user.
Forum Editor	If you are using Discussion Boards feature, specify which editor this user uses when editing in the Forums. Choose from eWebEditPro or the eWebEdit400 Editor. For information on Discussion Boards, see "Discussion Boards" on page 7-596
Disable Email Notification	Select to disable email notifications for this user. If you do, the user will not receive the automatic email notification described in "Automatic eMail Notification" on page 1-116. However, this field has no effect on the user's ability to receive instant email.

6. Click **Save** ( ) to add LDAP users to Ektron CMS400.NET.
7. The View Users in Group Everyone screen appears, displaying the new user and the other Ektron CMS400.NET users. To learn about how to assign this user to a specific group, see "Assigning Users To User Groups" on page 15-30.

Using the Browse Feature to Add an LDAP User

The Browse LDAP feature provides a more friendly and intuitive way to find the username, domain/organization and organizational unit(s).

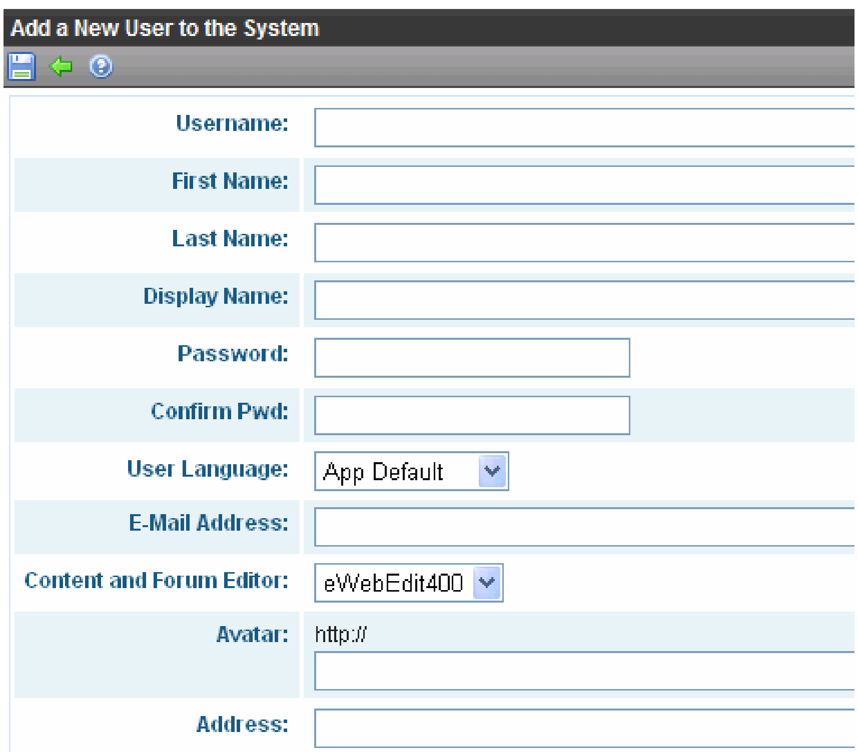
Important

Warning! The default server IP/DNS name and port are taken from the settings specified in the **Configuration > Setup** page. These settings must be specified before connecting to the LDAP server. *See Also*: "Enabling LDAP" on page 15-95

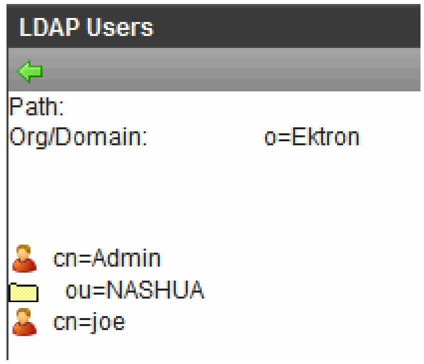
Important

Warning! An Organizational Unit that can see the user to be added must be specified in the **Configuration > Setup** page before using the browse feature. *See Also*: "Enabling LDAP" on page 15-95

1. Enable LDAP by following the instructions in "Enabling LDAP" on page 15-95.
2. From the left side of the Workarea, click **Users**.
3. Click the Add Users button ( ).
4. The Add a New User to the System screen appears.



5. Click the Browse LDAP button ( ).
6. The LDAP Explorer appears.



7. Navigate the LDAP server's folders by clicking on the folder images. Each folder represents an Organizational Unit (OU). When you choose an OU level, its users appear.

Note: In the LDAP Explorer, the Path and Org/Domain fields update dynamically as you navigate through the LDAP tree.

---

8. Select a user.
9. The user is now added to Ektron CMS400.NET and added to the Everyone group. To learn about how to assign this user to a specific group, see "Assigning Users To User Groups" on page 15-30.

Editing User Information in Ektron CMS400.NET

It is important to note that Ektron CMS400.NET does not write to the LDAP server. So, while you can change any fields when editing a user in Ektron CMS400.NET, you also need to make these changes in the LDAP server.

Steps to Edit an LDAP User's Information

The following steps explain how to edit an LDAP user's information.

1. In the Workarea, click **Settings** > **Users**.
2. In the Username column, click a user to edit.
3. The View User Information screen appears.
4. Click the Edit button ( ).
5. Change the information as needed. For more information on the fields you can edit, see "Fill out the fields according to the table below." on page 15-101.
6. Click Save ( ).

Deleting Users

If a user is deleted in an LDAP server, Ektron CMS400.NET does not automatically delete the user. However, the user's login fails because he cannot be authenticated.

In this case, you should delete the user from Ektron CMS400.NET using the Delete User function. See Also: "Deleting a User" on page 15-11

Note: If you mistakenly delete all users with administrative privileges, you can still sign in using the builtin user's username and password. For more information, see "BuiltIn User" on page 19-11.

LDAP Screen Descriptions

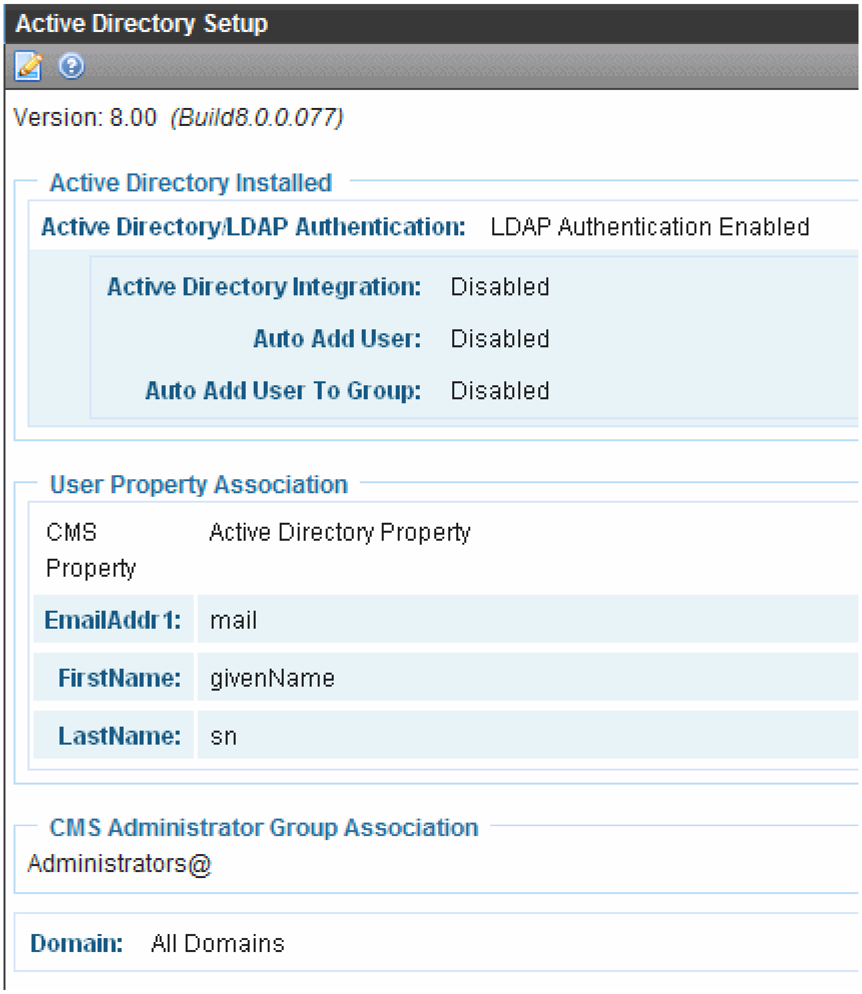
The LDAP feature uses the following screens:

- "The Active Directory Setup Screen" on page 15-105
- "The View Users Screen" on page 15-106

This section explains how to use each screen.

The Active Directory Setup Screen

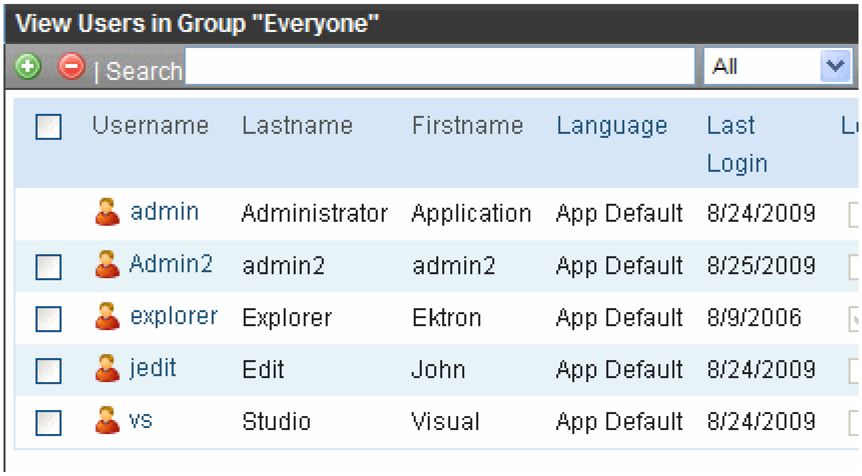
The Active Directory Setup screen (illustrated below) lets you enable and disable the Active Directory or LDAP features, as well as determine other aspects of AD management, such as whether users and groups are automatically updated. To access the screen, click **Settings** > **Configuration** -> **Active Directory** -> **Setup** from the left panel of the Workarea.



For a description of the fields, see the Active Directory section "The Active Directory Setup Screen" on page 15-105.

The View Users Screen

The View Users screen (illustrated below) lists all users in the Ektron CMS400.NET database. To access the screen, click **Users** from the left panel of the Workarea. To view more information for a user, click that user to move to the View User Information screen.



The View Users screen also provides a toolbar button ( ) that lets you add LDAP users manually to the Ektron CMS400.NET database. This is useful if you want to add a single user from an Organization that is does not have the same Organizational Unit as the rest of your users, and you do not want to add any other users from that Organization.

The View User Information Screen

The View User Information Screen displays the user's

- username
- Path
- first and last name
- language
- email address and whether the user receives email notifications
- whether the account is locked
- which Forum Editor the user is using
- user groups
- user properties (if any)

The screen also displays the following buttons.

Button	Description
	Edit information on screen
	Delete user See Also: "Deleting Users" on page 15-105
	Return to previous screen

Disabling LDAP Authentication

If you decide to disable LDAP authentication or integration, edit the Active Directory Setup screen and select **Disable Active Directory and LDAP Authentication**.

See Also: "The Active Directory Setup Screen" on page 15-105

Chapter 16

Community Management

A community is a group of people who network with each other to share information, ideas, likes and dislikes. Typically, people or members in the community are connected by a relationship. For example, they work for the same company, went to the same school, share the same values, or have a friendship.

When a person visits a community site, he can look around to see what type of information, people and groups are on the site. Typically, the person can see only limited information on the site. To see all information, he needs to become a member.

When a person signs up to be member, he defines information about himself. This is known as his member profile. After becoming a member, he can

- search for other members and add them to his friends list
- invite non-members to join the community and become a friend
- join or create a community group
- add photos
- add documents
- leave messages on another member’s message board
- write a private message to another member
- keep a journal of his thoughts
- create a list of favorite CMS400.NET content links
- have a list of content he’s added
- write content reviews
- flag content

The Community Platform in CMS400.NET is a group of features that allow users to network socially on a Web site. Access to the community platform is available from the Web site or the Workarea. Only CMS400.NET users and administrators can access their information via the Workarea. Membership Users, CMS400.NET users, and administrators can access their profile pages via a Web site.

As an Administrator, you can manage Community features from the Workarea. These features are described in the following topics:

- "Membership Users and Groups" on page 16-4
- "Accessing a Profile" on page 16-37
- "PhotoGallery Server Control" on page 16-60
- "Message Board Comments Associated with Content in the Workarea" on page 16-76
- "Community Groups" on page 16-91
  - "Community Group Server Controls" on page 16-99
- "Distributing Content to Another Ektron CMS400.NET Folder" on page 16-261

- "Flagging" on page 16-193
- "Email Invites for Community Management" on page 16-207
- "Tags" on page 16-228
- Reviews - see "Content Rating" on page 7-991
- "Assigning Templates to Groups and Members" on page 16-20

Membership Users and Groups

Membership users are a category of users who have limited privileges to Ektron CMS400.NET. Unlike regular CMS users, they cannot use the Workarea. When a membership user logs in, he can view, add and edit content from the Web site (as permitted) -- all other functionality is disabled.

Membership users can also be granted permission to view private content. This is helpful if your organization has partners who need access to Web pages that should not be visible to the general public.

When you have a Social Network or Community Web site, membership users can create an online area for themselves.

You can use Membership groups to group similar membership users.

The following topics explain membership users and groups in more detail.

Privileges of Membership Users

- They can create, edit, and view content after log in.
- They can be granted permission to view private content. See Also: "Membership User/User Group Example" on page 16-5 and ”Private Content” on page 7-237
- They can self-subscribe to receive Web Alerts. See Also: ”Web Alert Feature” on page 20-1
- If your site is a Community Web site, they become members of the community and can use the following features provided by Ektron’s Community Platform. See Also: "Community Management" on page 16-1”
  - Share their Document Workspace and Photo Gallery with other site visitors
  - Join a Community Group

- Mark content the member likes and allow site visitors to see the list of these Favorites
- Mark other members or site users as Colleagues.
- Keep a Journal about themselves.
- Add and read comments left on a Message Board
- Send and receive Messages with other registered users.

- If a Discussion Board requires sign in, they can view and post to them. See Also: ”Discussion Boards” on page 7-785
- If a blog requires authentication, they can post blog comments. See Also: ”Blogs” on page 7-640
- If a poll or survey is set up to track participating users, membership users’ names appear on the Form reports.

Membership User/User Group Example

A typical membership scenario is a Partners section of your Web site that contains private content for partners only. Set up a membership user group to include users from your partner’s organization. The group is given add and edit permissions to the Partners section. As a result, any partner can log into Ektron CMS400.NET and view, add, or edit the private content.

This topic is more fully explained through the following subtopics.

- "Accessing the Membership Folder" on page 16-5
- "Working with Membership Users" on page 16-6
- "Membership User Groups" on page 16-16
- "Assigning Permissions for Memberships" on page 16-19
- "Troubleshooting Problems with Membership Users and Groups" on page 16-23

.

Accessing the Membership Folder

Use the Membership Module folder to enter and edit membership users and user groups. To access the folder, follow these steps.

1. Navigate to **Workarea > Settings > Community Management**.
2. Click the **Memberships** folder to view its subfolders.

Folder Name	More Information
Users	"Working with Membership Users" on page 16-6
Users not Verified	"What Happens if Verification email is Used" on page 20-36
User Groups	"Membership User Groups" on page 16-16
Messages	"What Happens if Verification email is Not Used" on page 20-36

Working with Membership Users

The following sections explain all actions that may be performed on membership users via the following topics.

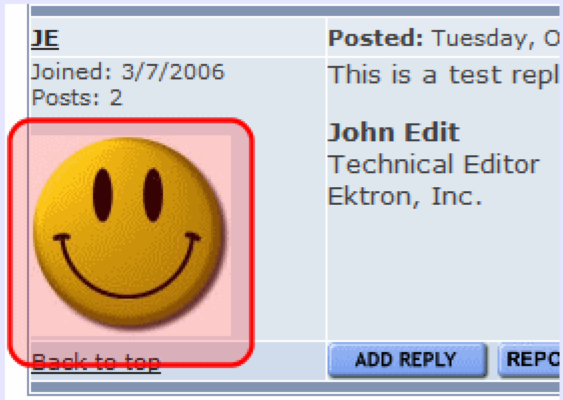
Adding Membership Users

Note: If you are using the Web Alert feature, any site visitor can sign up to be a membership user. That represents another way to add membership users. For more information, see "How Users Sign up for Subscriptions" on page 20-35.

To add a new membership user, follow these steps.

1. Form the Workarea, click **Settings** > **Community Management** > **Memberships** > **Users**.
2. Click the Add Membership User button ( ).
3. The Add Membership User screen is displayed.
4. Complete the form using the following table as a reference.

Field	Description
Username	Enter a unique username for the membership user.
First Name	Enter the first name of the user.
Last Name	Enter the last name of the user.
Display Name	The name that is used to identify a Membership user on the Web site. This can be different from their Username, which is the name you use to log into the Ektron CMS400.NET Web site. **Warning! Important:** This name needs to be unique inside CMS400.NET and it cannot be blank.
Password	Enter a password for the user.
Confirm Pwd	Re-type the password to confirm it is correct.
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within Ektron CMS400.NET. The dropdown list of choices at this field is derived from the Language Settings screen, available from the **Settings> Configuration** folder. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. See Also: "Multi-Language Support" on page 14-1 Note: If the selected language is not English, French or German, it is only supported after you download the Ektron CMS400.NET Language Support Program from Ektron and translate the Web site.
Email Address	Enter an email address for the user.
Forum Editor	Determines which editor will be used when this user replies to a Discussion Board. See Also: "Using Discussion Boards on Your Web Site" on page 7-850

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Avatar</td><td>
An image or icon to represent the user in the Forum.
Type in a web path to image. For example:
<code>http://www.example.com/smileyface.gif</code>


Changing Maximum File Size
By default, an avatar's maximum size is 200 kilobytes. The height and width of the avatar is reduced 125 pixels preserving the aspect ratio.
To change the file size maximum, edit this file:
<code>C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb</code>
In this file, change the line shown below to the desired size:
<code>If (numFileSize > 200) Then</code>
For example, to allow 500kb files, change 200 to 500.
Remember, this number is in kilobytes.
Changing Default Height and Width
To change the default height and width of the avatar, edit this file:
<code>C:\intetpub\wwwroot\<YourSite>\App_Code\VBCode\Utilities.vb</code>
In this file, change the following lines.
<code>Dim Width As Integer = 125</code>
<code>Dim Height As Integer = 125</code>
For example, to set avatars to a height and width of 166 pixels, change 125 to 166 in both lines.
</td></tr>
<tr><td>Address</td><td>The address used to find your location when a user is performing a search based on location.</td></tr>
<tr><td>Latitude</td><td>
The latitude used to find your location when a user is performing a search based on location.
Google maps provides a service that takes the address of user and returns its latitude and longitude.
Note: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.
</td></tr>
</table>

Field	Description
Longitude	The longitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of content and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.
Any custom user properties	See "Custom User Properties" on page 15-16

5. Click the Save button ( ).

See Also: "Working with Membership Users" on page 16-6

Adding Membership Users to a Membership User Group

See "Adding Membership Users to a Membership User Group" on page 16-17.

Setting Permissions on Private Content for Membership Users

See "Assigning Permissions for Memberships" on page 16-19.

Viewing Membership User Information

To view membership user information, follow these steps.

1. Access the membership users folder, as described in "Accessing the Membership Folder" on page 16-5.

Note: The `ek_PageSize` setting in the web.config file determines the maximum number of users that can appear on a page before it "breaks." When a page breaks, additional entries appear on another screen, and the following text appears near the bottom of the list:
Page 1 of 2[First Page] [Previous Page] [Next Page] [Last Page]

The View Users in Group All Members screen lets you add new users, as well as sort and search for existing users. See "Sorting Membership Users" on page 16-10 and "Searching for Membership Users" on page 16-10.

2. Click the user you want to view.
3. The View Membership User Information screen is displayed.

From this screen, you can edit or delete membership users.

Sorting Membership Users

You can arrange users on the View Users in Group All_Members screen by clicking the following column headers:

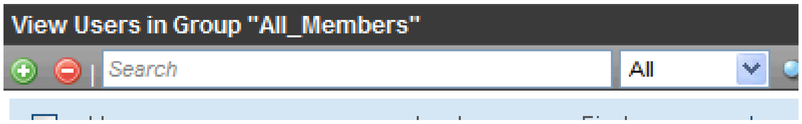
- Username
- Last Name
- First Name

By default, users are arranged alphabetically by Username, starting with the beginning of the alphabet. To switch that arrangement so that users whose username is *last* when sorted alphabetically, click the column header. To revert to the original arrangement, click the header again.

You can also sort the list by last name or first name. Like username, clicking the column header reverses the arrangement.

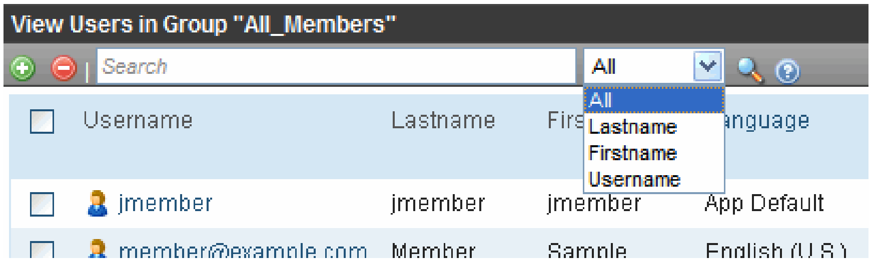
Searching for Membership Users

You can use the **Search** field (circled below) to display only users who meet your criteria. This would be especially helpful to filter out a large number of membership users.



Use the **Search** field to enter unique characters to find members you seek. For example, to find all members whose username includes **@example.com**, enter that into the **Search** field and click the **Search** button. Only users with those characters in that exact sequence in their username, first name, or last name appear on the screen.

You can also search by First and Last name fields. Click the down arrow to the left of the **Search** button to select a field to search.



The sequence of search characters must match your entry in the **Search** field. For example, if you are searching by last name and enter **MI**, anyone whose name is *Smith* appears. But, if you enter **IM,** users with the last name of *Smith* do not appear.

Also, the search is case-insensitive, so **MI** produces the same results as **mi**.

See Also: "Working with Membership Users" on page 16-6

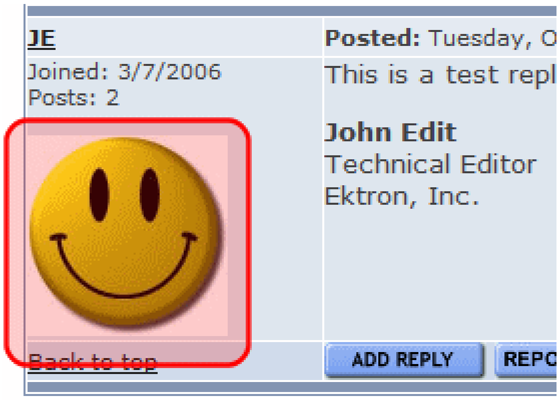
Editing Membership Users

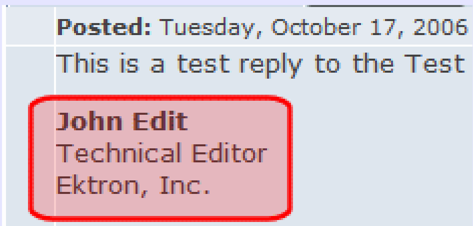
To edit a membership user, follow these steps.

1. Access the View Membership User screen of the membership user you want to edit, as described in "Viewing Membership User Information" on page 16-9.
2. Click the Edit button ( ).
3. The Edit Membership User Information screen is displayed.
4. Use the following table to assist with editing the membership user's information.

Field	Description
General tab (Tabs only appear when editing)	
Username	Enter a unique username for the membership user.
First Name	Enter the first name of the user.
Last Name	Enter the last name of the user.
Display Name	The name used to identify a Membership user on the Web site. This can be different from their Username, which is the name they use to log in to the Ektron CMS400.NET Web site. **Warning! Important:** This name needs to be unique inside CMS400.NET and it cannot be blank.
Password	Enter a password for the user.

Field	Description
Confirm Pwd	Re-type the password to confirm it is correct.
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within Ektron CMS400.NET. This field's list of choices is derived from the **Settings > Configuration > Language Settings** screen. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. See Also: "Multi-Language Support" on page 14-1 Note: If the selected language is not English, French or German, it is only supported after you download the Ektron CMS400.NET Language Support Program from Ektron and translate the Web site.
Email Address	Enter an email address for the user.
Content and Forum Editor	Determines which editor will be used when this user replies to a Discussion Board. See Also: "Using Discussion Boards on Your Web Site" on page 7-850

Field	Description
Avatar	An image or icon to represent the user in the Forum. Type in a web path to image. For example: http://www.example.com/smileyface.gif  By default, the maximum file size of an avatar is limited to 200 kilobytes and the height and width of the avatar will be reduced 125 pixels preserving the aspect ratio. To change the file size limit, edit this file: C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb In this file, change the line shown below to the size file you wish to allow. For example, to allow 500kb files, change 200 to 500. If (numFileSize > 200) Then Remember, this number is in kilobytes. To change the default height and width of the avatar, edit this file: C:\intetpub\wwwroot\<YourSite>\App_ Code\VBCode\Utilities.vb In this file, change the following lines to the size you wish to allow. For example, to make avatars have a height and width of 166 pixels, change 125 to 166 in both these lines. Dim Width As Integer = 125
Address	Enter the address used to find this user's location when a search based on location is being performed.
Latitude, Longitude	The latitude and longitude used to find this user's location when someone performs a search based on location. Google maps provides a service that takes the address of user and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.

Field	Description
Forum Signature	Adds a signature to the membership user's posts in the forum. You do not see the signature in the editor. It only appears after you click the **Post** button. 
Tags	Select from a predefined list of Tags that describe yourself. Or, create a new tag by clicking the **Click To Add A New Tag** link. Placing a check mark in the check box next to a tag activates it for your profile. See Also: "Tags" on page 16-228
User Groups (Tabs only appear when editing) - displays user groups to which member belongs. See Also: "Membership User Groups" on page 16-16	
Custom tab (Tabs only appear when editing)	
Any custom user properties	See "Custom User Properties" on page 15-16
Activities tab (Tabs only appear when editing)	
Colleagues Sub Tab	Select the notifications you want to receive when a colleague performs an activity, and the agent that transmits the notification. For example, if you want to receive email notifications when a colleague posts a blog message, you would place a check mark in the box for **Blog Post** in the email column. See Also: "Notifications" on page 16-129

Field	Description
Groups Sub Tab	Select notifications you want to receive when a member of a community group performs an activity relating to the group, the agent that transmits the notification. For example, you want to receive email notifications when a co-member of a community group posts a blog message to group's blog. To enable this, would place a check mark in the box for **Group Blog Post** in the email column. See Also: "Notifications" on page 16-129 This tab sets preferences for all community groups. **For Developers:** Ektron has created a UserGroupPreferences user control that a you can add to a community group's profile page that allows users to specify notification preferences for individual groups. This control comes with CMS400.NET and is located in: `[Drive:]\[webroot]\[siteroot]\Workarea\Notifications\Controls` To see this user control in an example site, download Ektron's **eIntranet** starter site. http://www.ektron.com/cms400-web-cms.aspx?id=5748 In this site, when a logged in member of a community group accesses his group's profile page, there is an **Edit Group Notifications Preferences** link. Clicking this link opens a thick box which contains the user control. When the user selects his preferences, they are stored for that group only.
Privacy Sub Tab	Select notifications you want publish when performing various activities on the Web site. For example, if you want to publish notifications when you posts a blog message to your blog, place a check mark in the box for **Blog Post** in the **Publish** column. See Also: "Notifications" on page 16-129

5. Click the Update button ( ).

See Also: "Working with Membership Users" on page 16-6

Deleting Membership Users

To delete a membership user, follow these steps.

1. Access the View Membership User screen of the membership user you want to edit, as described in "Viewing Membership User Information" on page 16-9.
2. Click the Delete button ( ).
3. A confirmation message is displayed.
4. Click **OK**.

See Also: "Working with Membership Users" on page 16-6

Membership User Groups

Warning! Membership User Groups and Community Groups are two different concepts. Community Groups allow users with similar interest to join together in a social networking environment. See "Community Groups" on page 16-91. Membership User Groups are explained below.

Membership user groups organize similar membership users, reducing the effort required to assign identical permissions to many users. You can assign them permission to any folder by going to **Folder Properties** > **View Permissions for Folder** > **User Type: MemberShip users**.

The following sections explain membership user group management.

- "Adding Membership User Groups" on page 16-16
- "Viewing Users in a Membership User Group" on page 16-17
- "Adding Membership Users to a Membership User Group" on page 16-17
- "Setting Permissions on Private Content for Membership User Groups" on page 16-17
- "Editing Membership User Group Name" on page 16-17
- "Deleting User from Membership User Group" on page 16-18
- "Deleting Membership User Groups" on page 16-18

Adding Membership User Groups

To create a new membership user group, follow these steps.

1. Access the membership user group folder, as described in "Accessing the Membership Folder" on page 16-5.
2. Click the Add Membership User Group button ( ).
3. The Add a New User Group screen is displayed.
4. Enter a unique name for the group.
5. Click the Save button ( ).

See Also: "Membership User Groups" on page 16-16

Viewing Users in a Membership User Group

To view the information about a membership user group, follow these steps.

1. Access the membership user group folder, as described in "Accessing the Membership Folder" on page 16-5.
2. Click the membership user group you want to view.
3. The View Users In Group screen is displayed.

See Also: "Membership User Groups" on page 16-16

Adding Membership Users to a Membership User Group

To add a membership user to a membership user group, follow these steps.

Note: Only membership users can be added to membership user groups.

---

1. Access the View Membership User Group screen for the membership user group to which you want to add a membership user, as described in "Viewing Users in a Membership User Group" on page 16-17.
2. Click the Add Membership User button ( ).
3. The Add User to Group screen is displayed.

Note: Only membership users who do not belong to the group appear.

---

4. Click the user you want to add.
5. A confirmation message is displayed.
6. Click **OK**.

See Also: "Membership User Groups" on page 16-16

Setting Permissions on Private Content for Membership User Groups

See "Assigning Permissions for Memberships" on page 16-19

Editing Membership User Group Name

To edit a membership user group name, follow these steps.

Note: The membership user group, All_members, cannot be edited.

1. Access the View Membership User Group screen for the membership group you want to edit, as described in "Viewing Users in a Membership User Group" on page 16-17.
2. Click the Edit button ( ).
3. The Edit User Group screen is displayed.
4. Change the membership group name.
5. Click the Update button ( ).

See Also: "Membership User Groups" on page 16-16

Deleting User from Membership User Group

To remove a user from a membership user group, follow these steps.

1. Access the View Membership User Group screen for the membership user group that contains the membership user you want to delete, as described in "Viewing Users in a Membership User Group" on page 16-17.
2. Click the name of the membership user you want to remove.
3. The View User Information screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.
6. Click **OK**.

See Also: "Membership User Groups" on page 16-16

Deleting Membership User Groups

To delete a membership user group, follow these steps.

1. Access the View Membership User Group screen for the membership user group you want to delete, as described in "Viewing Users in a Membership User Group" on page 16-17.
2. Click the Delete button ( ).
3. A confirmation message is displayed.
4. Click **OK**.

See Also: "Membership User Groups" on page 16-16

Assigning Permissions for Memberships

After you create membership users and groups, you can assign them permissions to Community folders only. See Also: ”Community Folders” on page 5-26

To do so, follow these steps.

1. Access the permissions table for the content or folder to which you want to assign membership permissions.

For	See
Content folders	”Setting Permissions for a Content Folder” on page 5-63
Content	”Setting Permissions for Content” on page 5-68

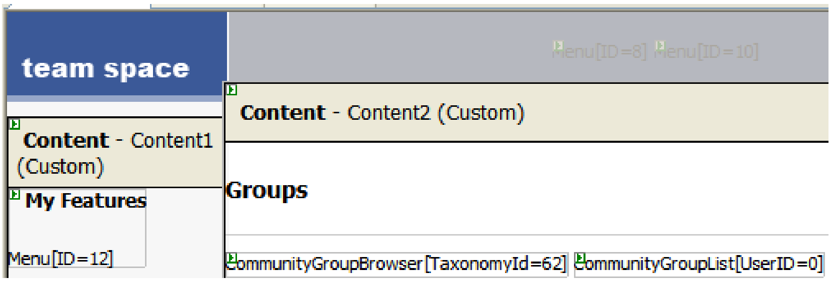
2. If necessary, break the inheritance for the content or folder. See Also: ”Inheritance” on page 5-60
3. If desired, set the folder or item to **Private**. See Also: ”Private Content” on page 7-237
4. Click **View MemberShip Users** on the right side of the permissions table.

5. The membership users/user groups added to the permissions table are displayed.
6. Click the Add button ().
7. The Add Permissions screen is displayed.
8. Click a username or user group name to add to the permissions table.
9. The Add Permissions Options screen is displayed.
10. Check appropriate permissions for the membership user or group.
11. Click the Save button ().

Assigning Templates to Groups and Members

As mentioned in "Community Management" on page 16-1, Ektron CMS400.NET 's Community Management feature supports both community and individual member pages. Like other Ektron CMS400.NET content, Community Management content appears on a dynamic Web page. Page templates determine each page's layout and location of elements (menus, content, blogs, etc.). Below is a sample Community Management template. See Also: "Creating/Updating Templates" on page 7-184

Sample Group Template within Visual Studio.NET



Sample Group Template on a Web Page

The Community Management feature includes six templates:

- Community Group
  - documents
  - photos
  - journal
- User
  - documents

- photos
- journal

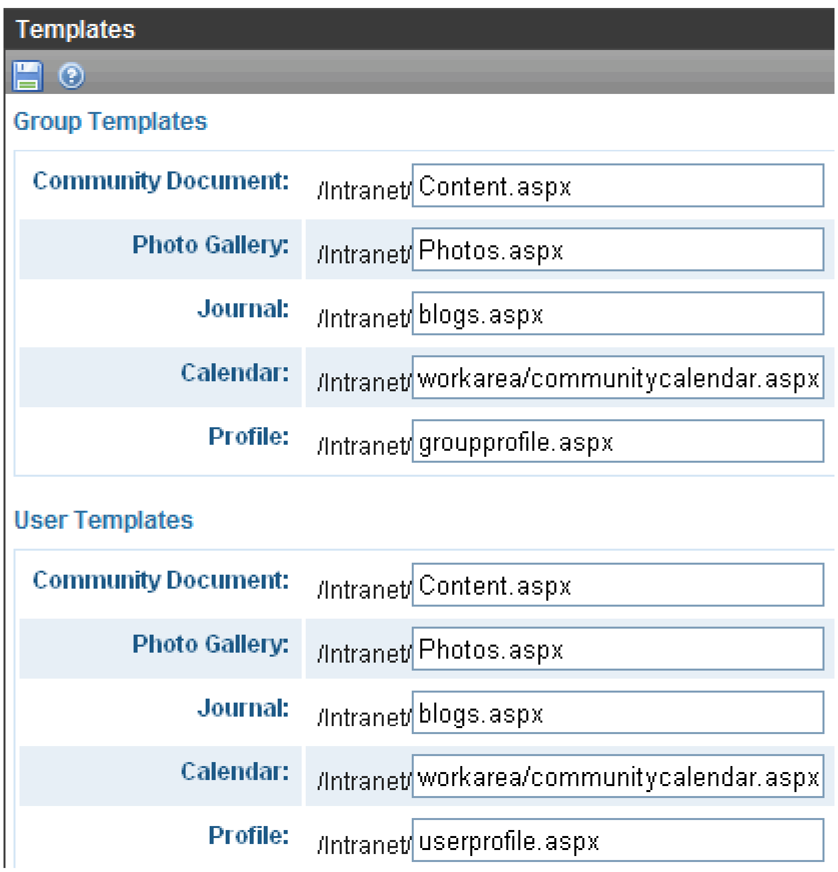
Ektron CMS400.NET provides a sample for each template. You can use the sample or create your own. If you begin with a sample template and modify it, be sure to save it under a different name to prevent it from being overwritten when you upgrade.

See Also: "The Templates Screen" on page 16-21

The Templates Screen

Use the Templates screen to assign templates to Community Management pages.

See Also: "Assigning Templates to Groups and Members" on page 16-20



The following table explains the fields on the Templates screen.

Field	Page that displays template
Group Templates	
Community Document	Page hosts the CommunityDocuments Server Control; ObjectType property is set to **Group**
Photo Gallery	Page hosts the PhotoGallery Server Control; ObjectType property is set to **Group**
Journal	Page hosts the Blog Server Control, and the blog was created for a group page
Profile	Page that hosts a Community Group Profile server control. Note, however, that a site visitor, while viewing a page, may click an icon to visit a Community Group profile from there. See image below.  In this case, if the original control has a `TemplateUserProfile` defined, that value overrides this field and defines the template in which the Community Group profile is displayed.
User Templates	
Community Document	Page hosts the CommunityDocuments Server Control; ObjectType property is set to **User**
Photo Gallery	Page hosts the PhotoGallery Server Control; ObjectType property is set to **User**
Journal	Page hosts the Blog Server Control, and the blog was created for a user page

Field	Page that displays template
Profile	Page that hosts a User Profile server control. Note that a site visitor may click an user icon to visit a user profile from another page. See image below.  In this case, if the original control has a `TemplateUserProfile` property value defined, that value overrides this field and defines the template in which the user profile is displayed.

Troubleshooting Problems with Membership Users and Groups

Symptom	Problem	Solution
Error message: `Response object error 'ASP 0251 : 80004005'`	Response Buffer exceeded its limit	Increase limit. To do so, follow these steps. 1. Stop IIS. 2. Locate the file `%WinDir%\System32\Inetsrv\Metabase.xml` 3. Modify the AspBufferingLimit value. 4. Restart IIS.

Symptom	Problem	Solution
`Response Buffer Limit Exceeded`		The default value is 4194304, which is about 4 MB. Suggest changing it to 20MB (20971520) and see if that helps.

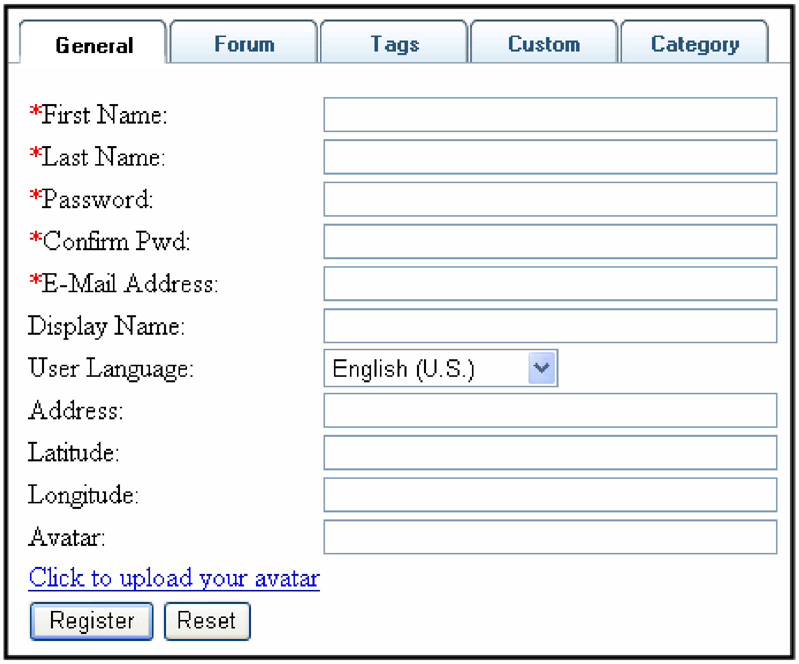
Membership Server Control

The Membership server control creates a tabbed form on a Web page that allows a site visitor to create or update a profile of themselves. The control creates the form provides tabs for site visitors to enter the following types of information.

- **General** - see "Items on the General Tab" on page 16-25
- **Forum** - see "Items on the Forum Tab" on page 16-27
- **Tags** - see "Items on the Tags Tab" on page 16-28
- **Custom** - see "Items on the Tags Tab" on page 16-28
- **Category** - see "Items on the Category Tab" on page 16-29
- **Activities** - see "Items on the Activities Tab" on page 16-30

It also provides a way to have new membership users read and accept the terms and conditions for using Discussion Boards (Forums) when needed.

Below is an example of the Membership server control when viewed on a Web page.



It is recommended that you review the following documentation when using the Membership server control.

- "Managing Users and User Groups" on page 15-1
- "Web Alert Feature" on page 20-1
- "Terms & Conditions" on page 7-798

Understanding these topics along with using this server control extends the most functionality to your membership users.

Tabs on the Membership Server Control

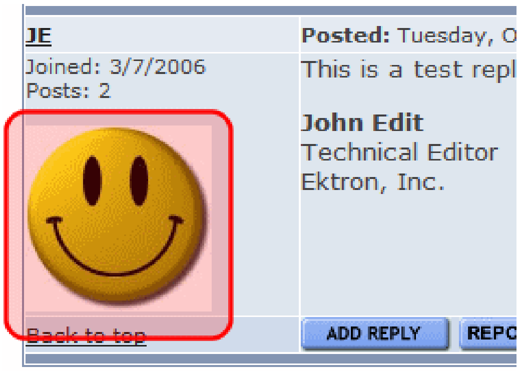
A member's profile on this server control is separated by tabs. This allows for the most functionality in the least amount of space.

Items on the General Tab

The items on the General tab define information about a membership user. When an item has an asterisk next to it, it must be filled out before the form can be submitted. The following items appear on the General Tab.

Field	Description
First Name	A user's first name.
Last Name	A user's last name.
Password	If desired, enter a new password into this field. **Note**: If you change your password, you do not need to log out then log back in. However, the next time you log in, you must use the new password.
Confirm Pwd	Confirm your new password by retyping it into this field.
E-Mail Address	Enter a new valid email address. Notification email is sent to this address unless the **Disable E-mail Notification** field is checked. To understand how email notification operates within the content workflow, see "Example of an Approval Chain" on page 5-47. Also, this address identifies the user sending Instant email. See Also: "Instant eMail" on page 1-121
Display Name	The name that is used to identify the user on the Web site. This can be different from the user's Username, which is the name you use to log into the Ektron CMS400.NET Web site.
User Language	Select a language in which to view Ektron CMS400.NET. Click the black down arrow on the right of the drop down box to see a list of choices.
Address	The address used to find your location when a user is performing a search based on location.
Latitude	The latitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of user and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.
Longitude	The longitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of content and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.

Field	Description

Avatar	An image or icon to represent you on the Web site. Click the **Click to upload your avatar** link to upload an avatar to the system. This link is controlled by the AllowAvatarUpload property.
	
	By default, the maximum file size of an avatar is limited to 200 kilobytes and the height and width of the avatar will be reduced 125 pixels preserving the aspect ratio.
	
	To change the file size limit, edit this file:
	`C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb`
	In this file, change the line shown below to the size file you wish to allow. For example, to allow 500kb files, change 200 to 500.
	`If (numFileSize > 200) Then`
	Remember, this number is in kilobytes.
	
	To change the default height and width of the avatar, edit this file:
	`C:\intetpub\wwwroot\<YourSite>\App_Code\VBCode\Utilities.vb`
	In this file, change the following lines to the size you wish to allow. For example, to make avatars have a height and width of 166 pixels, change 125 to 166 in both these lines.
	`Dim Width As Integer = 125`
	`Dim Height As Integer = 125`

Items on the Forum Tab

The Forum tab allows a user select settings for the Forum. The following items appear on the General Tab.

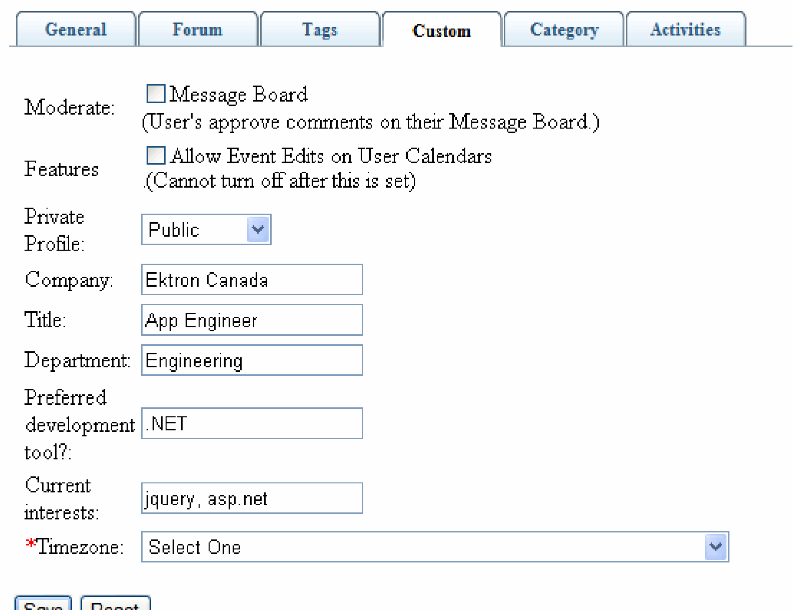
Field	Description
Forum Editor	Select the type of editor to use when creating Forum posts.
Topics per Page	The amount of Forum topics displayed on a page.
Forum Signature	In the text area, add a signature. This signature will be appended to all posts submitted by a user. For example: Regards, John Edit Content Creator Custom Content Creations, Inc.

Items on the Tags Tab

Tags allow users to identify themselves by means of a common term. A user can select from a predefined list of Tags. Or, create a new tag by clicking the **Click To Add A New Tag** link. Placing a check mark in the check box next to a tag activates it for a user's profile.

Items on the Custom Tab

The Custom tab displays custom settings for Message Boards and User calendars as well as Privacy Settings and User Properties that are created by the administrator of the site.



Put a check mark in the Moderate Message Board checkbox to allow the member to moderate or approve comments made on their personal message board.

Put a check mark in the checkbox that says Allow Event Edits on User Calendars to let this person edit events on their calendar. If this is unchecked, the calendar is displayed but events cannot be added

Select whether this profile is displayed to any visitor or privately to only colleagues.

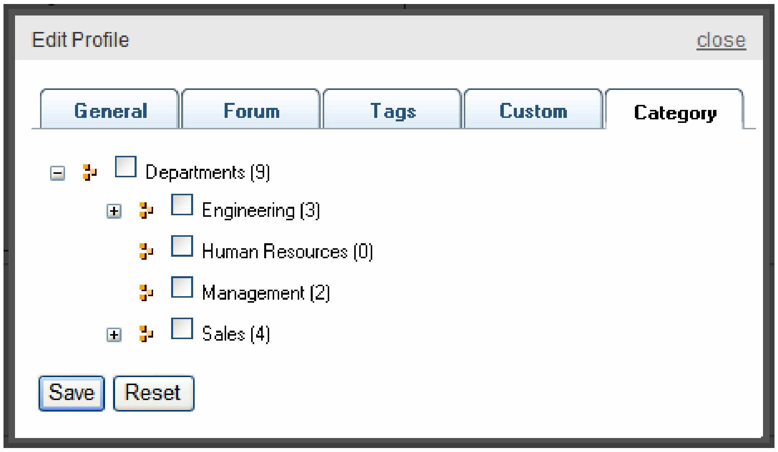
The fields that follow are created by the administrator in the Settings > User Properties section. See Also: "Custom User Properties" on page 15-16

For example, subscriptions, an employee ID or a user's birthday might appear on this tab. Unlike items on the General tab, these items change from organization to organization. If an administrator creates a property such as Employee ID number, it appears even when a membership user views this form. The Membership server control's `ShowExtended` property allows you to decide if want the custom user properties to appear when the form is viewed.

Items on the Category Tab

The Category tab allows a user to select from a list of taxonomy categories that they wish to be associated with. You can choose which taxonomy appears on the tab by setting the `TaxonomyID` property.

Warning! The Category tab appears only when an ID is assigned to the `TaxonomyID` property.



Items on the Activities Tab

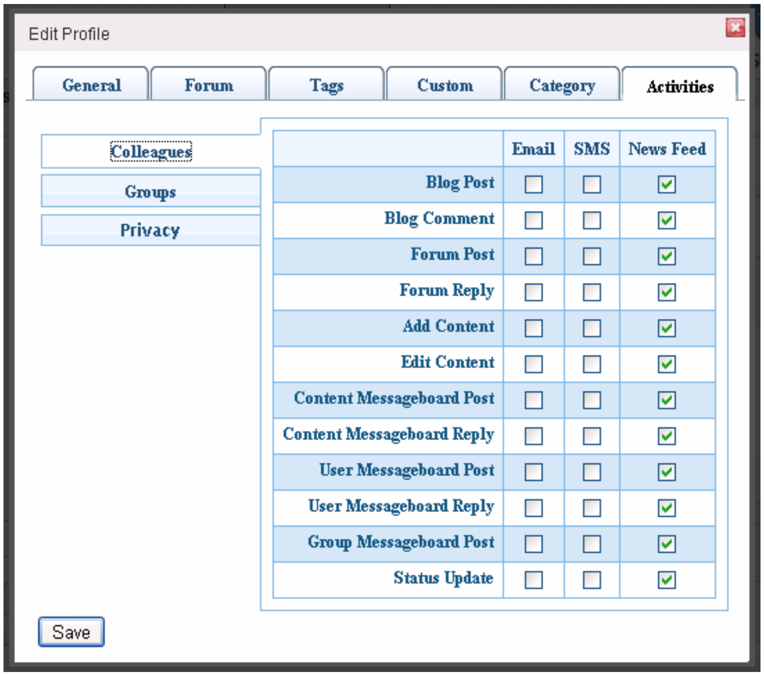
The Activities tab allows a user to select the activities for which he will receive notification messages and the means by which these messages are sent. Notifications are messages that are sent from one user to another when certain activities happen.

Notification messages are sent through an "agent" which determines how the notification is handled. For example, users can receive notifications via the ActivityStream server control, email or SMS. The agents that are available are determined by an Administrator in the **Workarea** > **Settings** > **Community Management** > **Notifications** > **Agents** screen. See Also: "Review Notification Agents" on page 16-136

The Activities tab has three sub tabs,

- **Colleagues tab** - used to select which notifications are received from colleagues when they perform certain actions.
- **Groups tab** - used to select which notifications are received from members of a community group when a user in the group performs an action related to the group.
- **Privacy tab** - allows a user to decide which activities generate notifications when he performs an action.

The image below show a user who has chosen to receive all notification messages through the ActivityStream server control.



Membership Server Control Properties

The following table explains the properties of the Membership server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
AllowAvatarUpload	When set to **Active**, the **Click to upload your avatar** link appears on the General tab. This allows site visitors to upload an avatar when registering for the site. When set to **Disable**, the link is hidden. If you want to force site visitors to choose from a predefined gallery of avatars, enter a path to the template containing the avatars. The predefined gallery appears in a pop-up window. If you want to adjust the properties of this window, edit the `<siteroot>\<webroot>\workarea\java\membershiptabs.js` file.	String

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
BoardID	The ID of the Discussion Board for which to show the Terms and Conditions. See Also: "ShowTerms" on page 16-36. If you don't know the ID, click the Ellipses button (...), then sign in, browse to and select the Discussion Board. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	Long
DisplayMode	The type of membership form displayed. Choose from the following. - **UserRegistration** - Lets a site visitor register as a membership user. - **ResetPassword** - Lets a membership user reset his password. - **UnsubscribeSecured** - Lets a membership user unsubscribe. He needs to enter his username and password. - **UnsubscribeUnsecured** - Lets a membership user unsubscribe by entering his membership username only. - **AccountActivate** - Let a site visitor activate his membership account by entering the ID number in the account verification email. For more information, see "DisplayMode" on page 16-35.	Mode
DynamicParameter	To make this control dynamic, select id. When you do, this server control is attached to the user passed as a URL parameter.	
Hide	Used to hide login button in design time and run time. **True** = Hide login button **False** = Show login button	Boolean
JavascriptEditorHeight	**Note:** As of version 7.6, the JavaScript editor has been removed from the product. This property has been deprecated. Set the height in pixels for the Signature editor. The default is **300**.	Integer
JavascriptEditorWidth	**Note:** As of version 7.6, the JavaScript editor has been removed from the product. This property has been deprecated. Set the width in pixels for the Signature editor. The default is **360**.	Integer
Language	Set a language for the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Value	Data Type
RedirectFailedURL	The URL where a membership user is sent if the registration fails. ■ If the page resides in the same folder as the registration page, enter the name of the page. For example, **RegFailed.aspx**. ■ If the redirect page is located in a subfolder, add the folder path. For example, **members\RegFailed.aspx**.	String
RedirectSucessURL	The URL where a membership user is sent when the registration succeeds. ■ If the page resides in the same folder as the registration page, enter the name of the page. For example, **RegSucceed.aspx**. ■ If the redirect page is located in a subfolder, add the folder path. For example, **members\RegSucceed.aspx**.	String

RegisterButtonImg	Lets you add an image in place of the text on the register button. Enter a path to the image. For example:
	`http://www.example.com/buttons/registerbutton.gif`
	If the image is located in the site root, you do not need to enter the full path. Only enter the subfolder path and image name. For example:
	`/buttons/registerbutton.gif`
		String

RegisterButtonText	Text that appears on the Register button. The default is **Register**. If you use a register button image, you do not see this text.	String

ResetButtonImg	Lets you add an image in place of the text on the reset button. Enter a path to the image. For example:
	`http://www.example.com/buttons/resetbutton.gif`
	If the image is located in the site root, you do not need to enter the full path. Only enter the subfolder path and image name. For example:
	`/buttons/resetbutton.gif`
		String

ResetButtonText	Text that appears on the reset button. The default is **Reset**. If you use a reset button image, you do not see this text.	String

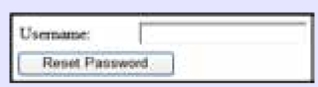
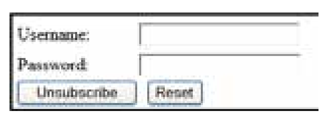
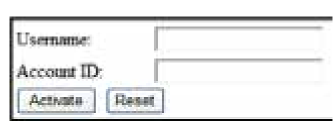
SaveButtonImg	Lets you add an image in place of the text on the save button. Enter a path to the image. For example:
	`http://www.example.com/buttons/savebutton.gif`
	If the image is located in the site root, you do not need to enter the full path. Only enter the subfolder path and image name. For example:
	`/buttons/savebutton.gif`
		String

Property	Value	Data Type
SaveButtonText	Text that appears on the save button. The default is **Save**. If you use a save button image, you do not see this text.	String
ShowExtended	Decide if the Custom User Properties Tab is available when using this control. The default setting is **True**. **True** - Show Custom User Properties tab. **False** - Hide Custom User Properties tab. **Note:** For more information, see "Custom User Properties" on page 15-16.	String
ShowTerms	When set to True, this property shows the Terms and Conditions as defined in the Workarea. In addition, users are asked to check a box stating they have read and agree to abide by the terms and conditions of the forum. Default is **False**. See Also: "ShowTerms" on page 16-36 and "Terms & Conditions" on page 7-798	Boolean
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TaxonomyID	The numeric ID of the taxonomy that is available to users. A user editing or creating a profile can select which categories to associate with their profiles. See Also: "Items on the Category Tab" on page 16-29 and "Taxonomy" on page 9-253	Long
UserExists Message	The message that appears when a membership user already exists. The default message is: **Username(email) already exists!**	String
UserSuccessMessage	The message that appears when a membership user successfully registers. The default message is: **You have registered successfully**. You can also use this property to set the message that appears when users successfully unsubscribe or reset their password. To do this, enter the success message in this property and set the `DisplayMode` property to the proper usage.	String
UserUpdateSuccessMessage	The message that appears when a membership user successfully updates their information. The default message is: **You have successfully updated your information.**	String

Property	Value	Data Type
WrapTag	Allows a developer to specify a server control’s tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

DisplayMode

Lets a developer decide what type of membership form is added to the Web form. The following table describes settings for the `DisplayMode` property.

Setting	Description	Example
User Registration	Lets a site visitor register as a membership user. This mode also allows membership users to update their information and preferences when they are logged in.	
Reset Password	Lets a membership user reset his password.	
Unsubscribe Secured	Lets a membership user unsubscribe. The membership user needs to enter his username and password to unsubscribe.	
Unsubscribe Unsecured	Lets a membership user unsubscribe by entering his membership username only.	
Account Activate	Let a site visitor activate his membership account by entering the ID number sent him in the account verification email.	

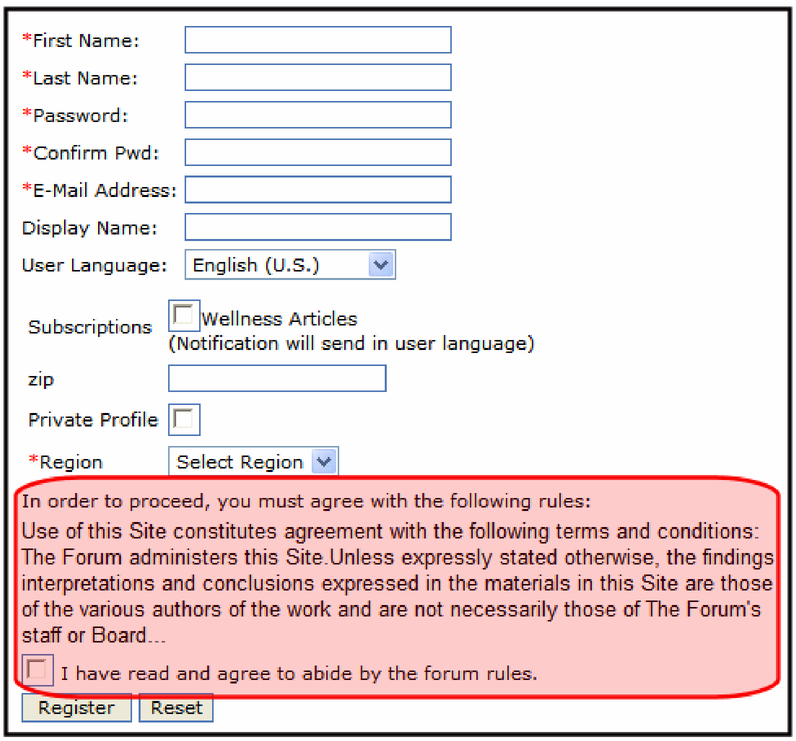
ShowTerms

Setting the `ShowTerms` property to True allows you to show the Terms and Conditions for the forum. In addition, users are asked to check a box stating they have read and agree to abide by the terms and conditions of the forum.

Terms and Conditions are added in the Workarea. See Also: "Terms & Conditions" on page 7-798

Note: If there are no Terms and Conditions defined in the Workarea, setting the `ShowTerms` property to True does nothing.

Setting this property to False hides the terms and conditions of the forum. If Terms and Conditions are defined in the Workarea and this property is set to False, users will still have to read and accept the Terms and Conditions the first time they create a post or a reply.



Accessing a Profile

A Profile provides users with information about a user. Administrators can access user profiles from the Workarea. CMS400.NET users can access their profile from the Workarea or the Web site. Membership users can only access their profile page from the Web site.

Warning! For CMS400.NET users, some profile information in the Workarea's **View User Information** screen is not available on the Web site profile page. That information involves Workarea settings.

Profiles in the Workarea

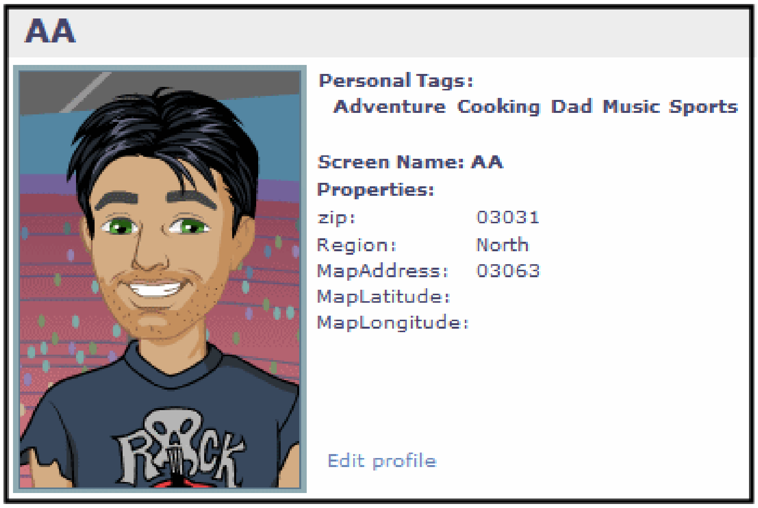
In the Workarea, profiles are located in the following areas:

- For CMS400.NET Users - navigate to **Settings** > **Users**. See "Managing Users" on page 15-3
- For Membership Users - navigate to **Settings** > **Community Management** > **Memberships** > **Users**. See the "Working with Membership Users" on page 16-6

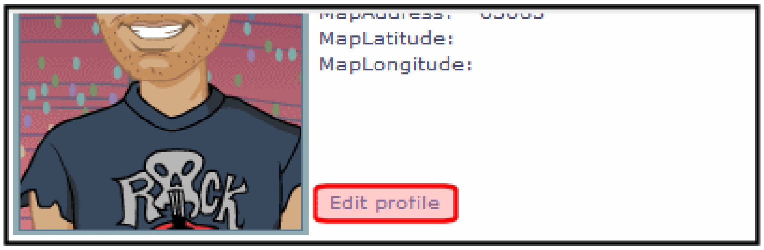
UserProfile Server Control

The UserProfile control displays information about a user. A user's Profile page is their home on the Web site. The following information is displayed in a user's profile.

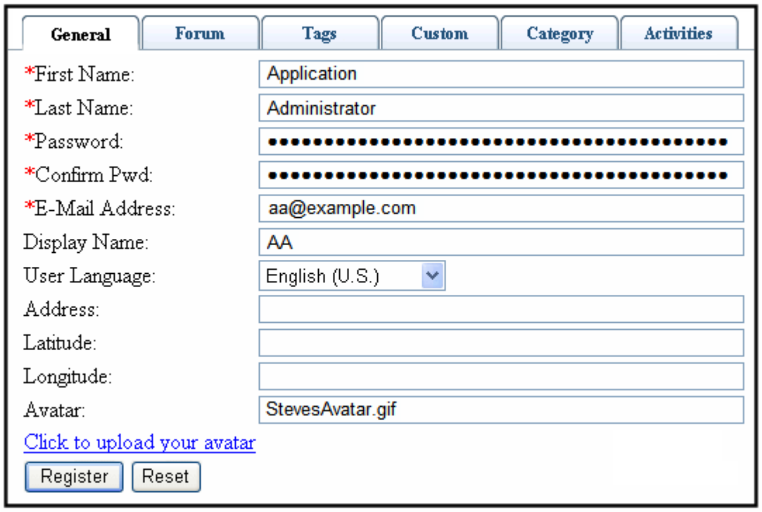
- The user's Avatar
- Any Personal Tags associated with the user
- The user's Screen Name
- Any Custom Properties associated with the user



In addition to displaying profile information, logged in users can edit their profile by clicking the **Edit Profile** link. When a user clicks this link, a dialog appears allowing the user to edit any of the available information.



This dialog box is the same dialog that a membership user uses to create an account on the site. See "Tabs on the Membership Server Control" on page 16-25 for a description of the tabs an fields contained in this dialog.



UserProfile Server Control Properties

The UserProfile server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
AvatarHeight	The display height of the avatar in the profile area.	Integer
AvatarWidth	The display width of the avatar in the profile area.	Integer
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred).	Double

Property	Description	Data Type
	See Also: "Caching with Server Controls" on page 21-42	
DefaultUserID	The default user ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicParameter	Gets or sets the QueryString parameter to read a user ID dynamically. To use the default object ID, leave blank.	String
EnableEmailDisplay	Set to True to display a user's email address in his profile. If a user's **Private Profile** setting is set to Private, his profile information is not visible, regardless of this property's setting. If Private Profile is set to Colleagues, only a user's colleagues can see email information. **True** - display a user's email address in his profile. **False** - do not display a user's email address in his profile.	Boolean
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the server control. This property shows information in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Description	Data Type
Stylesheet	Specify the path to a style sheet for use with the Documents server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TagTemplate	The Web page template that contains the CommunitySearch server control. This allows users to perform a search for users with the same tags. When template is entered, Personal Tags in the Profile appear as links. Clicking a tag forwards the user to the User Search page that displays the search results for the matching tag.	String
TagTemplateTarget	Determines the type of window that appears on this Web form when a user clicks an item in the server control. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
TaxonomyId	The numeric ID of the taxonomy that is available to users. A user editing a profile can select which categories to associate with their profiles. See Also: "Items on the Category Tab" on page 16-29; "Taxonomy" on page 9-253	Long
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Friends Server Control

Part of the Community Platform, the Friends server control displays a list of users who are colleagues of the member you are viewing. This control is typically located on a User's profile page. The control can be set to display a list of:

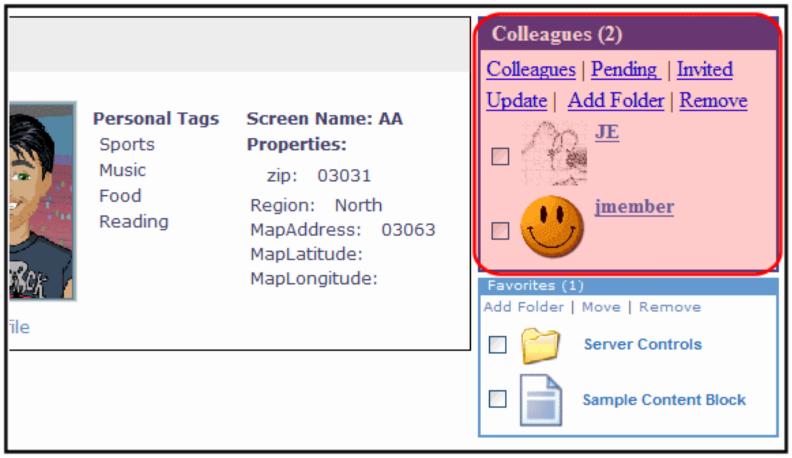
- current colleagues
- current colleagues sorted into folders
- pending colleagues
- invited colleagues

In addition, you can set the control to allow a user to navigate between these views. Clicking a user link in the list takes you to user's profile page.

When the Friends server control is in Pending Colleagues mode, a logged in user can approve or decline his pending colleague requests. When it's in Invited mode, a logged in user can cancel colleague invites he has sent, but have yet to be accepted.

The control also allows a user to mark a colleague as a Selected Colleague. Selected colleagues are allowed to view documents and photos that regular colleagues and the public cannot view.

The following topics are covered in this section:



Setting the Friends Server Control's Display Mode

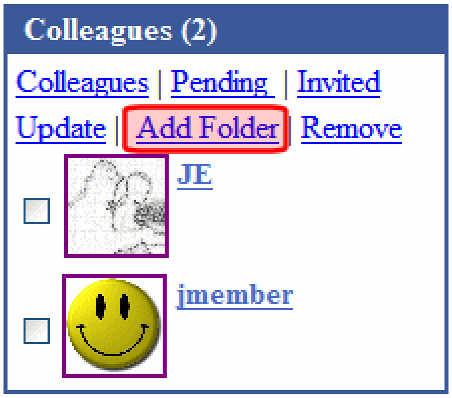
The `DisplayMode` property controls whether a user's colleagues are displayed as a basic list, grouped by common themes in folders, colleagues who have requested you to become their colleague or people you invited to become your colleague.

Grouping colleagues allows a user to sort colleagues into different groups by folder. For example, a user might group all colleagues that are family under a folder named Family. You can only group current colleagues, not colleagues that are pending or invited.

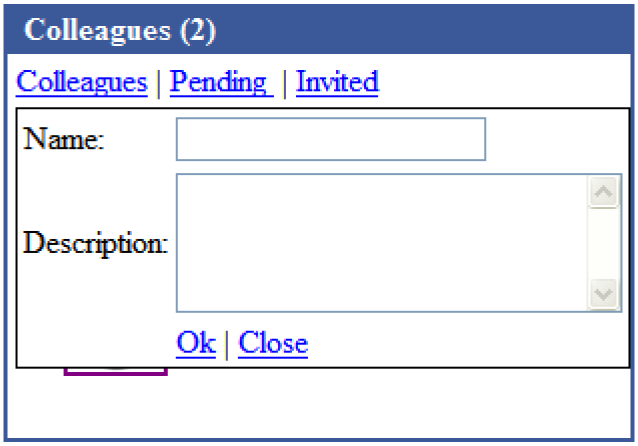
Grouping Colleagues by Folder

To move a colleague to a folder, follow these steps.

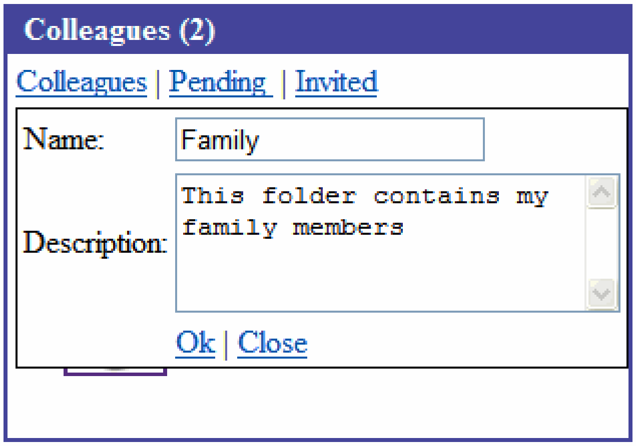
1. Make sure the `DisplayMode` property for the Friends server control is set to **Directory**.
2. Log into the Web site.
3. Navigate to your profile page or the page the contains the Friends server control.
4. Create a folder by clicking the **Add Folder** link in the Friends server control.



5. Enter a **Name** and **Description** for the folder in the provided text boxes.

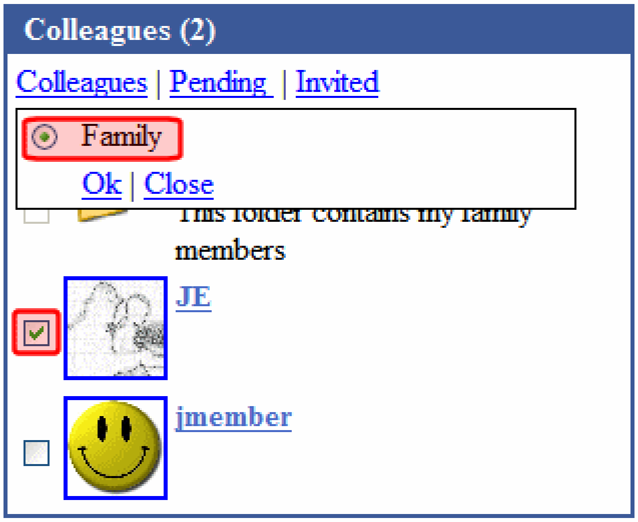


6. Click the **OK** link to add the folder.

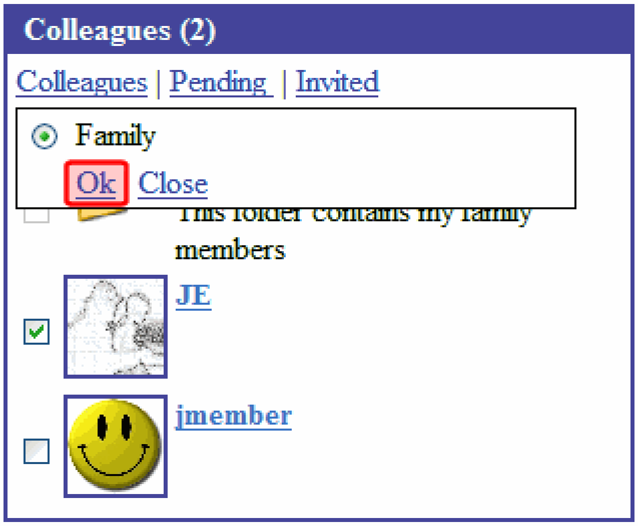


7. Click the **Move** link on the Friends server control.

8. Mark a Colleague and select the folder to which it will be moved.



9. Click the **OK** link to move the colleague.



10. A dialog box appears asking you confirm moving the items. Click **OK**.
11. The colleague can now be found under the folder. Click the folder to see all colleague in that folder.

Managing Existing Colleagues

To manage existing colleagues on the Web site, find the **Colleague** area of your profile page. From this area, users can view, approve and remove colleagues.

Viewing the Existing Colleagues List

The colleagues list provides a quick and easy way to view your colleagues. This list contains the following information.

Field	Description
Avatar	An image representing the user.
Display Name	The user's display name as it appears in blogs, forums posts and message board comments.

Removing Colleagues

If you would like to end your association with another user, you can remove the colleague. To remove a colleague on the Web site, follow these steps.

1. Navigate to **Colleagues** area of your profile page.
2. Place a check mark in the check box next to each colleague you want to remove.
3. Click the **Remove Selected** link.
4. A dialog box appears and asks you to confirm that colleague is to be removed.

5. Click **OK**.

The page refreshes and the user is removed from your colleagues list.

View Pending Colleagues

Pending Colleagues are users that have sent you a colleague request which you have yet to accept. To view pending colleagues on the Web site, navigate to the **Pending Colleagues** area of your profile page. From this area, you can accept and decline colleague requests.

Accepting a Pending Colleague Request

Accepting a colleague request adds the user to your colleagues list. This allows you to access additional information on their profile page. To accept a pending colleague request, follow these steps.

1. Navigate to the **Pending colleagues** area of your profile page.
2. Place a check mark in the check box next to each colleague whose request you want to accept.
3. Click the **Approve** link.

The page refreshes and the users are removed from the Pending Colleagues list and added to the colleagues list. See Also: "Viewing the Existing Colleagues List" on page 16-46

Declining a Pending Colleague Request

Declining a colleague request cancels the request. Once you decline the request, it is removed from your Pending Colleagues list and the requester's Invited list. To decline a colleague request, follow these steps.

1. Navigate to the **Pending Colleagues** area of your profile page.
2. Place a check mark in the check box next to each colleague whose request you want to decline.
3. Click the **Remove Selected** link.
4. A dialog box appears asking you to confirm that you are declining the colleague.
5. Click **OK**.

The page refreshes and the users are removed from the Pending Colleagues list and requester's Invited list.

Viewing Invited Colleagues

The Invited Colleagues list allows you to view a list of users to whom you've sent Colleague invites. From this screen, you can also delete requests that have yet to be accepted. *See Also:* "Canceling Invited Colleagues" on page 16-48

To view sent colleague requests, navigate to the **Invited Colleagues** area of your profile page.

Canceling Invited Colleagues

If you want to cancel a colleague request, follow these steps.

1. Navigate to the **Invited Colleagues** area of your profile page.
2. Place a check mark in the check box next to each colleague whose invite you want to cancel.
3. Click the **Remove Selected** link.
4. A dialog box appears asking you to confirm that you are canceling the colleague invites.
5. Click **OK**.

The page refreshed and the invited colleague is removed from the Invited Colleagues list and the colleague's Pending list.

Marking a Colleague as a Selected Colleague

Selected Colleagues are colleagues that are allowed to view additional documents and photos that regular colleagues cannot view. When a user shares a Workspace containing documents or photos, the user can select whether to share the photos with the Public, Colleagues or Selected Colleagues. *See Also:* "Sharing Workspace Content" on page 16-123.

Follow these steps to mark a colleague as a Selected Colleague.

1. Navigate to the **Colleagues** area of your profile page.
2. Place a check mark in the check box next to each colleague you want to make a Selected Colleague.
3. Click the **Update** link.

4. A dialog box appears asking you to confirm the status change of the colleague.

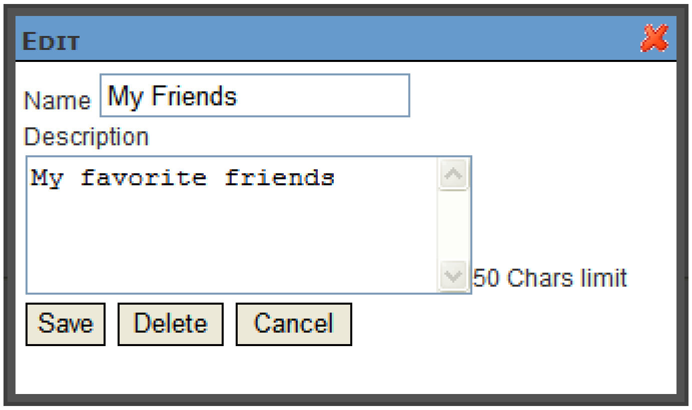
5. Click **OK**.

Selected Colleague appears in parentheses next to the colleague.

You can change a selected colleague back to a colleague by placing a check mark in the check box next to a selected colleague and clicking the update link.

Changing a Folder's Name or Description

A user can change a folder's name or its description by clicking the Edit Folder icon () next to the folder's title. Clicking the icon launches a dialog box that allows you to enter a new name or description.



Once the changes are made, click the Save button.

Friends Server Control Properties

The Friends server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
AvatarHeight	The display height of the avatar in the results box. 0 (zero) = unlimited.	Integer
AvatarWidth	The display width of the avatar in the results box. 0 (zero) = unlimited.	Integer
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42.	Double
DefaultUserID	The default user ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayMode	Select the way this control displays colleagues. Choices are: **Directory** - this selection allows users to group their colleagues by folders. When this selection is chosen, the following menu items are added to the control: – **Add Folder** - allows a user to add a sub folder. – **Move** - allows a user to move users into a folder. This item only appears when there is a folder. **List** - shows a list colleagues in alphabetical order.	eDisplayMode

Property	Description	Data Type
	Pending - shows a list pending colleagues. This list is made up of user who have sent you colleague requests. **SentInvites** - shows a list of users to whom you've sent colleague requests. See Also: "Setting the Friends Server Control's Display Mode" on page 16-43	
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
DynamicParameter	Gets or sets the QueryString parameter to read a user ID dynamically. To use the default user ID, leave blank.	String
FriendLabel	Set the singular text to be used as a title for the Friends server control.	String
FriendsLabel	Set the plural text to be used as a title for the Friends server control.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean

Property	Description	Data Type
Language	Set a language for viewing the Friends control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Link	Enter a link to the user profile page. This allows a user to click a link in the Friends control and be taken to the user's profile page. There are two variables used within the link that represent the user's ID and the user's display name. **{0}** - represents the user's ID. **{1}** - represents the user's display name. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `userprofilepage.aspx?uid={0}&dn={1}`	String
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the Friends control. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer
ShowSortingOptions	Select whether the sorting options should be shown on the control. The following sorting options are available when this property is set to True: **Colleagues** - a list of current colleagues. **Pending Colleagues** - a list of colleagues who have sent you colleague requests, but you have yet to accept. **Invited** - a list of colleagues to whom you have sent colleague requests.	Boolean

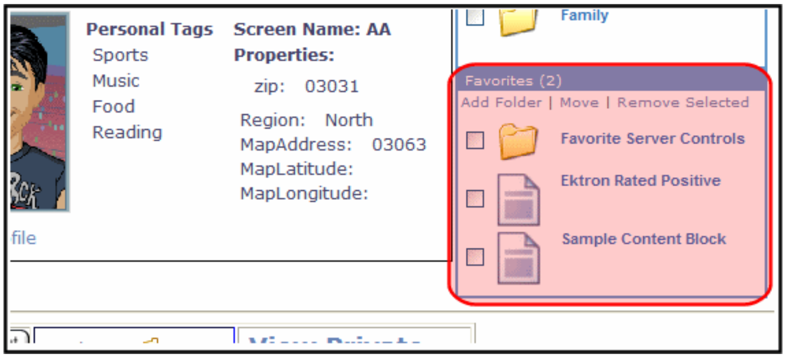
Property	Description	Data Type
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Favorites Server Control

The Favorites server control displays a list of content items that the user has designated as their favorite content. Clicking a link in the list takes you to the content. To learn about designating content as a favorite, see "SocialBar Server Control" on page 16-219. Users can also add URL links to their favorites via the **Add Link** item in the Favorites server control or a Social Bar's Add to Favorites link.

Note: To learn about to setting up the Social Bar for users to add URLs to their Favorites, see "Adding a Web Page's URL to a User's Favorites Via the Social Bar" on page 16-220.

In the control, content items and URLs are contained in separate lists. To view a list of content items, click on the **Content** link. To view a list of URLs, click the **Link** link.



Adding a URL to Your Favorites

User's can add a URL to their Favorites by either clicking the **Add Link** on the Favorites server control and entering the link's information or the **Add to Favorites** link on the Social Bar server control.

Note: To learn about to setting up the Social Bar for users to add URLs to their Favorites, see "Adding a Web Page's URL to a User's Favorites Via the Social Bar" on page 16-220.

To add a URL using the Favorites server control, follow these steps.

1. Log-in and navigate to the profile Web page where the Favorite control is located.
2. Click the **Add Link** link.
3. In the Name text box, add a name for the URL link.
4. In the Link text box, add the URL.
5. In the Description text area, add a description for the URL. This is optional.
6. Click **OK**.

Once a URL is added, it appears on the **Links** list in the control.

Grouping Favorites by Folder

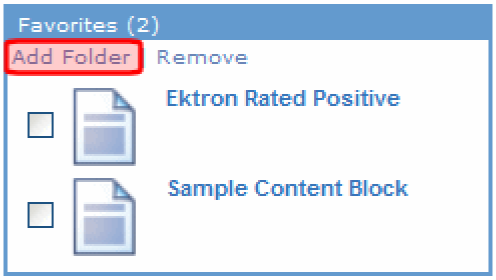
The `DisplayMode` property controls whether a user's Favorites are displayed as a basic list or if the user can group his Favorites by common theme in a folder. For example, a user might group all content created by a certain author under a folder with that author's name.

When a folder is added to a user's favorites, content items in the folder appear in the Content list; URLs in the folder appear in the Links list.

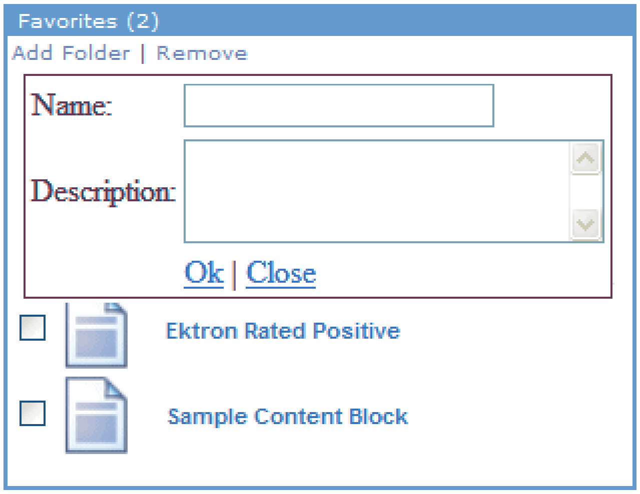
Moving Favorites to a Folder

To move a Favorite to a folder, follow these steps.

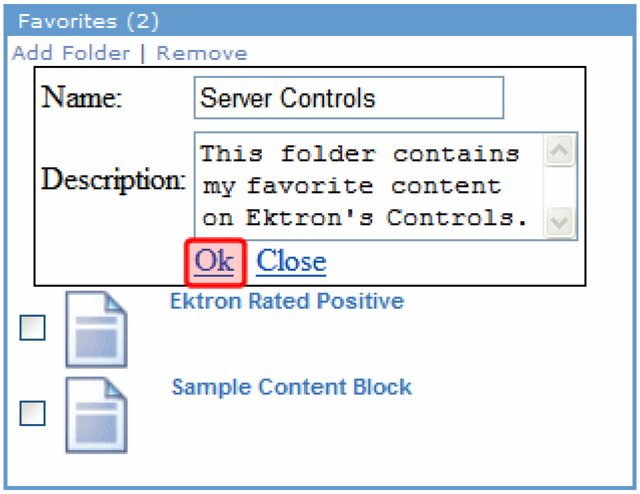
1. Make sure the `DisplayMode` property for the Favorites server control is set to **Directory**.
2. Log into the Web site.
3. Navigate to your profile page or the page the contains the Favorites server control.
4. Create a Folder by clicking the **Add Folder** link in the Favorites server control.



5. Enter a **Name** and **Description** for the folder in the provided text boxes.

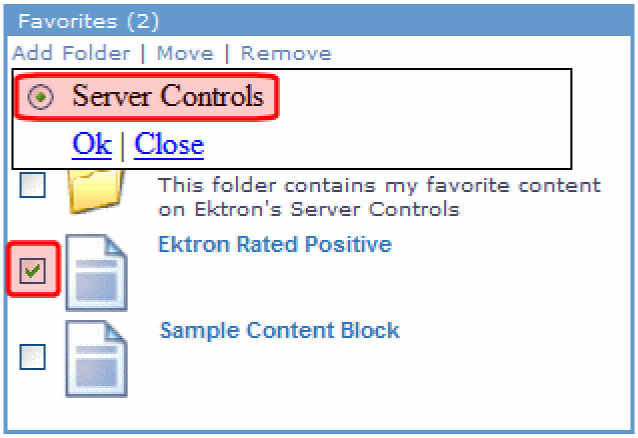


6. Click the **OK** link to add the folder.

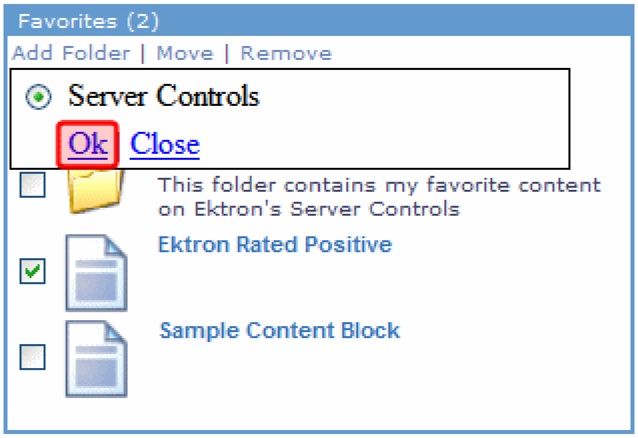


7. Click the **Move** link on the Favorites server control.

8. Mark a favorite item(s) and select the folder to which it will be moved.



9. Click the **Move** link to move the favorite items.

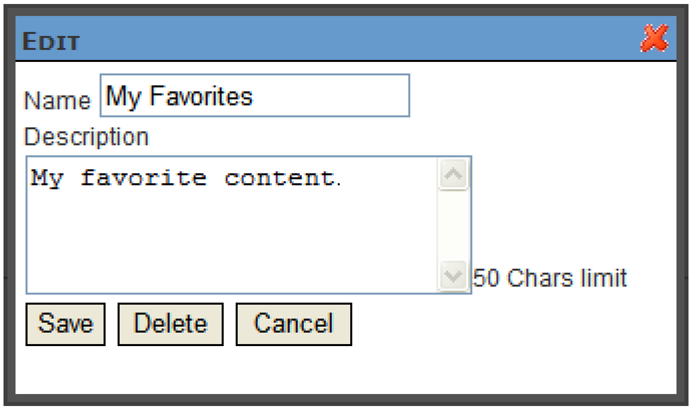


10. A dialog box appears asking you confirm moving the items. Click **OK**.

The Favorite content can now be found under the folder. Click the folder to see all content in that folder.

Changing a Folder's Name or Description

A user can change a folder's name or its description by clicking the Edit Folder icon () next to the folder's title. Clicking the icon launches a dialog box that allows you to enter a new name or description.



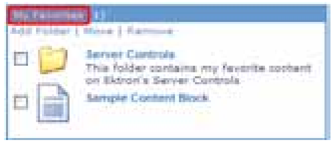
Once the changes are made, click the Save button.

Favorites Server Control Properties

The Favorites server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-43.	Double
DefaultUserID	The default user ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayMode	Select the way this control displays community group information. Choices are: **List** - shows a list of Favorites sorted in alphabetical order. **Directory** - this selection allows users to group their favorites by folders. When this selection is chosen, the following menu items are added to the control: – **Add Folder** - allows a user to add a sub folder. – **Move** - allows a user to move content into a folder. This item only appears when there is a folder. See Also: "Grouping Favorites by Folder" on page 16-54	eDisplayMode
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
DynamicParameter	Gets or sets the QueryString parameter to read a user ID dynamically. To use the default user ID, leave blank.	String

Property	Description	Data Type
FavoritesTitle	The title shown at the top of the control. 	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the Favorites control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Link	Enter a link to the content Web page. This allows a user to click a link in the Favorites control and be taken to the content. There are three variables used within the link that represent the content's ID, the language and the content's title. **{0}** - represents the content's ID. **{1}** - represents the content's language. **{2}** - represents the content's title. You need to have all three variables in the link. The Web form can be relative or absolute. Below is an example. `contentpage.aspx?cid={0}&lang={1}&title={2}`	String
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the Favorites control. The default is _ self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer

Property	Description	Data Type
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `Mark-upLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

PhotoGallery Server Control

The PhotoGallery server control helps users and community groups track and manage images. They can organize them in any number of taxonomy categories. For example, a user might have the following organization.

- Science
  - Biology
    - Animals
      - Mammals
        - Lions
        - Bears

Once a user uploads an image to the their Photo Gallery, site visitors can navigate through its taxonomy and view the image.

When the PhotoGallery server control is added a user's profile page, a logged in user can:

- add a taxonomy category - see "Adding Categories" on page 16-61
- edit a category's name - see "Edit a Category's Name" on page 16-62

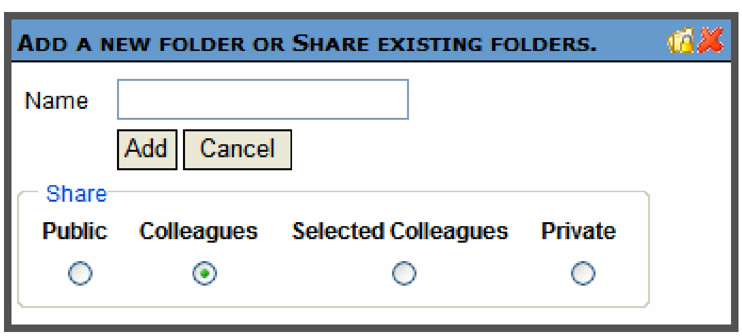
- delete a category - see "Deleting a Category" on page 16-63
- drag and drop a photo - see "Adding Photos to a Photo Gallery" on page 16-64
- change a photo's description - see "Changing a Photo's Title, Map Address or Description" on page 16-65
- move or copy a photo to another folder - see "Moving and Copying Photos" on page 16-66
- delete a photo - see "Deleting a Photo" on page 16-68
- select whether to share a category with the Public, Colleagues, Selected Colleagues or keep the category private - see "Sharing Photos" on page 16-69
- save a photo to a local system - see "Saving a Photo to User's Local System" on page 16-70
- allow members of a community group to add, remove and share folders - see "Allowing Community Group members to Work with Folders" on page 16-71

To see a list of properties for this server control, see "PhotoGallery Server Control Properties" on page 16-72.

Adding Categories

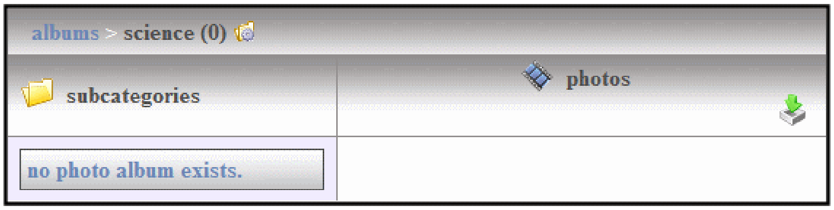
Users can add categories to their photo gallery to help them sort their photos. The categories represent a taxonomy of the items contained in the photo gallery. To add folders, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Click the Manage Folder Button ( ).
3. The Add box appears.



4. Enter a **Name** for the folder.
5. In the **Share** area, select with whom you want to share your photos.
6. Click the Add button.

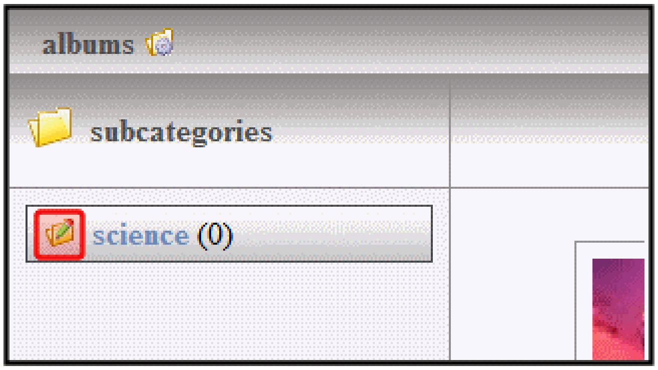
7. When the page refreshes, it opens to the newly added folder.



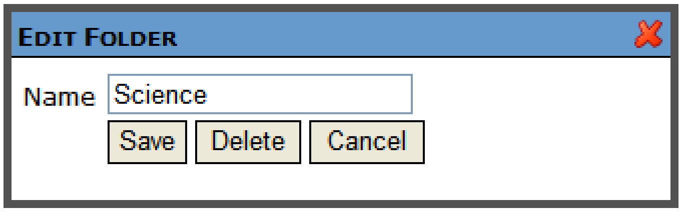
Edit a Category's Name

Sometimes, it is necessary to change the name of category. To accomplish this, follow these steps.

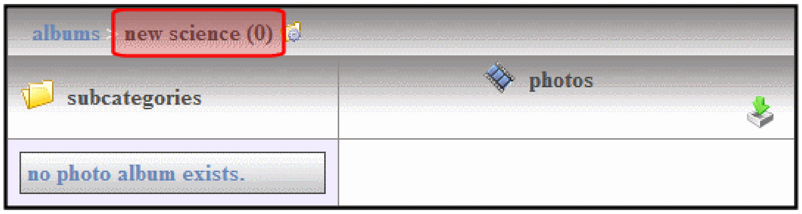
1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Click the category's Edit button ( ). This button is located to the left of the category's title.



3. The Edit box appears.



4. Change the name of the category.
5. Click the Save button.
6. When the page refreshes, it opens to the category with the changed name.



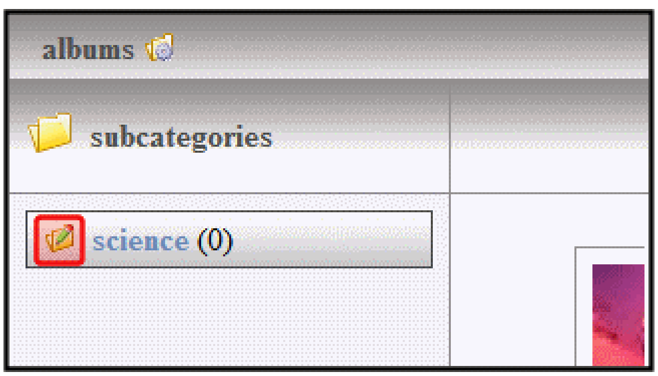
Deleting a Category

A user can delete obsolete categories in his photo gallery. To delete a category, follow these steps.

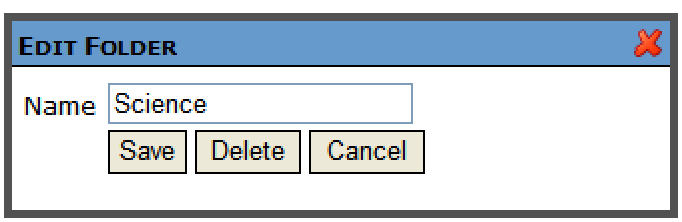
Note: You can not delete the top-level folder, Albums.

Warning! Deleting a category permanently deletes all photos, as well as its subcategories.

1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Click the category's Edit button ( ). This button is located to the left of the category's title.



3. The Edit box appears.



4. Click the Delete button.
5. A dialog box appears asking you to confirm deletion.
6. Click **OK**.

7. The page refreshes and the category is removed.

Adding Photos to a Photo Gallery

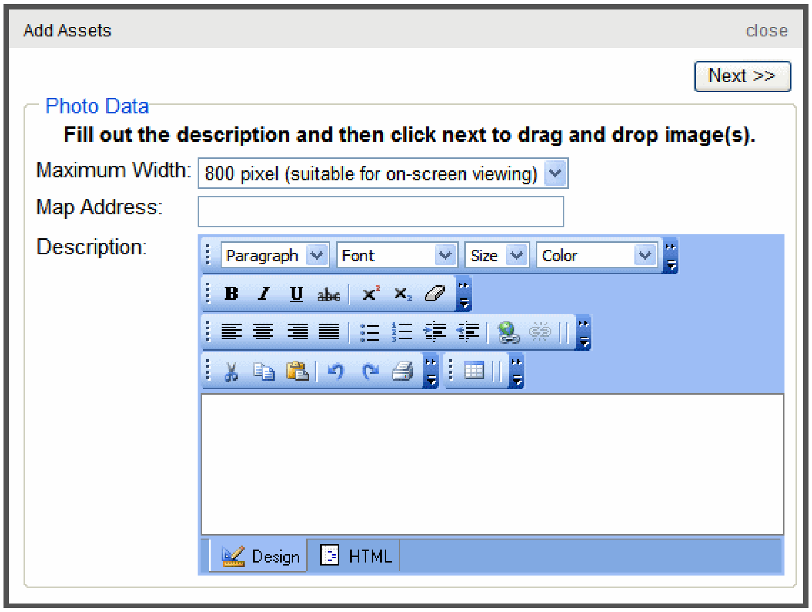
To add a photo to a user's photo gallery, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Select a category where the photo will be added. If you want to create a new category, see "Adding Categories" on page 16-61
3. Click the Add Photo button ().

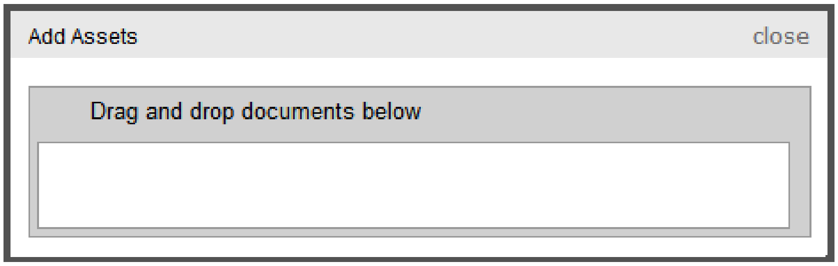
Note: If you see the following error at this point, make sure your server's clock is set to the correct time.
Error: Object Expected

---

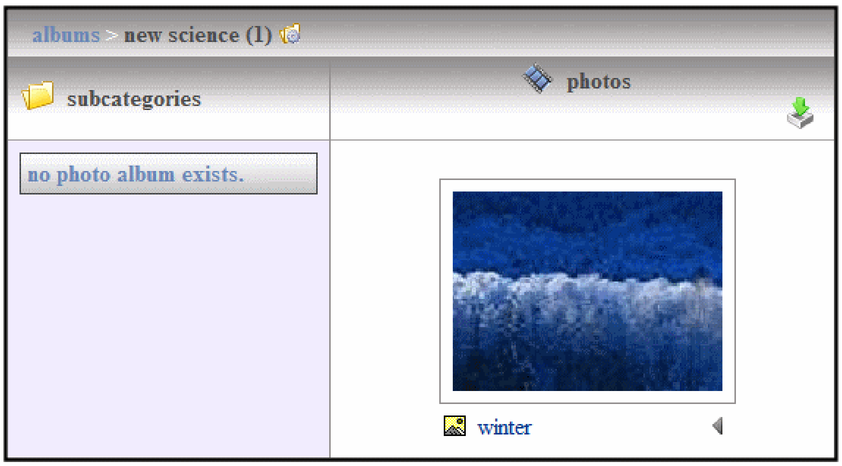
4. The Add Photo box appears
5. In the Photo Data area, enter a Description, Location and Maximum Width.



6. Click **Next**.
7. The Add box appears.



8. Drag and drop a photo in the Add box.
9. A status box appears and shows the files being uploaded.
10. Once the upload is complete, the page refreshes and the photo appears in the gallery.

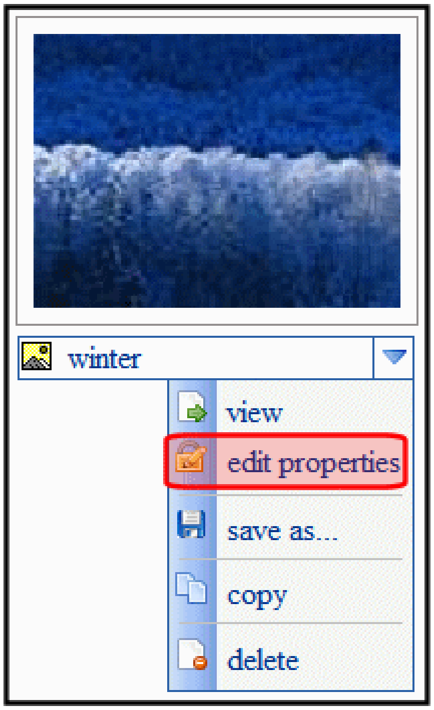


Changing a Photo’s Title, Map Address or Description

If a user wants to change a photo’s title, map address or description, follow these steps.

1. On the Web site, navigate to a **User’s Profile Page** > **Photo Gallery**.
2. Select the category which contains the photo you want to change.
3. Click the drop down triangle to the right of the photo’s title.

4. From the drop down list, select Edit Properties



5. Edit the photo's Title, Map Address or Description.
6. Click **Save**.

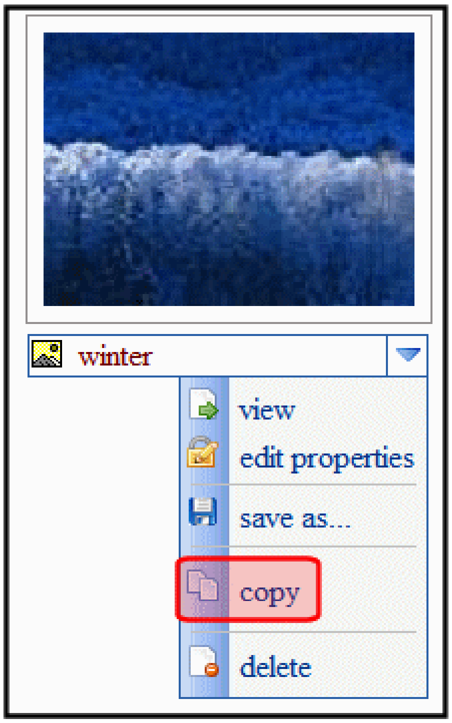
Moving and Copying Photos

A user can change the category where photos are stored in a user's photo gallery by moving a photo from one category to another. In addition to moving photos, you can copy photos to another category. To accomplish either of these actions, follow these steps.

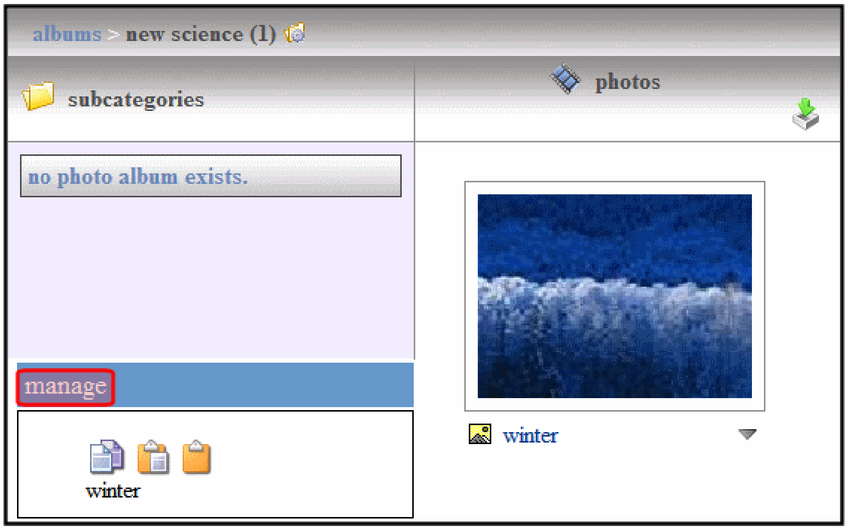
1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.

2. Select the category from which to move or copy the photo.
3. Click the drop down triangle to the right of the photo's title.

4. From the drop down list, select **Copy**.



5. Select the category to which the photo will be moved.
6. Click the **Manage** link.



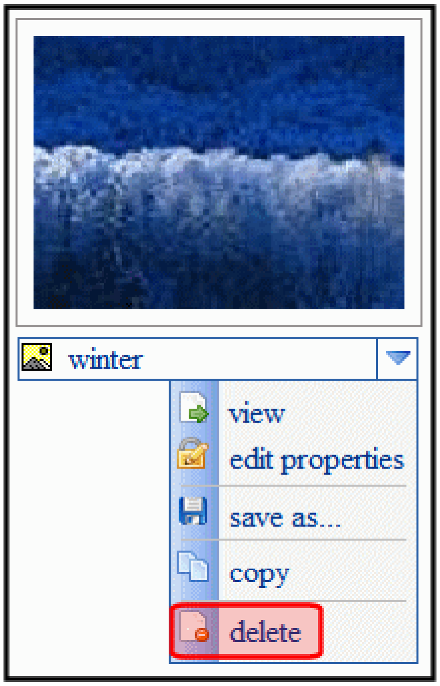
7. Click the Move Items ( ) or Copy button ( ).
8. A dialog box appears asking you to confirm the move or copy action.
9. Click **OK**.
10. The page refreshes and the moved or copied photo appears in the category.

Deleting a Photo

As photos become obsolete or are no longer wanted, users can delete them. This permanently removes the photo from the user's photo gallery. To delete a photo, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Select the category which contains the photo you want to delete.
3. Click the drop down triangle to the right of the photo's title.

4. From the drop down list, select Delete.

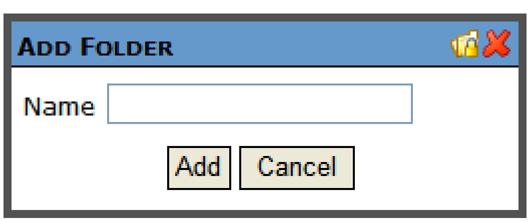


5. A dialog box appears asking you to confirm the deletion.
6. Click **OK**.
7. The page refreshes and the photo is removed.

Sharing Photos

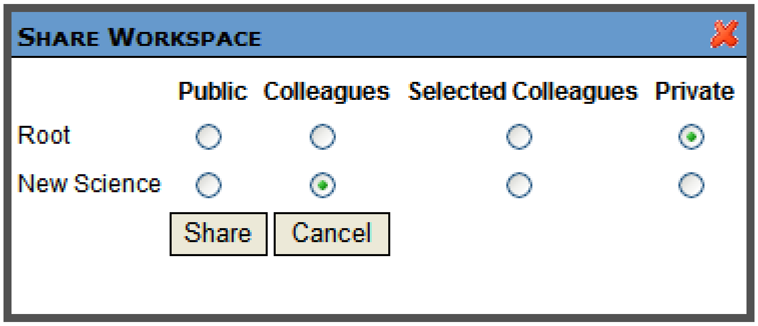
The photo gallery area allows users to share photos with their colleagues. Users can share photos with the Public, Colleagues, Selected Colleagues or keep the photos private. Users apply sharing options to categories not individual photos. To share a category, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Click the Manage Folder Button ( ).
3. The Add box appears.



4. Click the Share Folder button ( ).

5. The Share Workspace box appears.



6. Select with whom to share your photos. The table below describes each option.

Viewer Type	Description
Public	All site visitors viewing your photo gallery can view your photos.
Colleagues	Only people who are your colleagues can view your photos. See Also: "PhotoGallery Server Control" on page 16-60.
Selected Colleagues	Only colleagues who are marked as selected colleagues can view your photos.
Private	You are the only one who can view your photos.

7. Click the Share button.

Photos in the category are now available for viewing by the selected viewer type.

Saving a Photo to User's Local System

Users can save a copy of a photo to their local system. This enables the owner of the photo gallery to give the photo to other members of the community. For example, I add a photo of my child to my photo gallery. My parents can then save the photo to there system and either change it, print it out or upload it to there own photo gallery.

To save a photo to a local system, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Photo Gallery**.
2. Select the category which contains the photo you want to delete.
3. Click the drop down triangle to the right of the photo's title.

4. Select Save As... from the drop down list.

5. A dialog appears asking you to open or save the file.
6. Click **Save**.

Allowing Community Group members to Work with Folders

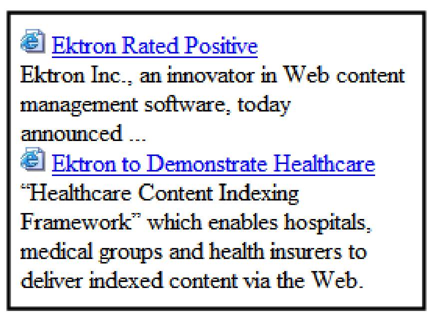
When you associate this control with a community group, you can allow members of the group to add, remove and control the sharing of folders in a workspace. Because this feature is implemented on a group by group basis, it is controlled in the Workarea on the **Edit Community Group** screen. See Also: "Adding a New Community Group" on page 16-93".

PhotoGallery Server Control Properties

The PhotoGallery server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42.	Double
DefaultObjectID	The default object ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicContentBoxHeight	The height of the dynamic content box in pixels	Integer
DynamicContentBoxWidth	The Width of the dynamic content box in pixels	Integer
DynamicContentTemplate	The template to use when displaying dynamic content. Leave blank to use the dynamic box.	String

Property	Description	Data Type
Dynamic Parameter	Gets or sets the QueryString parameter to read a object ID dynamically. To use the default object ID, leave blank.	String
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of document items while controlling the amount of screen space. To accomplish this, the display is limited to the number set in the `MaxResults` property. If you set this property to true, and the number of items exceeds the MaxResults number, navigation aids appear below the last item.	Boolean
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
IncludeIcon	Choose whether to display icons next to the navigation list's links.  **True** = Show icons **False** = Hide icons	Boolean

Property	Description	Data Type
ItemSortOrder	Specify the sort order of results. Choices are: **taxonomy_item_display_order** - the order of taxonomy items as set in the Workarea. For additional information, see "Change Order of Content Assigned to a Taxonomy/Category" on page 9-295. **content_title** - the content is listed in alphabetical order by title. **date_created** - content is listed in the order by which it was created. **last_edit_date** - content is listed in order by its last edit date. You can specify the direction of the items with the `SortDirection` property.	
Language	Set a language for viewing the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	String
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer
ObjectType	The type of object to which this control is assigned. Choices are: **User** - this control is assigned to an individual. **Group** - this control is assigned to a community group.	String

Property	Description	Data Type
ShowCount	Indicates if an integer representing the number of taxonomy items in the category appears next to each category when displayed on the Web site. The default is False. **True** - Show taxonomy items number next to category. **False** - Do not show taxonomy items number next to category.	Boolean
SortDirection	Select the direction of the `itemSortOrder` property. Choose Ascending or Descending.	String
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
TaxonomyCols	Enter the number of columns in which this taxonomy/category appear on the page.	Integer
TaxonomyItemCols	Enter the number of columns in which the taxonomy item appear on the page.	Integer
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Message Board Comments Associated with Content in the Workarea

Message Board comments can be associated with content. This allows a user who views the content on the site to add comments about the content.

Note: Message Boards can also be associated with users and groups. See Also: "MessageBoard Server Control" on page 16-76

Warning! Message Board comments are not the same as the Comments tab on the View Content screen.

You can view these comments in the Workarea. To do so, follow these steps:

1. Click the **Content** folder button.
2. Navigate to the content block for which to view messages.
3. Click that content item. The View Content screen appears.
4. Click the View Content Reports button ( ).
5. Click the **Messages** tab.
6. A list of comments associated with the content appears.

MessageBoard Server Control

The Message Board server control allows a user to submit comments on a Web page about a user, community group or content item. Comments are presented in a “wall” type format, where the newest one appears at the top, and older comments are pushed down as new ones arrive. See example below.

You can associate a Message Board with a user, a community group, or content.

Comments are posted to the Message Board immediately unless the board is moderated. See Also: "Moderating the Message Board" on page 16-79

This section contains the following topics.

Message Board Controls on Sample Sites

You can find examples of the MessageBoard Server Control in these Ektron sample sites. You can copy and edit the samples as needed to build your own pages.

Group Message Board

- Ektron Technology site > Login > Community > Community Groups > select a group > right side, bottom of page
- Intranet Site > Login > Groups > select a group > right side, bottom of page
- Developer Sample Site > Community > Community Groups

User Message Board

- Intranet Site > Login > My Profile > right side, bottom of page
- Ektron Technology site > Login > My Profile > right side, bottom of page
- Developer Sample Site > Community > User Message Board

Content Message Board

- Developer Sample Site > Community > Content Message Board

To download sample sites, go to http://www.ektron.com/solutions/startersites/.

Who is Authorized to Add Comments to a Message Board

If Message Board Associated with	These users can add comments
User	- the logged-in user - his colleagues - users assigned to the Message Board Admin role - Administrators group member
Group	- group members - users assigned to Community Group Admin role

If Message Board Associated with	These users can add comments
	- Administrators group member
Content item	- anyone who can view the content For example, if a content item is set to private, a user must have at least Read-Only permission for the folder containing the content.

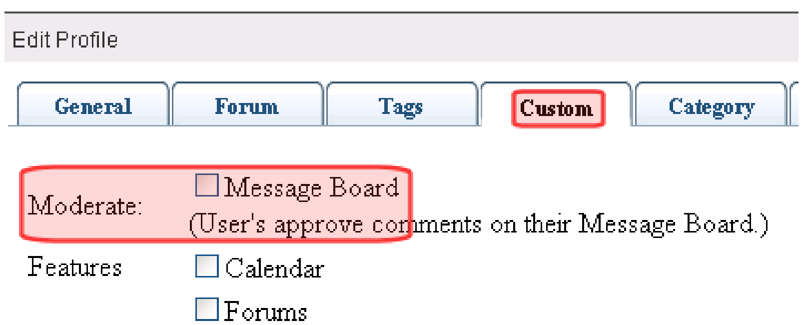
Moderating the Message Board

A moderated Message Board is one whose comments must be approved by an authorized user before they appear. Those users can either approve or delete the comment. To learn which users are authorized to moderate, see "Users Who Can Moderate Message Board Comments" on page 16-80.

You can force all message boards associated with a MessageBoard control to moderate comments. To do this, set the `Moderate` property to `True`.

On the other hand, you can allow the users and community group administrators who own a Message Board to decide if it will be moderated. To do this, set the control's `Moderate` property to `False`. Then, users and community group administrators can set this property in their user or group profile.

Users determine whether their Message Board is moderated by checking their profile's **Moderate** check box (see below).

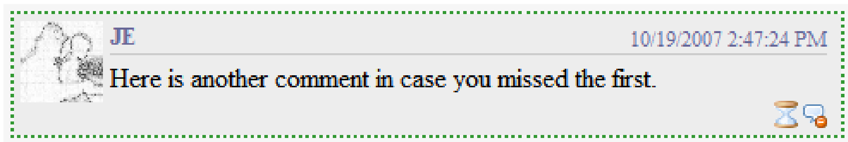


Community group members place a check mark in the **MessageBoard Moderation** check box.

Note: If a Group administrator submits a comment to a moderated Group Message Board, it is automatically approved.

Appearance of Comments on a Moderated Message Board

If a comment is submitted to a moderated Message Board, users who can see it notice a green dot border. The user who submitted the comment sees an hour glass icon ( ) until it's approved. At any time, he can delete the comment using the delete button ( ).



Approving Comments on a Moderated Message Board

To approve a Message Board comment, an authorized user clicks the approval button ( ). To delete a comment, he clicks the delete button ( ).

Users Who Can Moderate Message Board Comments

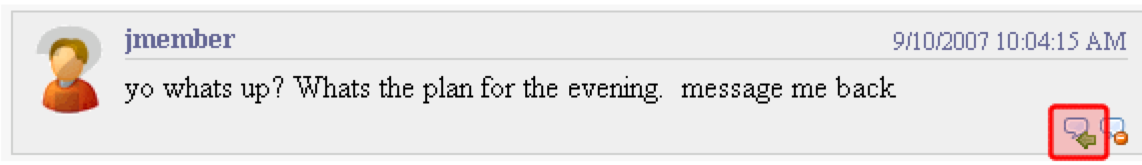
User	Can perform these actions on a comment
Who submitted comment	- view - delete
Individual or group member who owns Message Board to which comment was added	- view - approve pending comments - delete
- community group administrator - assigned Message Board Admin role	- view - approve pending comments - delete
If Message Board assigned to a content item, administrators or users with Message Board Admin role	- view - approve pending comments - delete

Replying to a Message Board Comment

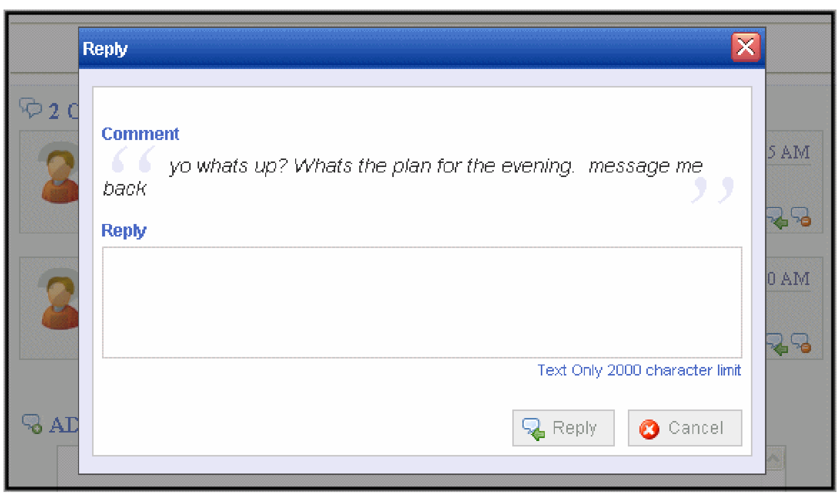
Users can reply to comments on a user's, community group's, or content item's Message Board. For community groups, the group must be public and not restricted; otherwise, only group members can reply.

The ability to reply to Message Board comments facilitates community building by allowing members to share information and, thereby, feel they have a personal stake in that information.

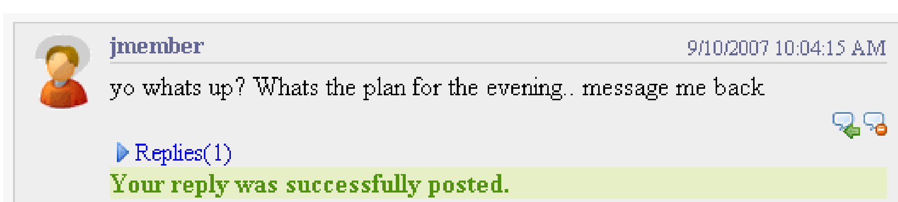
To add a reply, click the Reply button () in a comment's lower right corner (circled below).



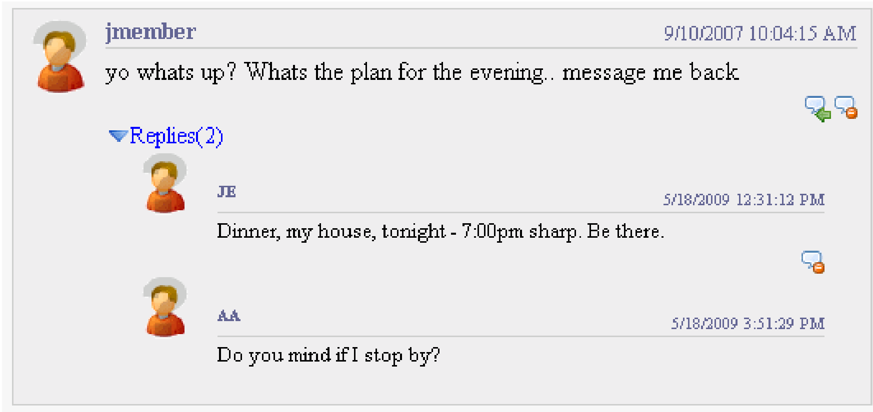
Next, a dialog box displays the original comment and a **Reply** field.



When the reply is submitted, a **Replies** link appears directly below the comment. The number of replies appears next to the link.



Click the link to view comments. They are arranged from the oldest at top to the newest at the bottom.



Deleting a Reply

To remove a reply, click the Delete button ( ). Only the user who replied and the Message Board owner can delete it.

Message Board Notifications

You can send e-mail notifications to Message Board owners and community group members when someone posts a message to a board.

When a user posts a message to a user's Message Board, its owner receives an e-mail notification. When a user posts a message to a *community group's* Message Board, all group members are notified.

IMPORTANT!

Warning! Users must have a valid email address in their profile to receive email notifications.

Enabling Message Board Notifications

You can turn this feature on or off in the site root's Web.config file. By default, the feature is turned off. To turn it on, open the Web.config file and set the following key's value to **True**.

```
<add key="ek_EnableMessageBoardEmail" value= "False"/>
```

Note: Currently, Message Board notifications are sent from the same e-mail address as the invite system.

Once activated, this feature applies to all user and community group message boards.

Filtering Spam

CMS400.NET lets you filter spam from your message boards. Ektron defines *spam filtering* as setting the following limits.

Limitation	To set, select this value in MessageBoard server control's SpamControlType property
User cannot post the same message to a board more than once per day	SameUserSameMessageSameDay
User cannot post another message for a period of time, specified in the `SpamTimeSpan` property.	SameUserTimeDelay
User cannot post the same message for a period of time, specified in the `SpamTimeSpan` property.	SameMessageTimeDelay

You can also define custom spam filters. See "Creating a Custom Spam Filter" on page 16-84.

Spam Filter Usage Examples

The table below provides examples of setting up the control to filter spam.

As a developer I want to...	So I set the SpamControlType property to...	And I set the SpamTimeSpan property to ...
Prevent a user from posting the same message more than once a day	**SameUserSameMessageSameDay**	
Prevent a user from posting any other message for 30 minutes	**SameUserTimeDelay**	**1800**

As a developer I want to...	So I set the SpamControlType property to...	And I set the SpamTimeSpan property to ...
Prevent a user from posting identical messages for 2 hours	**SameMessageTimeDelay**	**7200**
Use my own spam filter code	**Custom** and add the code to the code behind page of the template containing the MessageBoard server control.	

Creating a Custom Spam Filter

You can create your own spam filter in the codebehind of the page that hosts the Message Board. To do this, set the `SpamControlType` property to `Custom`, call the `CustomSpamMethod` in the page load event, and point it to your custom spam filter method. Your method's signature must include the following parameters:

- `long objectId` - the numeric ID of the object defined in the object type
- `Ektron.Cms.Common.EkEnumeration.MessageBoardObjectType objectType` - the type of object with which the Message Board is associated. See Also: "" on page 16-87
- `long userId` - The numeric ID of a user. For example, you want to block a user with the ID 18 from posting to the board.
- `string messageText` - a string of text you want to block
- `int interval` - the amount of time, in seconds, to block posting on the Message Board. For example, if you want to block a user from posting for 30 minutes, set this property to 900.

Below is a C# example that blocks the text Hello World.

```
using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;

public partial class WebformCB : System.Web.UI.Page
{
protected void Page_Load(object sender, EventArgs e)
{
this.MessageBoard1.CustomSpamMethod(SpamControl);
```

```
}
private bool SpamControl(long objectId,
Ektron.Cms.Common.EkEnumeration.MessageBoardObjectType objectType, long userId, string
messageText, int interval)
{

if (messageText == "Hello World")
{

return true;

}

return false;

}

}
```

Changing the Location of the Comment Box

By default, the user comments box is located at the bottom of a Message Board. You can move it to the top by setting the `CommentBoxLocation` property to **Top**. To move the comment box to the bottom, set the property to **Bottom**.

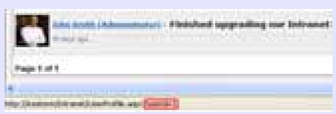
MessageBoard Server Control Properties

The MessageBoard server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-43	Double
CommentBoxLocation	Defines the location of the comment box. By default, bottom is selected. Choices are: **Bottom** = comment box appears below the comments	

Property	Description	Data Type
	Top = comment box appears above the comments **Data Type:** EkEnumeration.MessageBoardCommentBoxLocation	
DefaultObjectID	The default object ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
DynamicObjectParameter	Gets or sets the QueryString parameter to read a object ID dynamically. To use the default object ID, leave blank.	String
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of document items while controlling the amount of screen space. To accomplish this, the display is limited to the number set in the `MaxResults` property. If you set this property to true, and the number of items exceeds the `MaxResults` number, navigation aids appear below the last item.	Boolean
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String

Property	Description	Data Type
MaxResults	The maximum number of items to fetch. 0 (zero) = unlimited.	Integer
Moderate	Set to `True` to force moderation of the Message Board. If set to `false`, moderation is controlled by the user or community group with which the Message Board is associated. See Also: "Moderating the Message Board" on page 16-79	Boolean
ObjectType	The type of object to which the Message Board is assigned. Choices are: **Content** - a content item **User** - an individual **CommunityGroup** - a community group Data Type: EkEnumeration.MessageBoardObjectType	
ProfileParamName	The parameter name to pass in the QueryString to the TemplateUserProfile page, if you want it to be anything other than id. For example, you may prefer `userid`, because it is more descriptive, as shown in the following example. 	String
ShowMaxCharacter	The maximum number of characters to display in the message. If the number of characters in a message exceeds this, a **... more >>** link appears. Users click the link to see the full text.	Integer
SpamControlType	Assigns a spam filter to the Message Board. Ektron CMS400.NET provides three spam filters, and the ability to define your own. Note: Spam control is turned off by default. Filter choices are: **SameUserMessageDay** - a user cannot post the same message to a board more than once per day **SameUserTimeDelay** - prevents user from posting another message for period of time, specified in the `SpamTimeSpan` property. **SameMessageTimeDelay** - prevents user from posting an identical message for a period of time, specified in the `SpamTimeSpan` property. **Custom** - Message Board uses your custom spam filter code. See "Creating a Custom Spam Filter" on page 16-84 See Also: "Filtering Spam" on page 16-83 Data Type: EkEnumeration.MessageBoardSpamControlType	

Property	Description	Data Type
SpamTimeSpan	The number of seconds for which the `SameUserTimeDelay` or `SameMessageTimeDelay` spam filters delay a user from posting a second time. See Also: "Filtering Spam" on page 16-83	Integer
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `Mark-upLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateUserProfile	The URL path to a page that contains a UserProfile server control. The path can be relative or absolute. If you enter a path, a user can click any user's name or avatar from the Message Board server control and be forwarded to his profile page. See illustration below.	String

Property	Description	Data Type
TemplateUserProfile *(Continued)*	Note that user templates can be defined in the Ektron CMS400.NET **Workarea > Settings > Community Management > Templates** screen. However, if you assign a template in this field, this setting takes precedence over the setting on the Workarea Template screen.	

Property	Description	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

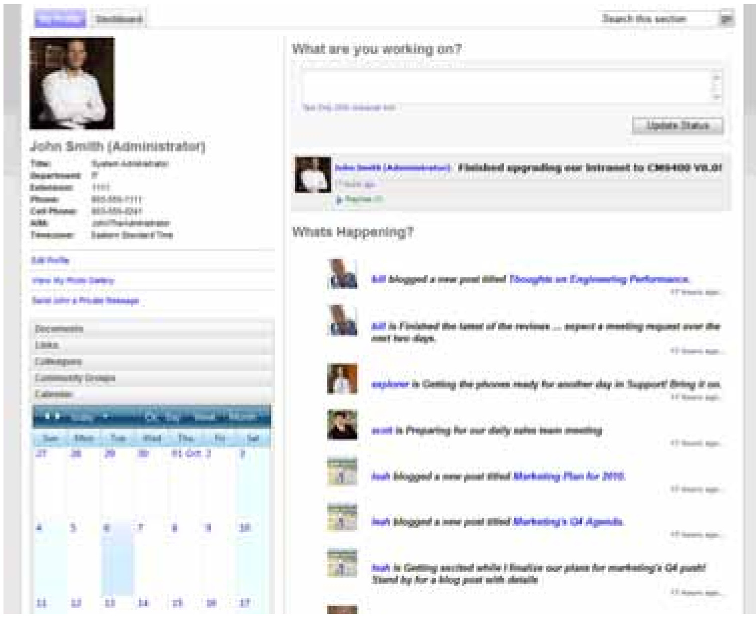
Calendars for Community Users and Groups

Ektron's Web Calendar provides the same function as a paper calendar - it keeps visitors informed about upcoming events. Combined with the powerful community features of the Ektron CMS400.NETplatform, the calendar enhances the communications between individuals and groups.

Communities calendars events could include

- personal vacations
- special personal occaisons
- group milestones
- group meetings

The following example shows a calendar on a personal profile page.



To use this feature, each group must add Calendar into the database before events can be added. To do this, see "Adding a WebCalendar ServerControl to a User Profile " on page 7-577 or "Creating the User Calendar in the Database" on page 7-577.

For more information about using the Calendar feature, see the following topics.

- "Web Calendars" on page 7-551
- "Web Calendar Widgets" on page 7-569
- "Using Community Web Calendars" on page 7-576
- "Creating a Calendar in My Profile" on page 7-577
- "Creating a Calendar in My Group" on page 7-580

Discussion Boards for Community Groups

Using the Ektron CMS400.NET discussion board feature within a community group provides web based discussions targeted to topics of interest to a community group.

Types of topics that a group may discuss include

- project requirements
- scope and scheduling
- team issues

- frequently asked questions

The following example shows a discussion board on a community group page.

To use this feature, each group must add the Discussion Board for their group into the database before posts can be added. To do this, see "Creating a Community Discussion Board in the Database" on page 7-850.

For more information about using the Discussion Board feature, see the following topics.

- "Web Calendars" on page 7-727
- "Web Calendar Widgets" on page 7-750
- "Using Community Web Calendars" on page 7-759
- "Creating a Calendar in My Profile" on page 7-760
- "Creating a Calendar in My Group" on page 7-762

Community Groups

Warning! Membership User Groups and Community Groups are two different concepts. Membership User Groups allow an administrator to create a group of membership users, thereby reducing the effort required to assign identical permissions to many users. See "Membership User Groups" on page 16-16. Community Groups are explained below.

Community Groups are another aspect of a community sites. Being a part of a group allows you to meet people with a similar interest; for example, car racing.

Groups have features and functions similar to users. A Community Group can have its own Message Board, Discussion Board, show a list of members in the group, and keep a journal about the group. Community Groups can be managed from the Web site or the Workarea.

Community Groups can also be assigned to a Taxonomy. This allows users to browse and search for groups by category.

You can also assign Tags to a community group. This allows users to find the group when searching via tag name. Tag information for a group appears in the Group's profile on the Web site. In the Workarea, Tag information can be found on the View Community Group's > Tag tab. From this tab, you can add a Default Group Tag or a new tag associated with the group.

See Also:

- "Community Groups in the Workarea" on page 16-92
- "Managing Community Groups" on page 16-92
- "Distributing Content to Another Ektron CMS400.NET Folder" on page 16-261

Community Groups in the Workarea

You can access community group information in the following areas of the Workarea:

- **My Workspace > Community Groups** - this area allows you to see what groups you belong to and remove yourself from them.
- **Settings > Community Management > Community Groups** - this area allows you to see all groups that exist. You can define a group's details or add and remove members from the group when you are:
  - a Group's Leader (Group's Administrator)
  - a CMS400.NET Administrator
  - a CMS400.NET User or Membership user with the Community Group Admin or Community Group Create role

Managing Community Groups

To view a list of all community groups in the Workarea, click the **Settings Tab**> **Community Management** > **Community Groups** > **Groups**.

From this screen, the following actions and information are available.

- **Information**
  - Group Name
  - How many members are in the group
  - The language of the group
  - The ID of the group
  - Whether the group is Public or Restricted
  - The short description of the group
  - The location of the group
- **Actions**

Adding a New Community Group

Administrators or CMS400.NET users with the Community Group Administrator role can add a new community group in the Workarea. After you create a group, you can add members to it. See Also: "Adding Members to a Community Group" on page 16-97 and "Community Groups" on page 16-91

To add a new community group, follow these steps:

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the Add New Community Group button ( ).
3. The Add Community Group screen appears.
4. Use the table below to assist you with filling out this screen.

Field	Description
Properties Tab	
Group Name	The name of the group.
Administrator	A group administrator has privileges to delete a group or edit its properties. Note: Members of the Administrators group and users assigned to the Community Group Admin role also have these privileges. By default, the person who created the group is the group administrator. Click the **Browse** button if you want to select a different group administrator.
Membership	Select whether the group is open to the public, or if members can only join when invited.

Field	Description
Image	Upload an image to use as an avatar for the group.
Location	The geographical location associated with the group.
Short Description	A brief description of the group.
Description	A fully detailed description of the group.
Enable Distribute	Check this box if you want the group and system administrator to be able to *distribute* content to any Ektron CMS400.NET folder. See Also: "Distributing Content to Another Ektron CMS400.NET Folder" on page 16-261
Allow member to manage photo/workspace folders	Checking this box allows members to add, remove and control the sharing of folders in a community group's Photo Gallery or Document's Workspace. See Also: "Allowing Community Group members to Work with Folders" on page 16-94.
Tags Tab	
Group Tags	From this screen, you can either create a new tag or select from a default list of community group tags. See Also: "Assigning Tags to a Community Group" on page 16-95.
Categories Tab	
Category List	The categories tab lists all of the categories associated with the community group. **Note:** If you have not defined at least one taxonomy for community groups, this tab does not appear. See Also: "Creating a Taxonomy" on page 9-202.

5. Click the Save button ( ).

Allowing Community Group members to Work with Folders

When you associate the CommunityDocuments or PhotoGallery server control with a community group, you can allow members of the group to add, remove and control the sharing of folders in these controls. To allow a member to work with Photo Gallery and Workspace folders, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click a community group.
3. Click the **Edit** button ( ).

4. Place a check mark in the **Allow member to manage photo/workspace folders** check box.
5. Click the **Save** button ( ).

Viewing a Community Group's Details

Any user with access to the Workarea can view a group's details. However, they cannot see the members of the group.

If a user is the Group Leader (Group's Administrator), an Administrator, or CMS400.NET User with the Community Group Administrator role, he can edit the group's information, add and remove members, or delete the group.

See Also: "Community Groups" on page 16-91

To view a group's details, follow these steps.

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. The group's detailed information appears.

Editing a Community Group's Information

Editing a group's information allows you change certain details about the group. Only the Group Leader (Group's Administrator), Administrators, CMS400.NET Users with the Community Group Admin, or Community Group Create role can edit a group's information.

See Also: "Community Groups" on page 16-91

To edit a group's details, follow these steps:

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the Edit button ( ).
4. Change any fields as needed. These fields are described in See "Adding a New Community Group" on page 16-93"Adding a New Community Group" on page 16-93.
5. Click the Save button ( ).

Assigning Tags to a Community Group

You can either create a new tag for a community group or select from a default list of group tags.

See Also: "Tags" on page 16-228

Creating New Tags for a Community Group

To create a new tag for a community group, follow these steps.

1. In the Workarea, navigate to the **Settings** > **Community Group** > **Groups**.
2. Click the community group for which to create a new tag.
3. Click the Edit button ( ).
4. Click the **Tags** tab.
5. Click the **Click To Add A New Group Tag** link.
6. Add a tag to the **Name** text box.
7. Select a Language.
8. Click **Save**.
9. Click the Save button ( ).

Once the Tag is saved, it appears in the Group Tags area with a check mark in the check box, which means the tag is active for the community group.

Adding a Default Tag to a Community Group

To add a default tag to a community group, follow these steps.

1. In the Workarea, navigate to the **Settings** > **Community Group** > **Groups**.
2. Click the community group for which to create a new tag.
3. Click the Edit button ( ).
4. Click the **Tags** tab.
5. Place a check mark in the tag's check box that you want to use.
6. Click the Save button ( ).

Viewing Members of a Community Group

Only the Group Leader (Group's Administrator), Administrators or CMS400.NET Users with the Community Group Administrator role can view members of the group. In addition to viewing community group members, you can see add and remove members. You can also accept or decline members' requests to join the group if the group's membership is set to **Restricted**.

See Also:

- "Adding Members to a Community Group" on page 16-97
- "Removing Members from a Community Group" on page 16-98
- "Accepting/Declining Requests to Join a Community Group" on page 16-97
- "Community Groups" on page 16-91

To view members of a community group, follow these steps:

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the View Community Group Members button ( ).
4. A list of group members appears.

Adding Members to a Community Group

Only the Group Leader (Group's Administrator), Administrators or CMS400.NET Users with the Community Group Administrator role can add members to a group.

See Also: "Community Groups" on page 16-91

To add members to a group, follow these steps:

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the View Community Group Members button ( ).
4. The View Community Group Members for the group screen appears.
5. Click the Add User(s) button ( ).
6. The Add Members screen appears.
7. Using the drop down box, select the type of name for which to search.
8. Enter a name in the text box.
9. Click the **Search** button.

TIP!

Note: If you leave the text box blank and click the **Search** button, all results for the name type are returned.

10. The results are returned.
11. Place a check mark in the box next to each member to add.
12. Click the Add button ( ).
13. The **View Community Group Members** screen appears with all members of the group.

Accepting/Declining Requests to Join a Community Group

If a group's membership is set to **Restricted** (on the Add or Edit Community Group screen), users must request to join the group. If membership is set to **Open**, on the other hand, users join a group immediately.

Use the **Pending** tab on the View Community Group Members to accept or decline a user's request to join a group. Only a Group Leader (Group's Administrator), Administrators, or Ektron CMS400.NET users with the Community Group Administrator role can accept new members to a group.

See Also: "Community Groups" on page 16-91

To accept or decline members' request to join a group, follow these steps.

1. From the Ektron CMS400.NET Workarea, go to **Settings > Community Management > Community Groups > Groups**.
2. Click the group for which you want to accept or decline requests to join.
3. Click the View Community Group Members button ( ).
4. Click the **Pending** tab.
5. Check the box next to each member whose request you want to approve or decline.
6. To approve the selected members' request to join, click the approve button ( ).

   To decline the request, click the decline button ( ).

Removing Members from a Community Group

Only the Group Leader (Group's Administrator), Administrators, or CMS400.NET Users with the Community Group Administrator role can remove members from a group.

To remove members from a group, follow these steps.

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the View Community Group Members button ( ).
4. The View Community Group Members for the group screen appears.
5. Place a check mark in the box next to members you want to remove.
6. Click the Remove button ( ).
7. A dialog box appears asking you to confirm you are removing the selected members.
8. Click **OK** to remove the members.
9. The page refreshes, and the selected members are removed.

Deleting a Community Group

Only the Group Leader (Group's Administrator), Administrators or CMS400.NET Users with the Community Group Administrator role can delete a group.

To remove a community group, follow these steps:

1. Click **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the Delete button ( ).
4. A dialog box appears asking you to confirm that the community group will be deleted.
5. Click **OK**.
6. The page refreshes and the **View All Community Groups** screen appear.

You could

Searching for a Community Group

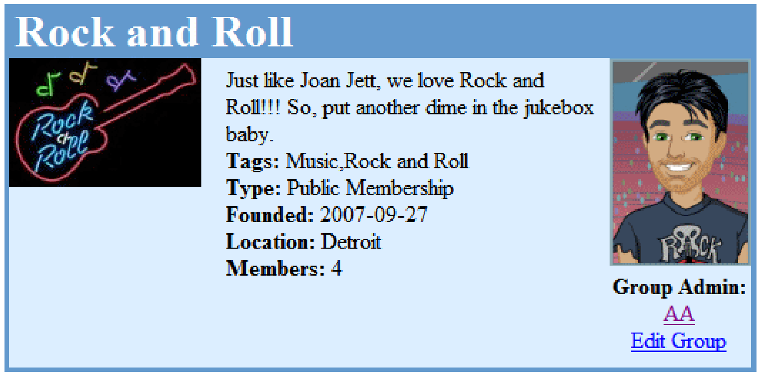
You can search for a Community Group in the Workarea by using the **Search** box located at the top of the View All Community Groups page. To search for Community Groups, click **Settings** > **Community Management** > **Community Groups** > **Groups**. Enter text in the search box and click the **Search** button. A list of Community Groups that match the search term appears.

Community Group Server Controls

CommunityGroupProfile Server Control

The CommunityGroupProfile server control displays the profile of a community group. This profile includes:

- an image associated with the group
- a description of the group
- a list of tags assigned to the group
- whether the group is Public or Restricted
- the date the group was founded
- location information for the group
- how many members are in the group
- the group's administrator
- an **Edit** link that allows you to change information displayed in the profile box and edit settings for the group.



Editing a Community Group's Information

Editing a group's information allows you change certain details about the group. Only the Group Leader (Group's Administrator), Administrators, CMS400.NET Users with the Community Group Admin, or Community Group Create role can edit a group's information.

To edit a group's details, follow these steps:

1. Log in to the community Web site.
2. Navigate to the group's profile page.
3. Click the Edit Group link.
4. Change any fields as needed or click the Delete button ( ) to delete the group.
5. Click the Save button ( ).

CommunityGroupProfile Server Control Properties

The CommunityGroupProfile server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String

Property	Description	Data Type
DefaultGroupID	The default community group ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
DynamicParameter	Gets or sets the QueryString parameter to read a community group ID dynamically. To use the default community group ID, leave blank.	String
GroupAdminLink	Add a link to the administrator's profile page. This allows a user to click a link in the profile area of the community group's page and be taken to the administrator's profile page. There are two variables used within the link that represent the administrator's ID and the administrator's name. **{0}** - represents the administrator's ID. **{1}** - represents the administrator's name. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `adminprofilepage.aspx?aid={0}&an={1}`	String
GroupAdminLinkTarget	Determines the type of window that appears on this Web form when a user clicks the Admin's display name link. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean

Property	Description	Data Type
Language	Set a language for viewing the CommunityGroupProfile control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TagTemplate	Add a path to another Web form to create links for the tag text. This path can be relative or absolute. By providing the path to CommunitySearch server control, a user viewing the profile can click a tag and search for other groups with the same tag. There are five parameters that are automatically added to the link's QueryString that allow you to pass information about tag. - **searchgrptag** - represent the tag's text for community groups. - **TagId** - represents the tag's ID. - **TagLanguage** - represents the tag's language. - **TagCount** - represents the tag's count. The tag's count is the amount of times a tag has been used. - **TagType** - represents the tag's type. The tag's type will be user or community group. In addition to these parameters, you can add your own by defining them in the path. When you do, these parameters will be appended to your parameters. See Also: "Linking Tag Cloud Items" on page 16-239	String

Property	Description	Data Type
TagTemplateTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

CommunityGroupBrowser Server Control

The CommunityGroupBrowser server control allows a user to browse a taxonomy structure for community groups that have been assigned a taxonomy category. As a user browses through a taxonomy structure, community groups at each level appear in a results box.

In addition to browsing a site's taxonomy for a community group, a user can click the Create Group link to create a new group. When the group is created, it is automatically added to the taxonomy you are viewing.

CommunityGroupBrowser Server Control Properties

The CommunityGroupBrowser server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String

Property	Description	Data Type
AvatarHeight	The display height of the avatar in the results box.	Integer
AvatarWidth	The display width of the avatar in the results box.	Integer
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the CommunityGroupBrowser control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Link	Add a link to the group's profile page. This allows a user to click a link in the community group list and be taken to the group's profile page. There are two variables used within the link that represent the group ID and the group name. **{0}** - represents the group's ID. **{1}** - represents the group's name. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `groupprofilepage.aspx?gid={0}&gn={1}`	String

Property	Description	Data Type
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer
Stylesheet	Specify the path to a style sheet for use with the Documents server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Description	Data Type
TagTemplate	Add a path to another Web form to create links for the tag text. This path can be relative or absolute. By providing the path to CommunitySearch server control, a user viewing the list of groups can click a tag and search for other groups with the same tag. There are five parameters that are automatically added to the link's QueryString that allow you to pass information about tag. - **searchgrptag** - represent the tag's text for community groups. - **TagId** - represents the tag's ID. - **TagLanguage** - represents the tag's language. - **TagCount** - represents the tag's count. The tag's count is the amount of times a tag has been used. - **TagType** - represents the tag's type. The tag's type will be user or community group. In addition to these parameters, you can add your own by defining them in the path. When you do, these parameters will be appended to your parameters. See Also: "Linking Tag Cloud Items" on page 16-239	String
TagTemplateTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	String
TaxonomyId	Enter the ID number of the taxonomy or category to appear in this server control. If you don't know the number, click the button and navigate to the taxonomy or category. When you select one, it appears in the center of the Visual Studio window.	Long
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

CommunityGroupList Server Control

The CommunityGroupList server control is a part Ektron's Community Platform. This server control displays a list of community groups and can be configured to display them by name, newest or most popular.

When associated with a user, this control can also be used to show community groups with which a user is associated, a list of community groups the user has been invited to join or any restricted community groups the user has asked to join, but his acceptance is pending.

The following information about each community group is displayed in the CommunityGroupList server control.

Field	Description
Community Group Avatar	an image representing the group.
Community Group Name	The name of a community group.

Field	Description
Type	Whether the community group is Public or Restricted.
Short Description	The community group's description that is entered in the Short Description field of the group's properties.
Tags	Any tags associated with the community group.
Founded	When the community group was created.
Members	The number of current users in the community group.

CommunityGroupList Server Control Properties

The CommunityGroupList server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
AllowGroupCreation	If the user has permissions to create community groups and this property is set to True, the Create Groups link appears in the control. **True** = Create Group link appears on the control. **False** = Create Group link is hidden on the control.	Boolean
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
AvatarHeight	The display height of the avatar in the results box.	Integer
AvatarWidth	The display width of the avatar in the results box.	Integer
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double

Property	Description	Data Type
DefaultUserID	The default User ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayMode	Select the way this control initial displays community group information. Choices are: **Newest** - shows a list of newly added community groups. **MostPopular** - shows a list of community groups with the most members. **Name** - shows a list of community groups sorted alphabetically. **MyGroups** - shows a list of community groups to which a user belongs. **MyPendingGroups** - shows a list of community groups to which a user has asked to join, but has yet to be accepted.	eDisplayMode
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
DynamicUserParameter	Gets or sets the QueryString parameter to read a user ID dynamically. To use the default user ID, leave blank.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the CommunityGroupList control. The `language` property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Description	Data Type
Link	Add a link to the group's profile page. This allows a user to click a link in the community group list and be taken to the group's profile page. There are two variables used within the link that represent the group ID and the group name. **{0}** - represents the group's ID. **{1}** - represents the group's name. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `groupprofilepage.aspx?gid={0}&gn={1}`	String
LinkTarget	Determines the type of window that appears for this Web form when a user clicks an item in the CommunityGroupList control. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer
ShowMySortingOptions	When this control is associated with a user and this property is set to True, the controls displays the following sorting options: **My Groups** - a list of community groups to which the user belongs. **Group Requests** - a list of community groups to which a user has requested to join, but has yet to be accepted. **Group Invitations** - a list of community group that the user has been invited to join, but has yet to accept. When set to False, Leave Selected Group is the only option that appears. **Note: Note**: Depending on how the `DisplayMode` property is set, you may see additional sorting options.	Boolean

Property	Description	Data Type
ShowSortingOptions	When this control is used to display a general list of community groups and this property is set to True, the following sorting options are shown: **Newest** - shows a list of newly added community groups. **Most Popular** - shows a list of community groups with the most members. **Group Name** - shows a list of community groups sorted alphabetically.	Boolean
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TagTemplate	Add a path to another Web form to create links for the tag text. This path can be relative or absolute. By providing the path to CommunitySearch server control, a user viewing the list of groups can click a tag and search for other groups with the same tag. There are five parameters that are automatically added to the link's QueryString that allow you to pass information about tag. - **searchgrptag** - represent the tag's text for community groups. - **TagId** - represents the tag's ID. - **TagLanguage** - represents the tag's language. - **TagCount** - represents the tag's count. The tag's count is the amount of times a tag has been used. - **TagType** - represents the tag's type. The tag's type will be user or community group. In addition to these parameters, you can add your own by defining them in the path. When you do, these parameters will be appended to your parameters. See Also: "Linking Tag Cloud Items" on page 16-239	String

Property	Description	Data Type
TagTemplateTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

CommunityGroupMembers Server Control

The CommunityGroupMembers server control allows you display a list of members associated with a community group, a list of members pending approval to join the group or a list of members who have been invited to group. In addition, if a user is the community group's administrator or a site administrator, he can approve pending members, remove current members and cancel invitations.

The following links appear on the CommunityGroupMembers Server Control when a community group's administrator or CMS400.NET administrator is logged in and viewing the control.

Link	Description
Members	A list of current members.
Pending Members	A list of members who have asked to join the community group, but have yet to be accepted. This link is used when access to the community group is restricted.
Invitations	A list of members who have been invited to join the group.
Remove	When a member is selected, this link removes the member from the community group.

CommunityGroupMembers Server Control Properties

The CommunityGroupMembers server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
AvatarHeight	The display height of the avatar in the results box.	Integer
AvatarWidth	The display width of the avatar in the results box.	Integer
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double
DefaultCommunityGroupID	The default community group ID for this control to use when there is no matching dynamic parameter value passed.	Long

Property	Description	Data Type
DisplayMode	Select whether this control displays a community group's current members or their pending members. Choices are: **Members** - shows a list of current community group members. **PendingMembers** - shows a list of user who have asked to join the community group.	eDisplayMode
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
DynamicParameter	Gets or sets the QueryString parameter to read a community group ID dynamically. To use the default community group ID, leave blank.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the CommunityGroupMembers control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Link	Add a link to the member profile page's Web form. This allows a user to click a link in the community group members list and be taken to a member's profile page. There are two variables used within the link that represent the user's ID and the user's name. **{0}** - represents the user's ID. **{1}** - represents the user's name. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `userprofilepage.aspx?gid={0}&gn={1}`	String

Property	Description	Data Type
LinkTarget	Determines the type of window that appears for this Web form when a user clicks an item in the CommunityGroupMembers control. The default is _ self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinktargets
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

CommunityDocuments Server Control

Part of the Community Platform, this server control allows Web site users to create and upload their own personal content to the site. Once content is added or uploaded, the control displays a list of the content filtered by category. In addition, a logged in users can manage files, create categories and decide which users can view the documents. This server control is typically placed on a user's profile page.

Note: When you drag and drop this control on a Web form in Visual Studio, the following message appears in the label of the control: "Workspace for user does not exist". This happens because there is no ID assigned to the control. Once you assign an ID, the control's name and the ID are displayed. If you use the `DynamicParameter` property to dynamically pass an ID from the QueryString, the above message is displayed because an ID is not assigned to the control.

When the CommunityDocuments server control is added a user's profile page, he can:

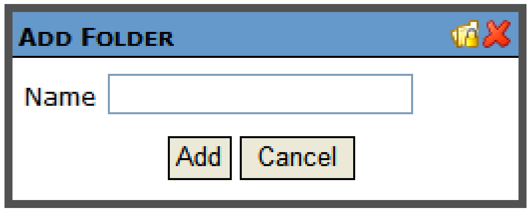
- add a folder - see "Adding Folders" on page 16-117
- edit a folder's name - see "Edit a Folder Name" on page 16-118
- delete a folder - see "Deleting a Folder" on page 16-119
- drag and drop an asset - see "Adding Assets to a Workspace" on page 16-120
- create an HTML file - see "Creating HTML content" on page 16-121
- move a content item to another folder - see "Moving and Copying Content" on page 16-122
- select whether to share the folder with the Public, Colleagues, Selected Colleagues or keep the folder private - see "Sharing Workspace Content" on page 16-123
- allow members of a community group to add, remove and share folders - see "Allowing Community Group Members to Work with Folders" on page 16-124

To see a list of properties for this server control, see "CommunityDocuments Server Control Properties" on page 16-125.

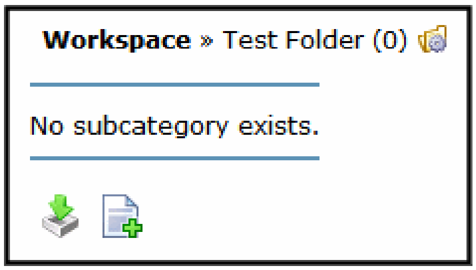
Adding Folders

Users can add folders to their Workspace to help them sort assets and content into categories. The folders represent a taxonomy of the items contained in the documents area. To add folders, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Workspace**.
2. Click the Manage Folder Button ().
3. The Add Folder box appears.



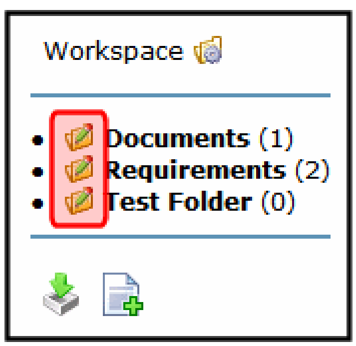
4. Enter a **Name** for the folder.
5. Click the Add button.
6. When the page refreshes, it opens to the newly added folder.



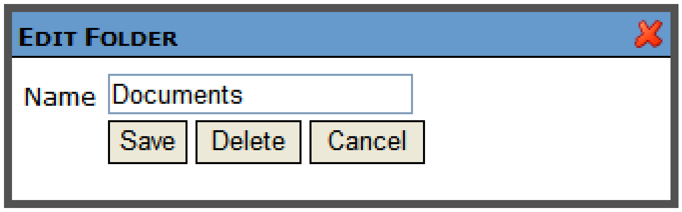
Edit a Folder Name

Sometimes, it is necessary to change the name of folder. To accomplish this, follow these steps.

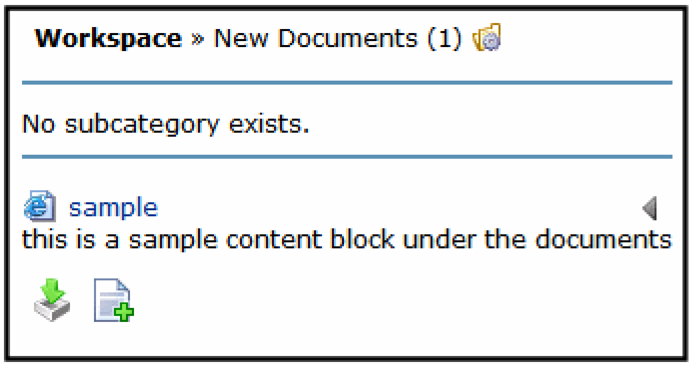
1. On the Web site, navigate to a **User's Profile Page** > **Workspace**.
2. Click the folder's Edit button ( ). This button is located to the left of the folder's title.



3. The Edit Folder box appears.



4. Change the name of the folder.
5. Click the Save button.
6. When the page refreshes, it opens to the folder with changed name.



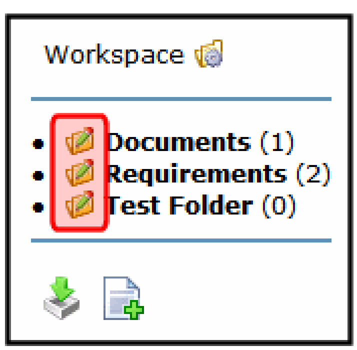
Deleting a Folder

A user can delete obsolete folders from his Workspace. To delete a folder, follow these steps.

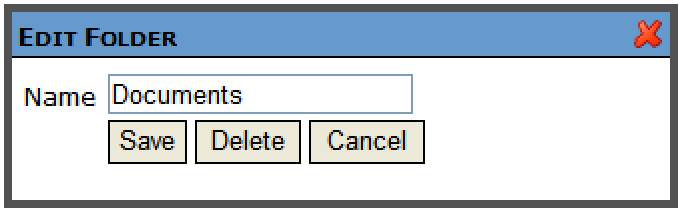
Note: You can not delete the top-level folder, Workspace.

Warning! Deleting a folder permanently deletes all of the assets and HTML content in the folder, as well as its sub-folders.

1. On the Web site, navigate to a **User's Profile Page** > **Workspace**.
2. Click the folder's Edit button ( ). This button is located to the left of the folder's title.



3. The Edit Folder box appears.

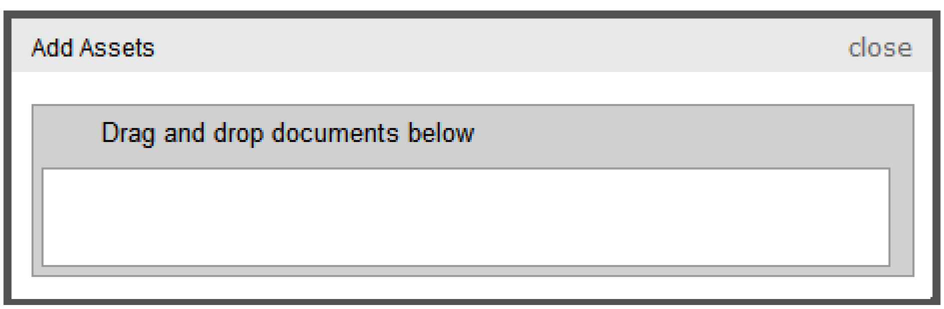


4. Click the Delete button.
5. A dialog box appears asking you to confirm deleting the folder.
6. Click **OK**.
7. The page refreshes and the folder is removed.

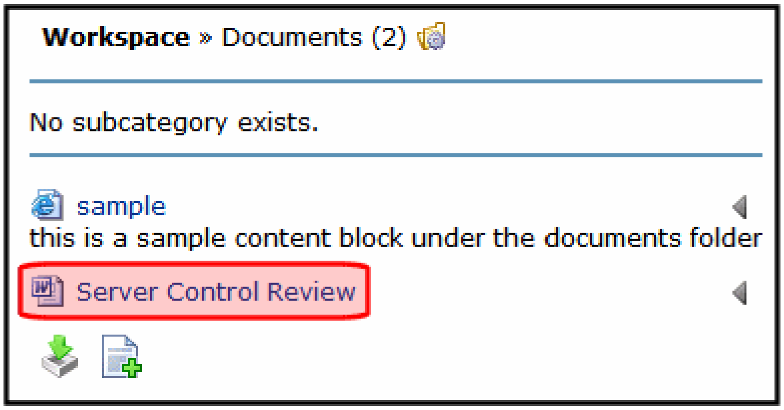
Adding Assets to a Workspace

Assets are files that are not HTML content, such as Office documents and PDFs. To add an asset to a user's Workspace, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Workspace**.
2. Select a folder where the asset will be added. If you want to create a new folder, see "Adding Folders" on page 16-117
3. Click the Add Asset button ().
4. The Add Asset box appears.



5. Drag and drop an asset in the Add Asset box.
6. A status box appears and shows the files being uploaded.
7. Once the upload is complete, the page refreshes and the asset appears in the file list.

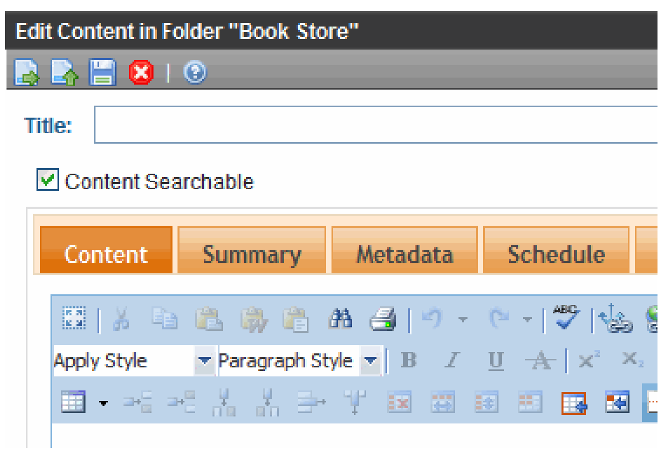


Creating HTML content

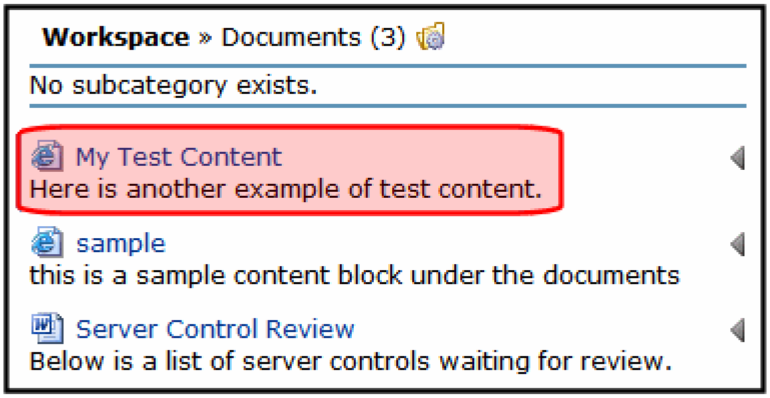
To create HTML content in a user’s Workspace, follow these steps.

1. On the Web site, navigate to a **User’s Profile Page** > **Workspace**.
2. Select a folder where the content will be added. If you want to create a new folder, see "Adding Folders" on page 16-117
3. Click the Add HTML Content button ( ).
4. The Add HTML Content window appears.

The editor page looks like this.



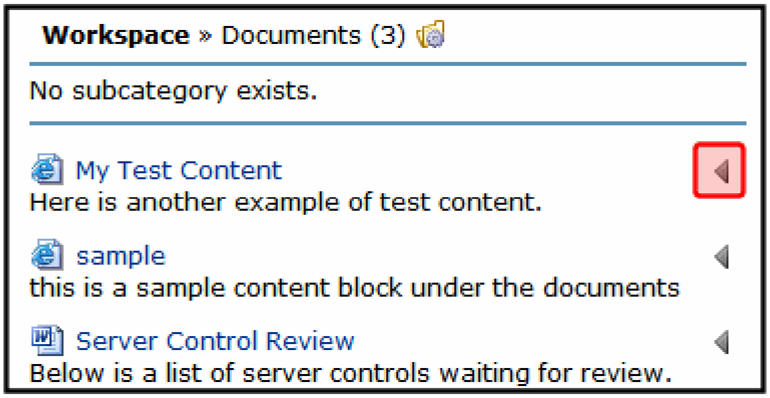
5. Add a title and content.
6. Click the **Publish** button to publish the content.
7. The page refreshes and the HTML content appears in the file list.



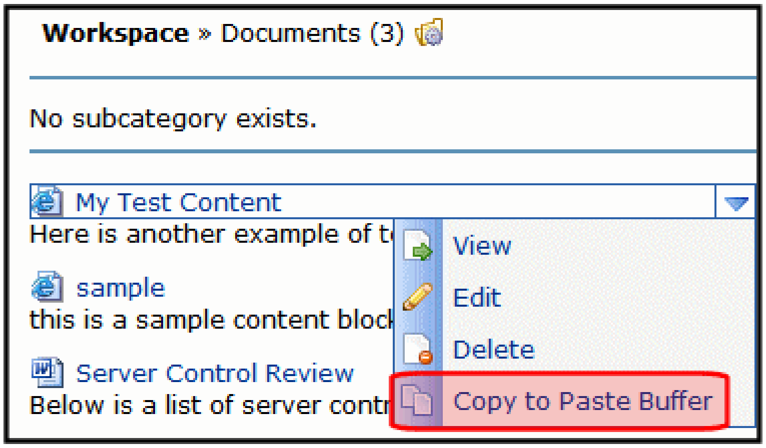
Moving and Copying Content

You can change the folder where assets and HTML content are stored in a user's Workspace by moving content from one folder to another. In addition to moving files, you can copy files to another folder. To accomplish either of these actions, follow these steps.

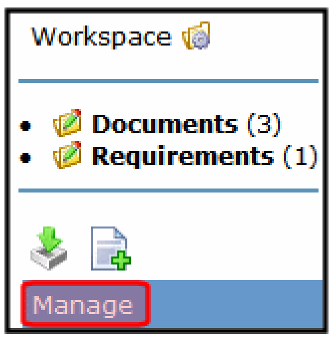
1. On the Web site, navigate to a **User's Profile Page** > **Workspace**.
2. Select the folder from which to move or copy the content.
3. Click the drop down triangle to the right of the content title.



4. From the drop down list, select **Copy to Buffer**.



5. Select the folder to which the content will be moved.
6. Click the **Manage** link.

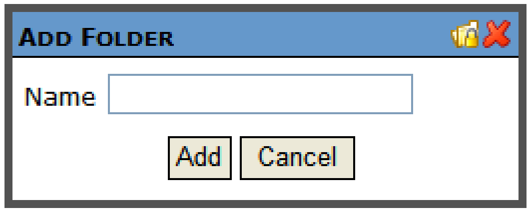


7. Click the Move Items () or Copy button ().
8. A dialog box appears asking you to confirm the move or copy action.
9. Click **OK**.
10. The page refreshes and the moved or copied content appears in the folder.

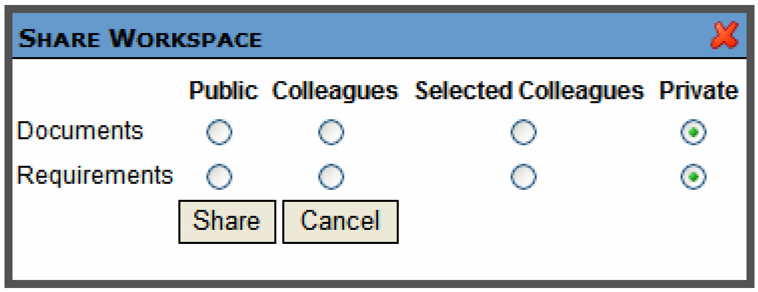
Sharing Workspace Content

The Workspace area allows users to share content with their colleagues. Users can share content with the Public, Colleagues, Selected Colleagues or keep the content private. Users apply sharing options to folders not individual content. To share a folder, follow these steps.

1. On the Web site, navigate to a **User's Profile Page** > **Workspace**.
2. Click the Manage Folder Button ().
3. The Add Folder box appears.



4. Click the Share Folder button ( ).
5. The Share Workspace box appears.



6. Select with whom to share your folders. The table below describes each option.

Viewer Type	Description
Public	All people viewing your Workspace can view your documents.
Colleagues	Only people who are your colleagues can view your documents. See Also: "Friends Server Control" on page 16-42.
Selected Colleagues	Only colleagues who are marked as selected colleagues can view your documents.
Private	You are the only one who can view your documents.

7. Click the Share button.

Documents in the folder are now available for viewing by the selected viewer type.

Allowing Community Group Members to Work with Folders

When you associate this control with a community group, you can allow members of the group to add, remove and control the sharing of folders in a workspace. Because this feature is implemented on a group by group basis, it is controlled in the Workarea on the **Edit Community Group** screen. For additional information, see "Adding a New Community Group" on page 16-93.

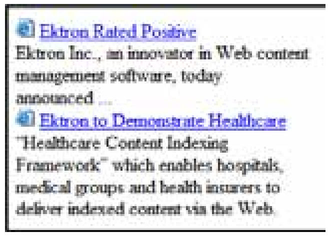
CommunityDocuments Server Control Properties

The CommunityDocuments server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double
DefaultObjectID	The default object ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning! :** If you specify an external file, it is strongly recommended that you do not store this file your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String

Property	Description	Data Type
DynamicContentBoxHeight	The height of the dynamic content box in pixels	Integer
DynamicContentBoxWidth	The Width of the dynamic content box in pixels	Integer
DynamicContentTemplate	The template to use when displaying dynamic content. Leave blank to use the dynamic box.	String
DynamicParameter	Gets or sets the QueryString parameter to read a object ID dynamically. To use the default object ID, leave blank.	String
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of document items while controlling the amount of screen space. To accomplish this, the display is limited to the number set in the `MaxResults` property. If you set this property to true, and the number of items exceeds the MaxResults number, navigation aids appear below the last item.	Boolean
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean

Property	Description	Data Type
IncludeIcon	Choose whether to display icons next to the navigation list's links.  **True** = Show icons **False** = Hide icons	Boolean
ItemSortOrder	Specify the sort order of results. Choices are: **taxonomy_item_display_order** - the order of taxonomy items as set in the Workarea. For additional information, see "Change Order of Content Assigned to a Taxonomy/Category" on page 9-295. **content_title** - the content is listed in alphabetical order by title. **date_created** - content is listed in the order by which it was created. **last_edit_date** - content is listed in order by its last edit date. You can specify the direction of the items with the `SortDirection` property.	
Language	Set a language for viewing the CommunityDocuments control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	String

Property	Description	Data Type
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxResults	The Maximum number of items to fetch. 0 (zero) = unlimited.	Integer
ObjectType	The type of object to which this control is assigned. Choices are: **User** - this control is assigned to an individual. **Group** - this control is assigned to a community group.	CommunityDocumentsObjectType
ShowCount	Indicates if an integer representing the number of taxonomy items in the category appears next to each category when displayed on the Web site. The default is False. **True** - Show taxonomy items number next to category. **False** - Do not show taxonomy items number next to category.	Boolean
SortDirection	Select the direction of the `itemSortOrder` property. Choose **Ascending** or **Descending**.	String
Stylesheet	Specify the path to a style sheet for use with the Documents server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
TaxonomyCols	Enter the number of columns in which this taxonomy/category appear on the page.	Integer

Property	Description	Data Type
TaxonomyItemCols	Enter the number of columns in which the taxonomy item appear on the page.	Integer
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Notifications

Ektron's Notification system creates and transmits Notification messages through various agents, based on CMS400.NET activities. The activities may be performed by a community group, membership user, or Ektron CMS400.NET user.

- *Activities* are events, such as adding content, joining a Community Group, and submitting a micro-message
- Notification *messages* are made up of text and a triggering activity. When the activity occurs, the message is sent to eligible recipients.
- Notification *recipients* include a user's colleagues and members of community groups to which a user belongs
- *Agents* are providers that transmit the messages

For example, Paul is a membership user who wants to notify his colleagues whenever he uploads a document to his profile page. When he does, a CMS400.NET event is fired, which causes a Notification agent to send the following email to his colleagues.

"Paul added a new document, 'How to Write Code', to his profile page."

Users can decide

- which of their activities should send a Notification to their colleagues or Community Groups

- which Notifications they want to receive from colleagues and community groups

Notifications help you build a tighter, more robust community. They drive users to your site by notifying them of a recent event, then directing them to the affected page.

Notifications are more fully explained through these topics.

- "Notification System Overview" on page 16-130
- "Conditions for Notification Messages" on page 16-130
- "Setting Up and Sending a Notification Example" on page 16-131
- "Managing the Notification System" on page 16-135
- "Notifications and Multi-Site" on page 16-158
- "Using Notifications with SSL" on page 16-160
- See "Using eSync with Notifications" on page 16-160

Notification System Overview

The following section presents an architectural overview of the Notification system. It is intended for developers and database administrators.

1. A user performs an activity in Ektron CMS400.NET.
2. Ektron CMS400.NET raises a corresponding event.
3. The activity's data is written to the Activity table in the database.
4. Activity information is sent to the activity queue.
5. Ektron CMS400.NET verifies that the Notification system is enabled.
6. The Notification service gets a list of users who signed up to be notified about that activity when performed by that user. That list also includes the agents that send the message (for example, SMS).
7. The Notification service gets the message associated with the activity, formats it, and sends it to the appropriate Notification agents.
8. Notification agents send the message to the users compiled in Step 6.

Conditions for Notification Messages

Notification messages require the following conditions.

Note: This section presents an overview of requirements. Following sections explain the how to set up each requirement.

- Notifications must be turned on in **Workarea** > **Settings** > **Community Management** > **Notifications** > **Settings**.

- A message for the activity must be enabled in **Workarea** > **Settings** > **Community Management** > **Notifications** > **Messages**. (By default, a message is enabled for each activity.)
- A user who wants to receive Notifications must enable each type of Notification for each agent in his profile's **Activities** tab.

Note: If a user wants to receive colleague and community group Notifications, he must enable activities for both.

- The user performing the action must allow the Notification to be published by enabling it on his profile's **Activities** tab.
- To receive Notifications for
  - another user's activities, you must be his colleague
  - a community group's activities, you must be a group member
- The Notification system respects CMS400.NET's content permissions. As a result, content-related Notifications are only sent to users with at least read-only permission for the content. See Also: "Folder Permissions" on page 5-56

For example, Julia adds content to an Ektron CMS400.NET folder for which her colleague, Tyler, does not have permission. Tyler is *not* notified when content is added, even though he signed up to be notified about colleagues' activities.

However Kristin, another colleague who has permission to edit the folder's content and who signed up to be notified about colleagues' activities, does receive Notification of that event.

Similarly, private content is only viewable by authorized CMS users or membership users with at least Read-Only permissions for its folder.

Setting Up and Sending a Notification Example

This section illustrates how to set up email Notification to alert a user when another user uploads a document to his Workspace. This example uses the following characters.

Miles - CMS400.NET administrator who wants Notifications to be sent when a user uploads a document. He needs to enable this capability and review the message.

Paul - the user who uploads the document to his profile page's Workspace. He needs to edit his user profile to enable the publishing of Notifications when he adds a document to his Workspace.

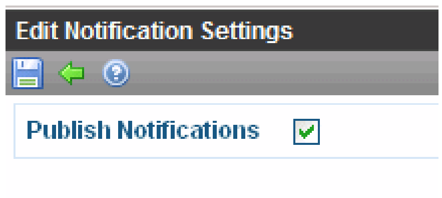
Chris - Paul's colleague, he wants to receive email Notifications when Paul uploads a document to his Workspace. He needs to edit his user profile to enable the receipt of Notifications when colleagues upload documents to their Workspace.

Steps Miles Needs To Perform

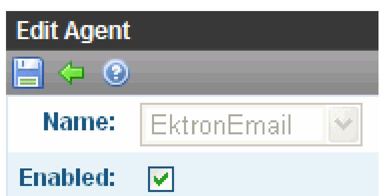
To set up CMS400.NET to send Notifications, Miles follows these steps.

> **Note:** For this example to work, Ektron CMS400.NET must be set up to send emails. See "Configuring E-Mail for Tasks and Content" on page 1-109.

1. Navigate to **Settings** > **Community Management** > **Notifications** > **Settings**.
2. Verify that Notifications can be published. If not:
   - click the **Edit** button ( ).
   - click the **Publish Notifications** check box.
   - click the **Save** button ( ).



3. Make sure the email agent is enabled by navigating to **Settings** > **Community Management** > **Notifications** > **Agents**.
   - if the EktronEmail agent does not appear in the list of agents, click the **Add Agent** button
   - select **EktronEmail** from the **Name** dropdown
   - click the **Enabled** check box
   - click the **Save** button ( )



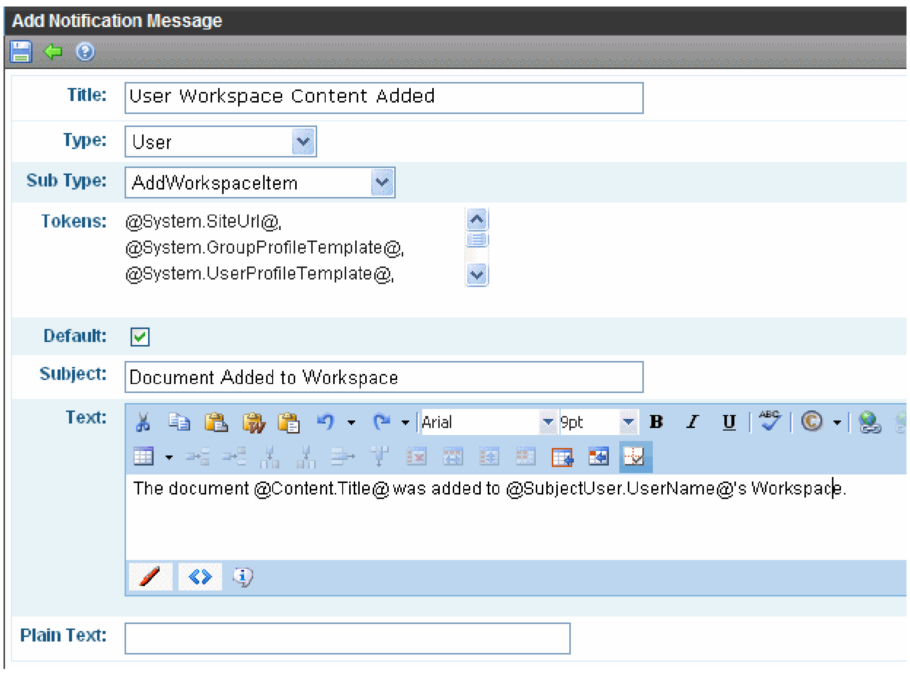
4. Ektron provides a standard Notification message that is sent when a user adds content to his Workspace. The message's name is **User Workspace Content Added**.

   Since Miles wants to edit the message, he follows these steps.
   - navigate to **Settings** > **Community Management** > **Notifications** > **Messages**.
   - click **User Workspace Content Added**.
   - click the Edit button( ).
   - update the email's subject in the **Subject** text box.
   - edit the message in the **Text** editor using a combination of Tokens and text:

The document @Content.Title@ was added to @SubjectUser.UserName@'s Workspace.

Note: Because Miles is not dealing with SMS type messages, he leaves the **Plain Text** text box empty. If he were using SMS messages, he would typically create a shorter version of the message in that text box.

– Click the **Save** button ( ).

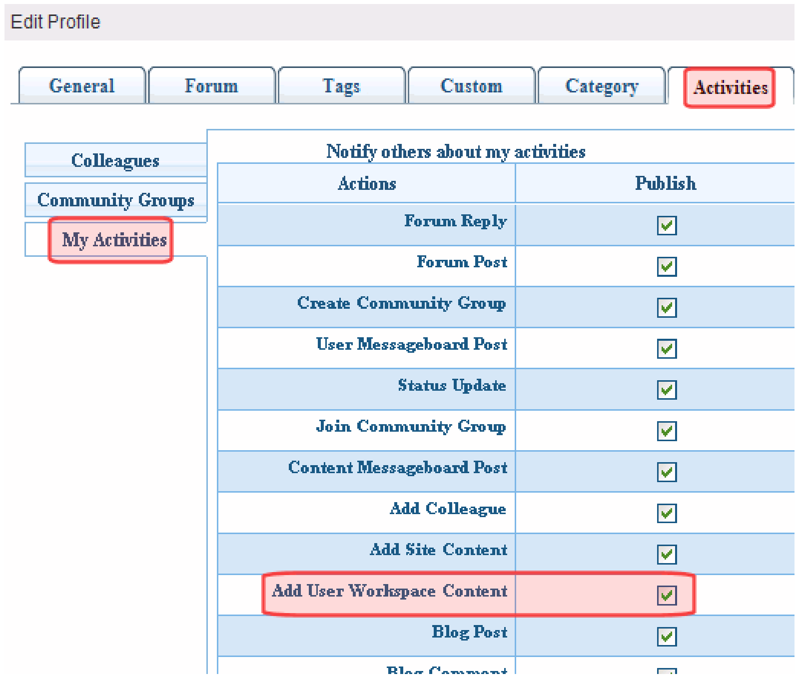


From now on, an email is sent whenever a user uploads a document to his Workspace to colleagues who signed up to receive them.

Steps Paul Needs To Perform

Next, Paul needs enable the **Add User Workspace Content** activity in his profile. This way, whenever he adds content to his Workspace, a Notification is sent. To do this, Paul follows these steps.

1. Log in to the site.
2. Navigate to his profile page.
3. Click the **Edit Profile** link.
4. Click the **Activities** tab.
5. Click the **My Activities** sub tab.

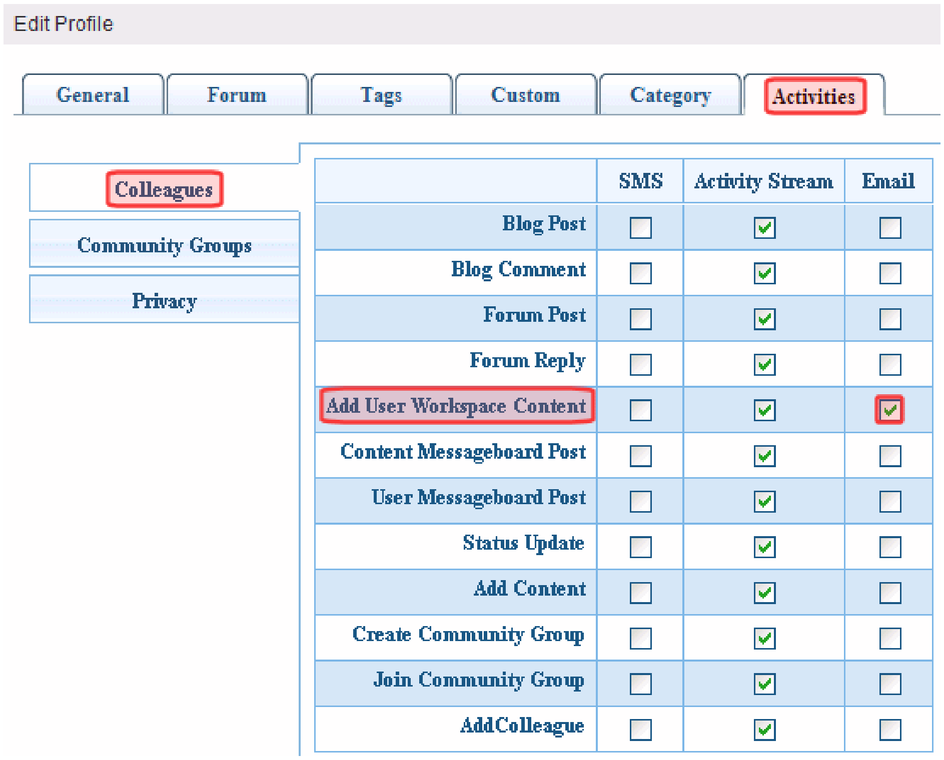


6. Click the **Add User Workspace Content** check box.
7. Click the **Save** button.

Steps Chris Needs To Perform

Next, Chris enables the receipt of Notifications that are sent whenever colleagues upload an item to their Workspace. To do this, Chris follows these steps.

1. Log into the site.
2. Navigate to his profile page.
3. Click the **Edit Profile** link.
4. Click the **Activities** tab.
5. Click the **Colleagues** sub tab.



6. Click the **Add User Workspace Content** check box in the **Email** column.
7. Click the **Save** button.

Managing the Notification System

To manage the Notification system, follow these steps.

1. "Enable/Disable the Notification System" on page 16-136
2. "Activity Types" on page 16-136
3. "Review Notification Agents" on page 16-136
4. "Review Notification Messages" on page 16-141
5. "Set Default Notification Preferences" on page 16-153
6. "Enable/Disable a User's Notification Activities" on page 16-156

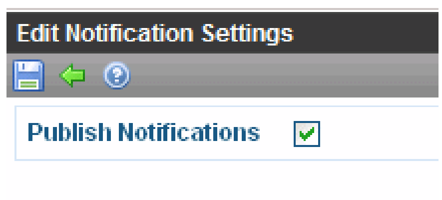
Warning! To perform Notification activities, you must be a member of the Administrators group or be assigned the Community Admin role. See Also: "Defining Roles" on page 15-40

Enable/Disable the Notification System

The Notification Settings controls the Notification engine. To turn Notifications on or off, follow these steps.

Note: If you are upgrading to Version 8.0, Notifications are disabled by default.

1. Log in to the Workarea.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **Settings**.
3. Click the Edit button ( ).



4. Add or remove the check mark from the **Publish Notifications** check box. When a check mark appears in the box, this feature is activated.
5. Click the **Save** button ( ).

Note: The Notification system requires Ektron CMS400.NET to be set up to send email. See "Configuring E-Mail for Tasks and Content" on page 1-109.

Note: If you disable Notifications, the **Activities** tab on the User profile (which lets the user pick Notifications to receive and send) disappears.

Activity Types

Activity Types list all Ektron CMS400.NET events that may trigger a notification. For a list and explanation of all types, see "Activities that Trigger a Notification Message" on page 16-157.

Review Notification Agents

A Notification agent is a pluggable component that sends Notification messages. Each Agent is responsible for sending notifications to users when CMS activity occurs. How that notification is sent is up to the Notification Agent itself. Once a Notification Agent is created and registered, users can begin setting up their notification preferences to use that agent.

CMS400.NET has predefined Notification agents, including email, SMS and activity streaming agents.

- SMS Notifications are sent to a cell phone or any other device that receives SMS messages
- Activity stream Notifications are posted via the ActivityStream server control. See Also: "Activity Streams" on page 16-160

You can customize these providers or create your own using the extendable Notification agent architecture.

Agents are more fully explained through these topics.

- "Enabling an Agent" on page 16-137
- "Disabling an Agent" on page 16-137
- "Creating a Custom Agent" on page 16-138
- "Adding an Agent" on page 16-139
- "Removing an Agent" on page 16-140

Enabling an Agent

For an agent to be available for sending Notifications, it must be enabled in CMS400.NET. See Also: "Review Notification Agents" on page 16-136

Note: Ektron CMS400.NET's predefined agents are enabled by default.

To enable an agent, follow these steps.

1. Log in to the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **Agents**.
3. Click the name of an agent.
4. Click the **Edit** button.
5. Click the **Enabled** check box.
6. Click **Save** button.

Disabling an Agent

To disable an agent, follow these steps. See Also: "Review Notification Agents" on page 16-136

1. Log in to the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **Agents**.
3. Click the name of an agent.
4. Click the **Edit** button.
5. Uncheck the **Enabled** check box.

6. Click the **Save** button.

Creating a Custom Agent

CMS 400.NET comes with several standard Notification Agents, including email, SMS, and Activity Stream. You can customize these agents or create your own using the extendable Notification Agent provider architecture. This section explains how to extend the object model to build a customized Notification Agent.

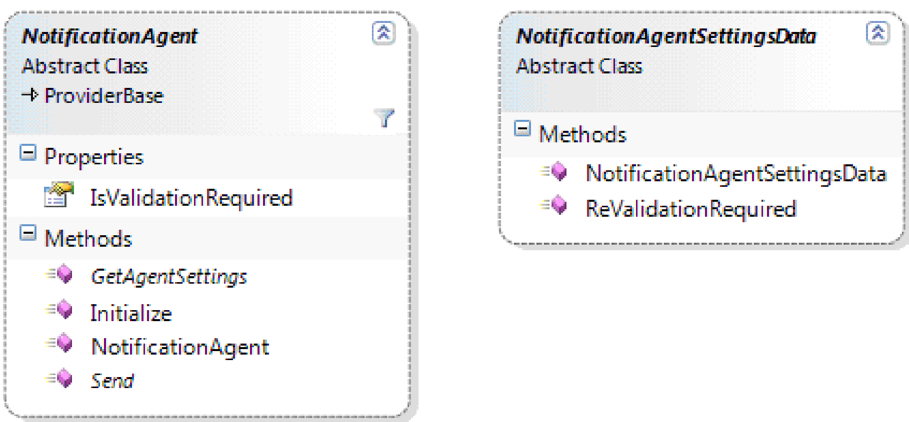
Each type of Notification Agent accepts configuration parameters. For example, email and SMS require an SMTP server, username, and password. These parameters can be specified in the web.config file, and read when the Agent is initialized the first time.

Each agent may also require storing settings for each user receiving notifications. For example, the SMS agent requires the user's cell phone number and carrier, which it stores as an SMS email address. To save these properties, each Notification Agent has an associated NotificatAgentSettingsData class. This class defines any properties needed to be supplied by the user. The CMS provides APIs for storing and retrieving this information, but the developer must create an interface for users to supply the information. The SMSAgentSettings.aspx page, supplied with the Developer and Intranet starter sites. provides a good example.

The following sections describe how to extend the functionality of the Ektron CMS400.Net Notification Agent and create your own.

Implementing Your Own Notification Agent Provider

Object Model



The NotificationAgent is the abstract base class you must extend to implement your own notification agent. Details on the class, available properties, and methods you are required to implement are below.

The following describes the methods that must be implemented for a Notification Agent.

Method	Description
virtual void Initialize(string name, Amenable config);	The initialize method comes from the ProviderBase base class. It supplies all name value pairs specified in the Providers web.config section. If you have custom settings that need to be provided to your agent, add them to your provider’s web.config key, and they will be provided to you at runtime in the Initialize method. If you have no custom settings, this class does not need to be overridden.
abstract NotificationAgentSettingsData GetAgentSettings();	This method should return a new instance of the NotificationAgentSettingsData class associated with your Agent.
abstract void Send(NotificationMessageData message);	This method should send the actual notification. It will be called by the notification *engine for each user that needs to be notified.* The NotificationMessageData has all the information you need for sending the notification including the message itself, the user to be notified and the NotificationAgentSettingsData for the user to be notified. If your agent has a custom NotificationAgentSettingsData you will need to cast the supplied NotificationAgentSettingsData to the appropriate type so that you can access the appropriate properties.

Next, add the agent. See See "Adding an Agent" on page 16-139.

Adding an Agent

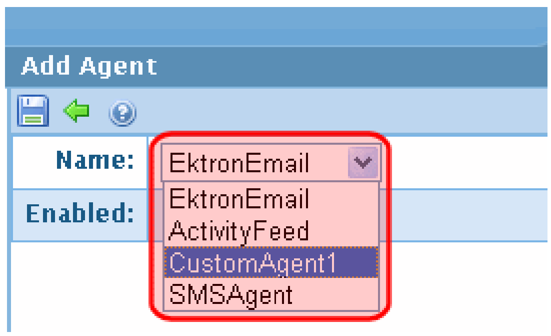
To add a custom agent to CMS400.NET, follow these steps. See Also: "Review Notification Agents" on page 16-136

1. Insert the provider between the Notification agent’s providers tags in the site root/web.config file. Below is an example.

```
<notificationAgent>
<providers>
<add name="CustomAgent1" type="Ektron.Cms.Notifications.Agents.CustomAgent1,
Ektron.Cms.BusinessObjects" setting1="" setting2=""/>
```

```
<add name="EktronEmail" type="Ektron.Cms.Notifications.Agents.EktronEmailAgent,
Ektron.Cms.BusinessObjects" useSystemSettings="false" smtpServer="amh010" smtpPort="25"
userName="" password="" fromEmail="admin@example.com"/>
<add name="SMSAgent" type="Ektron.Cms.Notifications.Agents.SMSAgent,
Ektron.Cms.BusinessObjects" smtpServer="amh010" smtpPort="25"
fromEmail="SMSAgent@example.com" validationRequired="true"/>
<add name="ActivityFeed" type="Ektron.Cms.Notifications.Agents.ActivityFeedAgent,
Ektron.Cms.BusinessObjects" validationRequired="false"/>
</providers>
</notificationAgent>
```

After you add an agent to web.config, it appears in the list of available agents in the Workarea.



2. Log into the Workarea as an administrator.
3. Navigate to **Settings** > **Community Management** > **Notifications** > **Agents**.
4. Click the **Add** button.
5. Select the custom agent from the **Name** drop down box.

Note: If you do not see the custom agent in the **Name** dropdown, check the web.config file to verify it is listed between the <notificationAgent> <providers> tags.

6. Place a check mark in the **Enabled** check box.
7. Click the **Save** button.

Removing an Agent

When you no longer need an agent, you can remove it. This can be a two step process, depending on the level of removal you are trying to achieve.

First, remove the agent from the list of agents in the Workarea. At this time, you can easily return the agent to the list. In the second step, you remove the agent from the web.config file.

To remove an agent from the list of available agents, follow these steps.

1. Log in to the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **Agents**.
3. Click the title of the agent.
4. Click the **Delete** button ( ).

5. In the Delete Agent dialog box, click **OK**.

The page refreshes, and the agent is removed from the agents list.

To completely remove the agent from Ektron CMS400.NET, follow these additional steps.

6. Open the site root folder's web.config file.

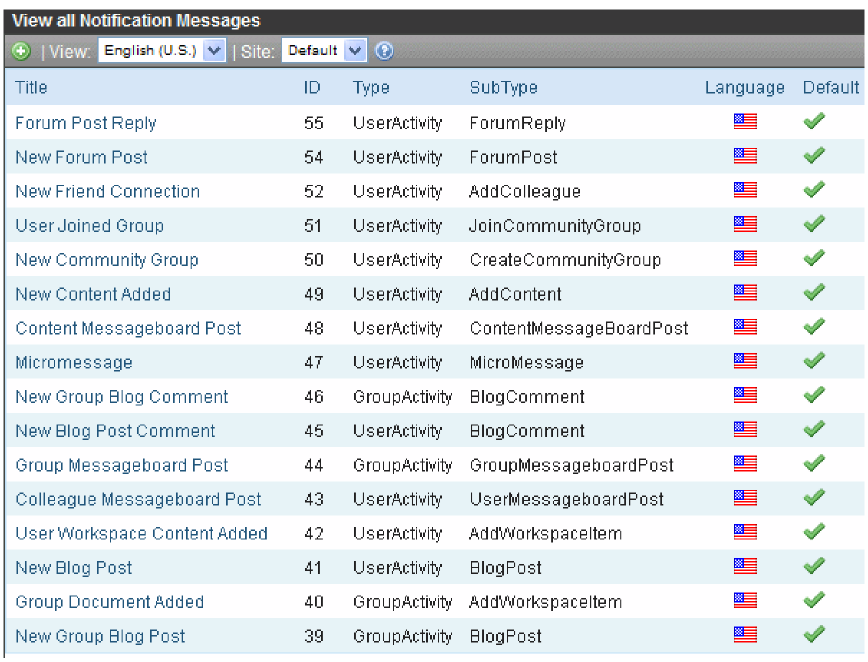
7. Between the `<notificationagent>`'s `<providers>` tags, remove the agent.

   Below is an example of agents that might appear in the web.config file.

```
<notificationAgent>
<providers>
<add name="CustomAgent1" type="Ektron.Cms.Notifications....
<add name="EktronEmail" type="Ektron.Cms.Notifications....
<add name="SMSAgent" type="Ektron.Cms.Notifications...
<add name="ActivityFeed" type="Ektron.Cms.Notifications...
</providers>
</notificationAgent>
```

Review Notification Messages

Messages are used by the Notification system to communicate site activities. You can view each activity's default message from the **Workarea** > **Settings** > **Community Management** > **Notifications** > **Messages** screen.



View all Notification Messages

Title	ID	Type	SubType	Language	Default
Forum Post Reply	55	UserActivity	ForumReply		
New Forum Post	54	UserActivity	ForumPost		
New Friend Connection	52	UserActivity	AddColleague		
User Joined Group	51	UserActivity	JoinCommunityGroup		
New Community Group	50	UserActivity	CreateCommunityGroup		
New Content Added	49	UserActivity	AddContent		
Content Messageboard Post	48	UserActivity	ContentMessageBoardPost		
Micromessage	47	UserActivity	MicroMessage		
New Group Blog Comment	46	GroupActivity	BlogComment		
New Blog Post Comment	45	UserActivity	BlogComment		
Group Messageboard Post	44	GroupActivity	GroupMessageboardPost		
Colleague Messageboard Post	43	UserActivity	UserMessageboardPost		
User Workspace Content Added	42	UserActivity	AddWorkspaceItem		
New Blog Post	41	UserActivity	BlogPost		
Group Document Added	40	GroupActivity	AddWorkspaceItem		
New Group Blog Post	39	GroupActivity	BlogPost		

You can edit any default message as well as create new ones.

Messages are more fully explained through these topics.

- "Message Types" on page 16-142

- "Assigning the Default Message for a Type and Sub Type" on page 16-143
- "Composing a Message" on page 16-143
- "Working with Tokens" on page 16-143
- "Adding a Message" on page 16-150
- "Editing a Message" on page 16-152
- "Removing a Message" on page 16-152

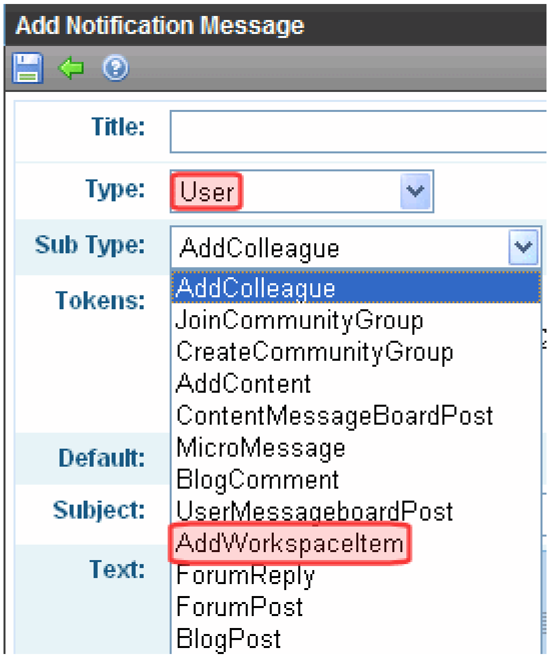
Message Types

There are two message types:

- User
- Community Group

Each type contains several sub types. The sub type is the activity that triggers the message. For example, to edit the message that notifies colleagues when a user uploads a document to his Workspace, select **User** from the **Type** drop down and **AddWorkspaceItem** from the **Sub Type** drop down.

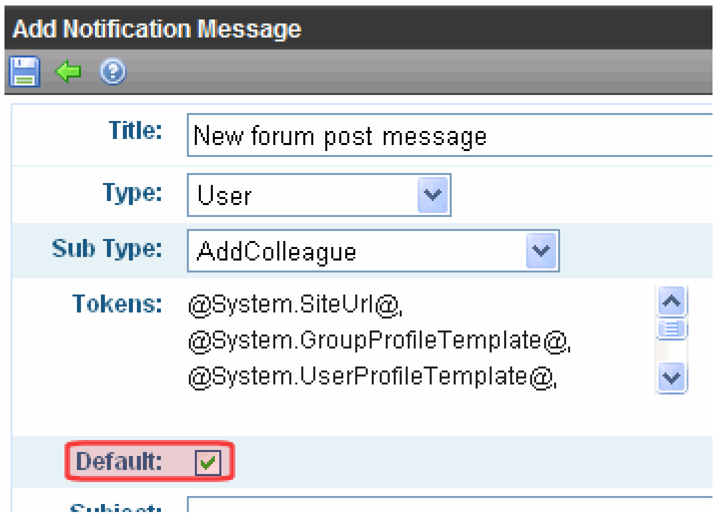
For a list of Sub types, see "Activities that Trigger a Notification Message" on page 16-157.



Assigning the Default Message for a Type and Sub Type

When you create a new message, you assign it to a type and sub type, such as **User Activity** > **Blog Post**. Only the default message is active for any combination of type and subtype.

So, while creating a new message, you must make it the default (via the Add Notification Message screen's **Default** check box) if you want it to be sent.



When you do, if another message was the default for that type and sub type, it is no longer used.

Composing a Message

You can create an HTML-based and a plain text message for each activity. Typically, HTML messages are sent as email or to the ActivityStream server control, while plain text is used in SMS style messages.

Messages typically combine text and tokens. See Also: "Working with Tokens" on page 16-143

Working with Tokens

Tokens are Ektron-defined variables surrounded by at signs (@). When a message is generated, tokens retrieve information about CMS400.NET users, groups, and objects. For example, the following message:

```
@SubjectUser.FirstName@ added a new document, '@Content.title@', to his profile page.
```

might look like this:

"Paul added a new document, 'How to Write Code', to his profile page."

In this example, `@SubjectUser.FirstName@` is the first name of the user performing the action. `@Content.title@` is the title of the object that was uploaded.

See Also:

- "Token Types" on page 16-144
- "Message Tokens: User and Content-Based" on page 16-144
- "Message Tokens: Community Group-Based" on page 16-146
- "Making Tokens into Hyperlinks" on page 16-148

Token Types

A message can include several token types.

- **SubjectUser tokens** - represent the user who performs the activity
- **DirectObjectUser tokens** - represent the user to which the activity is happening
- **Content tokens** - represent the content that was a part of the activity
- **CommunityGroup tokens** - represent the community group that was involved in the activity
- **Blog tokens** - represent the blog use in the activity
- **MicroMessage tokens** - represent micromessages used in the activity

The table below lists Message Sub Types and the Tokens available to each one.

Message Tokens: User and Content-Based

Message Sub Type	Associated Tokens
AddColleague	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @DirectObjectUser.Id@ @DirectObjectUser.UserName@ @DirectObjectUser.FirstName@ @DirectObjectUser.LastName@
AddContent	@System.SiteURL@ @System.GroupProfileTemplate@ @System.UserProfileTemplate@ @SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @Content.Id@ @Content.Title@

Message Sub Type	Associated Tokens
	@Content.Quicklink@ @Content.Icon@
AddWorkspaceItem.	@System.SiteURL@ @System.GroupProfileTemplate@ @System.UserProfileTemplate@ @SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @Content.Id@ @Content.Title@ @Content.Quicklink@ @Content.Icon@
BlogComment	@BlogComment.Id@ @BlogComment.Message@ @SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@
BlogPost	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @Content.Id@ @Content.Title@ @Content.Quicklink@
CreateCommunityGroup	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @CommunityGroup.Id@ @CommunityGroup.Name@

Message Sub Type	Associated Tokens
ContentMessageBoardPost	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @Content.Id@ @Content.Title@ @Content.Quicklink@ @MessageBoard.ObjectId@ @MessageBoard.ObjectType@ @MessageBoard.Message@
JoinCommunityGroup	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @CommunityGroup.Id@ @CommunityGroup.Name@
MicroMessage	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @MicroMessage.Id@ @MicroMessage.Message@
UserMessageboardPost	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @DirectObjectUser.Id@ @DirectObjectUser.UserName@ @DirectObjectUser.FirstName@ @DirectObjectUser.LastName@ @MessageBoard.ObjectId@ @MessageBoard.ObjectType@ @MessageBoard.Message@

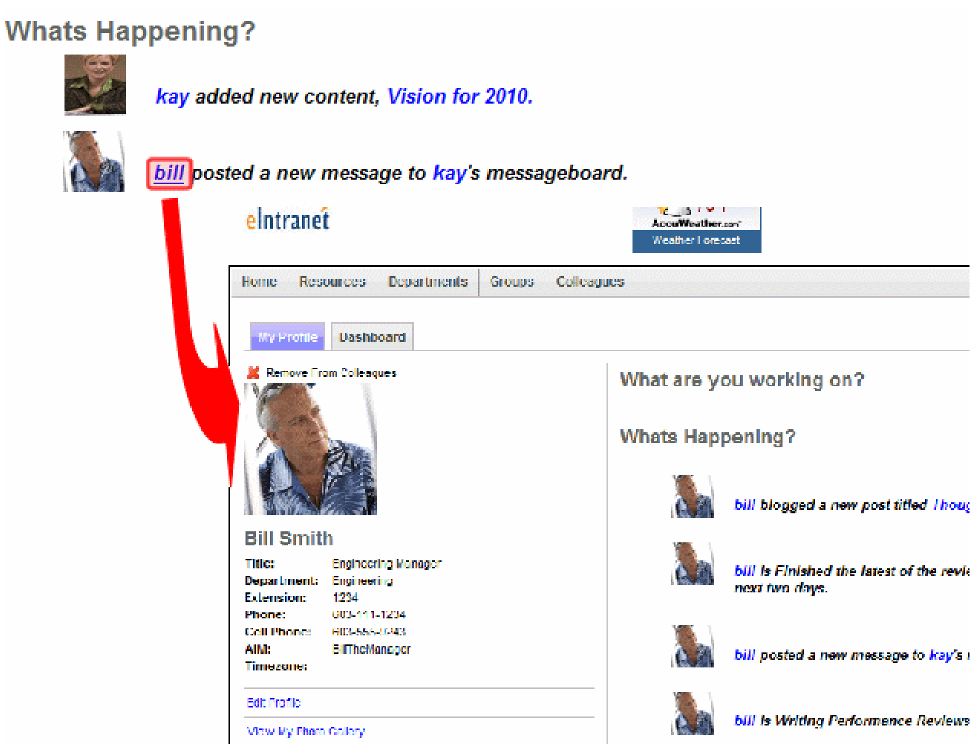
Message Tokens: Community Group-Based

Message Type	Associated Tokens
AddWorkspaceItem	@System.SiteURL@ @System.GroupProfileTemplate@ @System.UserProfileTemplate@ @SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @DirectObjectUser.Id@ @DirectObjectUser.UserName@ @DirectObjectUser.FirstName@ @DirectObjectUser.LastName@ @CommunityGroup.Id@ @CommunityGroup.Name@ @Content.Id@ @Content.Title@ @Content.Quicklink@ @Content.Icon@
BlogComment.	@BlogComment.Id@ @BlogComment.Message@ @SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@
BlogPost	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @Content.Id@ @Content.Title@ @Content.Quicklink@
CreateCommunityGroup	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @CommunityGroup.Id@ @CommunityGroup.Name@
JoinCommunityGroup	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @CommunityGroup.Id@ @CommunityGroup.Name@

Message Type	Associated Tokens
UserMessageboardPost	@SubjectUser.Id@ @SubjectUser.UserName@ @SubjectUser.FirstName@ @SubjectUser.LastName@ @DirectObjectUser.Id@ @DirectObjectUser.UserName@ @DirectObjectUser.FirstName@ @DirectObjectUser.LastName@ @MessageBoard.ObjectId@ @MessageBoard.ObjectType@ @MessageBoard.Message@

Making Tokens into Hyperlinks

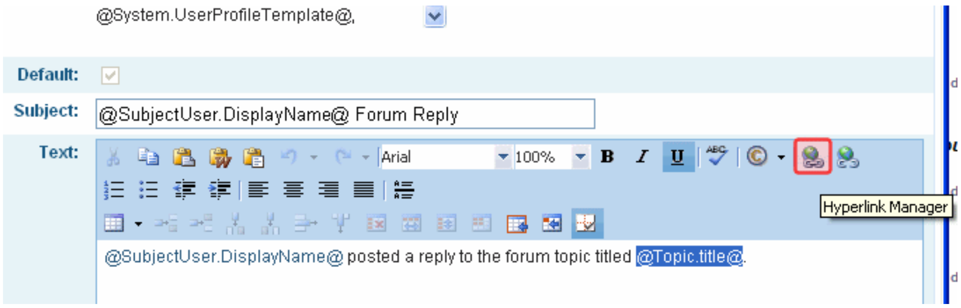
Message tokens represent CMS400.NET users, groups and content. They can become links that, when clicked, bring the user to content, a user's profile, or community group's profile, as shown below.



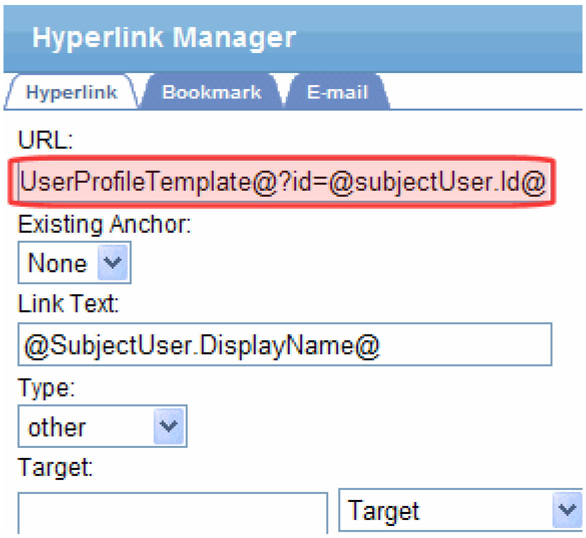
To make tokens into clickable links, follow these steps.

1. Create the message as described in "Adding a Message" on page 16-150.

2. While editing the message text, highlight a token and click the **Hyperlink Manager** button (circled below).



3. In the **URL** field, enter the path to the page that displays the content, user, or community group.



Make sure you include the QueryString parameter used to identify the object. The parameter to should point to an ID token. For example, a message notifies a user's colleagues whenever he adds a new colleague. The message might be:

@SubjectUser.UserName@ and @DirectObjectUser.UserName@ are now colleagues.

When creating a link for *@SubjectUser.UserName@*, insert the path to the user's profile page into the **URL** field. It might look like this:

`http://localhost/Intranet/UserProfile.aspx?id=@subjectUser.Id@`

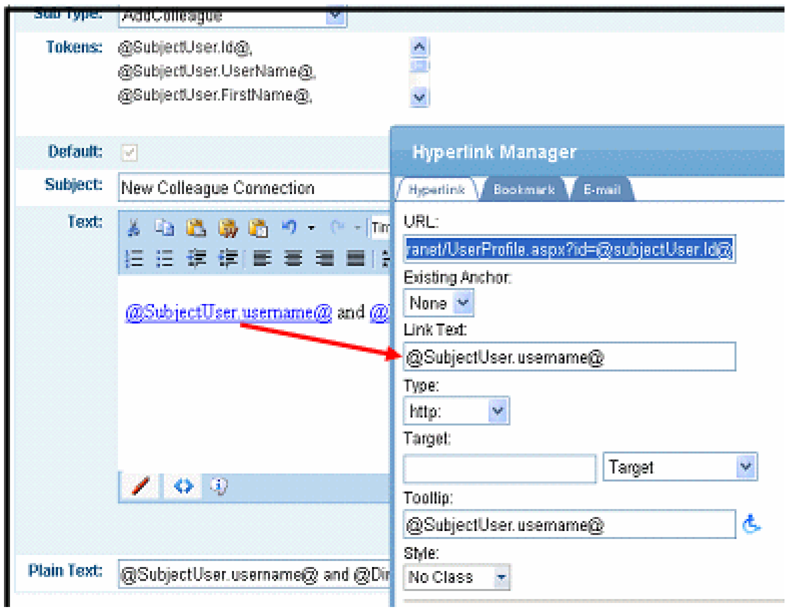
Note, the QueryString parameter (`?id=`) points to a token that represents the logged-in user's ID, `@subjectUser.Id@`. See Also: "Token Types" on page 16-144

For *@DirectObjectUser.UserName@,* enter the same path and change the dynamic parameter token to `?id=@DirectObjectUser.Id@`.

When hyperlinking content, use its QuickLink token in the path defined in the **URL** field. For example, a message that sends a Notification when a user adds content might look like:

@SubjectUser.username@ added new content, @Content.Title@.

4. Make sure the original token text appears in the **Link Text** field.



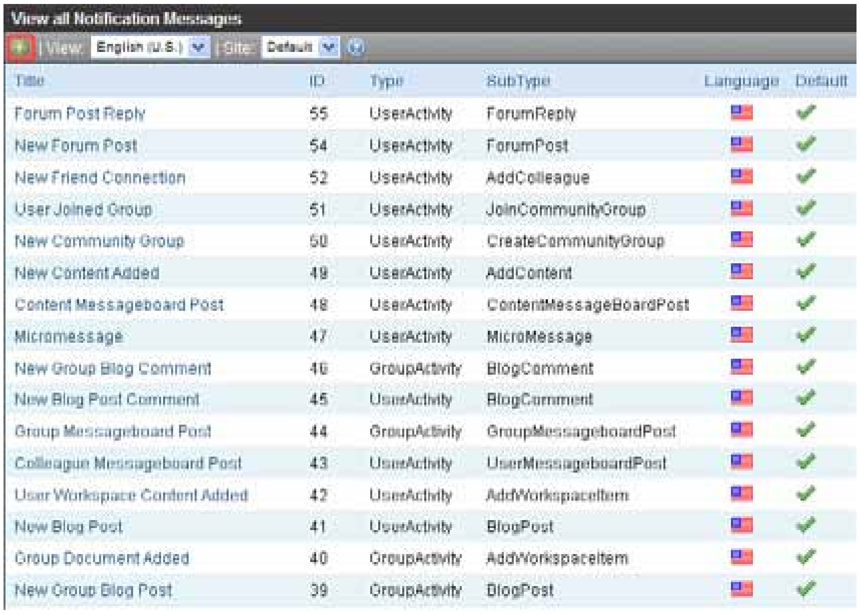
5. Click **OK**.

Adding a Message

Warning! A message is limited to 3000 characters *after* its tokens are converted to text. After 3000, any remaining characters are removed.

To create a message, follow these steps. See Also: "Review Notification Messages" on page 16-141

1. Log into the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **Messages**.



View all Notification Messages

View: English (U.S.) | Site: Default

Title	ID	Type	SubType	Language	Default
Forum Post Reply	55	UserActivity	ForumReply		✓
New Forum Post	54	UserActivity	ForumPost		✓
New Friend Connection	52	UserActivity	AddColleague		✓
User Joined Group	51	UserActivity	JoinCommunityGroup		✓
New Community Group	50	UserActivity	CreateCommunityGroup		✓
New Content Added	49	UserActivity	AddContent		✓
Content Messageboard Post	48	UserActivity	ContentMessageBoardPost		✓
Micromessage	47	UserActivity	MicroMessage		✓
New Group Blog Comment	46	GroupActivity	BlogComment		✓
New Blog Post Comment	45	UserActivity	BlogComment		✓
Group Messageboard Post	44	GroupActivity	GroupMessageboardPost		✓
Colleague Messageboard Post	43	UserActivity	UserMessageboardPost		✓
User Workspace Content Added	42	UserActivity	AddWorkspaceItem		✓
New Blog Post	41	UserActivity	BlogPost		✓
Group Document Added	40	GroupActivity	AddWorkspaceItem		✓
New Group Blog Post	39	GroupActivity	BlogPost		✓

3. If you are using the Multi-Site feature, select the site with which this message will be associated.
4. Click the **Add Notification Message** button ( ).
5. The Add Notification Message screen appears.
6. Complete the fields as described below.

Field	Description
Title	Enter a name for the message.
Type	Select the type of message you want to create. Choices are: **User** - message sent when user activity occurs **Community Group** - message sent when group activity occurs The activity is specified at the **Sub Type** field.
Sub Type	Select the activity which triggers the sending of this message. See Also: "Message Types" on page 16-142.
Tokens	A list of available tokens for the selected Sub Type appears. **Tip**! To easily insert a token into a message, highlight a token, then copy and paste it into the message. For a list of tokens and their sub types with, see "Message Tokens: User and Content-Based" on page 16-144. To learn about how to make tokens into hyperlinks, see "Making Tokens into Hyperlinks" on page 16-148.

Field	Description
Default	Click this check box if you want the message to be the default one that is sent. See Also: "Assigning the Default Message for a Type and Sub Type" on page 16-143
Subject	Enter a subject to be used if the message is sent as email.
Text	Enter the text and tokens that comprise the message. The editor allows you to format the text. Use this editor for HTML, email, and activity stream messages. See Also: "Composing a Message" on page 16-143 and "Making Tokens into Hyperlinks" on page 16-148
Plain Text	Enter the text and tokens that comprise the message you want to send. Use this field for SMS type messages and messages to be sent as plain text. **Tip**! If you already composed the message in the editor above, you can select that text, then copy and paste it into the **Plain Text** field. **Warning!** Most SMS systems impose a 160 character limit on messages. If you create a plain text message greater than 160 characters, CMS400.NET divides it into several, smaller messages.

7. Click the **Save** button ().

The message now appears in the list of Notification messages. If it is the default and an activity occurs on your Web site that matches the type and sub type, the message is sent.

Editing a Message

To edit a message, follow these steps. See Also: "Review Notification Messages" on page 16-141

1. Log into the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notification** > **Messages**.
3. If you are using Ektron's Multi-Site feature, select the site for which this message is used.
4. Click the title of the message you want to edit.
5. Make changes as needed. For a description of the fields on this screen, see "Adding a Message" on page 16-150.
6. Click the **Save** button ().

Removing a Message

When you no longer need a message, you can remove it from CMS400.NET. To remove a message, follow these steps.

1. Log into the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notification** > **Messages**.

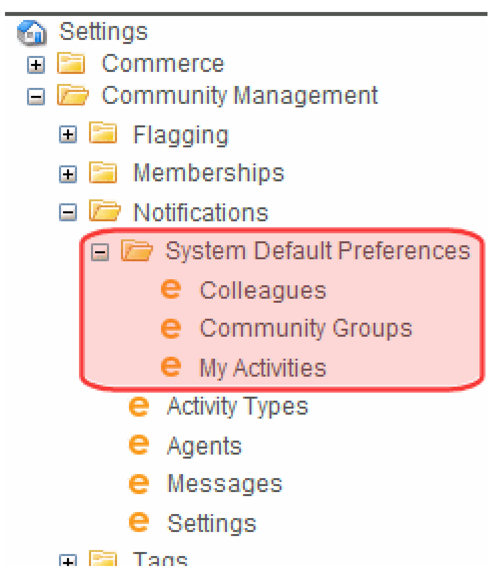
3. Click the title of the message you want to delete.
4. Click the **Delete** button ( ).
5. Click **OK** on the confirmation message.
6. The message is removed.

Set Default Notification Preferences

Ektron CMS400.NET provides a default set of Notifications that apply to all newly-created users. After a user is created, he can change his preferences by editing his profile, selecting the **Activities** tab, and checking or unchecking activities and agents.

For a list of activities, see "Activities that Trigger a Notification Message" on page 16-157. To learn about agents that appear across the top of the screen (for example, **SMS**), see "Review Notification Agents" on page 16-136.

You can apply three types of default settings via screens on the Workarea Settings tab (illustrated below).



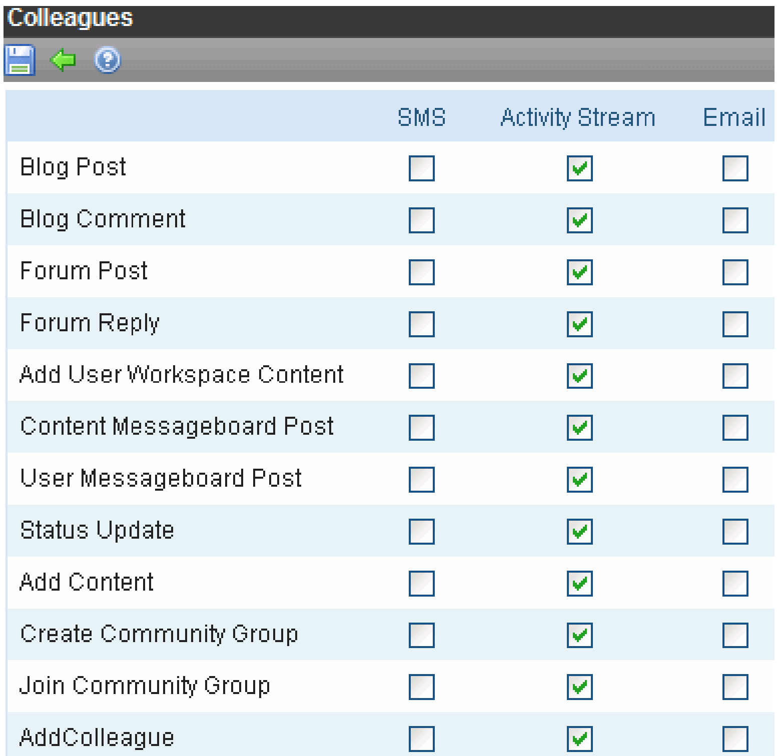
- Notification of colleagues' activities
- Notification of Community Group activities
- Notification of your activities to other users or Community Groups

Note: If you are upgrading to Version 8.0, all activities are checked for the Activity Stream agent by default. No activities are checked for the other agents by default.

Setting Default Colleague Notifications

To set default Notifications for colleagues, follow these steps. See Also: "Set Default Notification Preferences" on page 16-153

1. Log in to the Ektron CMS400.NET Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **System Default Preferences** > **Colleagues**.
3. Click the Edit button ( ).
4. Place a check mark next to each a default Notification.



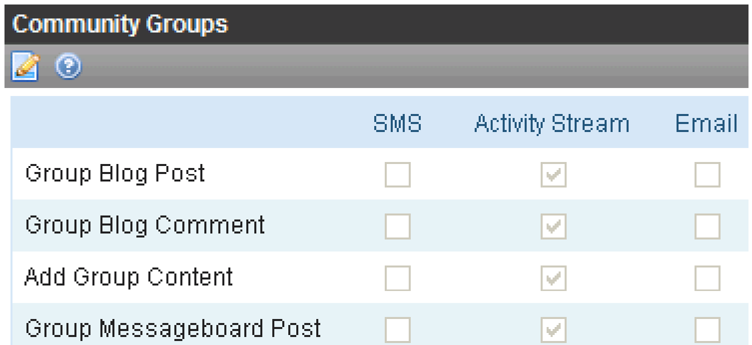
5. Click the **Save** button ( ).

Setting Default Community Group Notifications

To set the default Notifications of Community Group activities, follow these steps. See Also: "Set Default Notification Preferences" on page 16-153

1. Log into the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **System Default Preferences** > **Community Groups**.

3. Click the Edit button ( ).
4. Place a check mark in each box you want to be a default Notification.

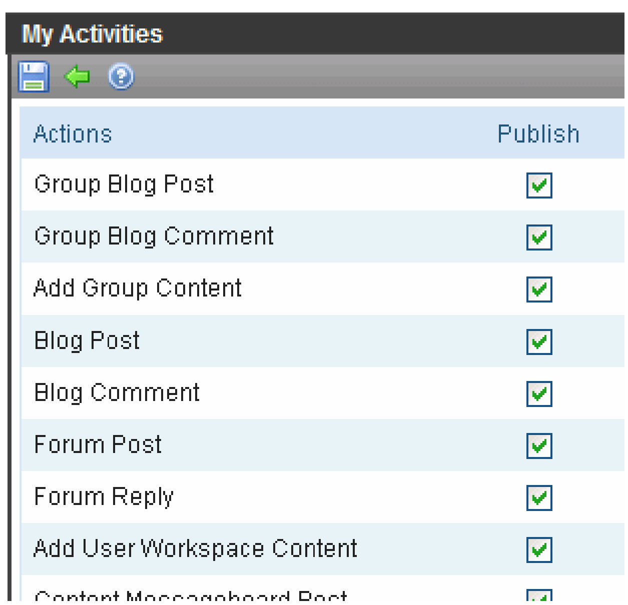


5. Click the **Save** button ( ).

Setting Default Notifications For Your Activities

To set the default Notifications of the logged-in user's activities that will be sent to other users and groups, follow these steps. See Also: "Set Default Notification Preferences" on page 16-153

1. Log into the Workarea as an administrator.
2. Navigate to **Settings** > **Community Management** > **Notifications** > **System Default Preferences** > **My Activities**.
3. Click the Edit button ( ).
4. Place a check mark in each box you want to be a default Notification.



5. Click the **Save** button ( ).

Enable/Disable a User's Notification Activities

Each user determines which activities he wants to be notified about, and about which he wants to notify others, on the User Profile screen's **Activities** tab.

Three sub-tabs group the activities.

Sub-tab	Description
Colleagues	Activities involving colleagues that the logged-in user wants to be notified about
Groups	Activities involving Community Groups that the logged-in user wants to be notified about
My Activities	Activities involving the logged-in user about which he wants to inform colleagues and Community Group

The enabling of activities in the User Profile is fully explained in these topics.

- "Activities that Trigger a Notification Message" on page 16-157
- "Set Default Notification Preferences" on page 16-153

Activities that Trigger a Notification Message

The table below lists activities that can trigger a Notification message, and the **Activities** sub-tab on which they can be enabled or disabled.

Activity Type & Description	Colleague Action (available from Colleagues sub-tab)	Community Group Action (available from Groups sub-tab)	User Action to Notify Others about (available on My Activities sub-tab
Add Colleague - message sent when user adds a colleague	✓		✓
Add Content - message sent when user adds content to CMS400.NET	✓		✓
Add Group Content - message sent when user uploads content to Community Group Workspace		✓	✓
Add User Workspace Content - message sent when user uploads content to his profile	✓		✓
Blog Comment - message sent when user comments on a blog post	✓		✓
Blog Post - message sent when user posts to a blog	✓		✓
Content Messageboard Post - message sent when user posts to a message board associated with content	✓		✓
Create Community Group - message sent when user creates a community group	✓		✓

Activity Type & Description	Colleague Action (available from Colleagues sub-tab)	Community Group Action (available from Groups sub-tab)	User Action to Notify Others about (available on My Activities sub-tab
Forum Post - message sent when user posts to a Forum	✓		✓
Forum Reply - message sent when user replies to a Forum post	✓		✓
Group Blog Comment - message sent when user comments on a community group's blog post.		✓	✓
Group Blog Post - message sent when user posts to community group blog		✓	✓
Group Messageboard Post - message sent when user posts to a message board associated with a Community Group		✓	✓
Join Community Group - message sent when user joins community group	✓		✓
Status Update - message sent when user updates his status	✓		✓
User Messageboard Post - message sent when user posts to a message board associated with a user	✓		✓

Notifications and Multi-Site

In a Multi-site environment, Notifications stay within the site where the activity happened. For example, I have two sites: an Intranet and Social Club site. When a user from the Intranet site performs an activity that generates a message, it does not trigger Notifications on the Social Club site.

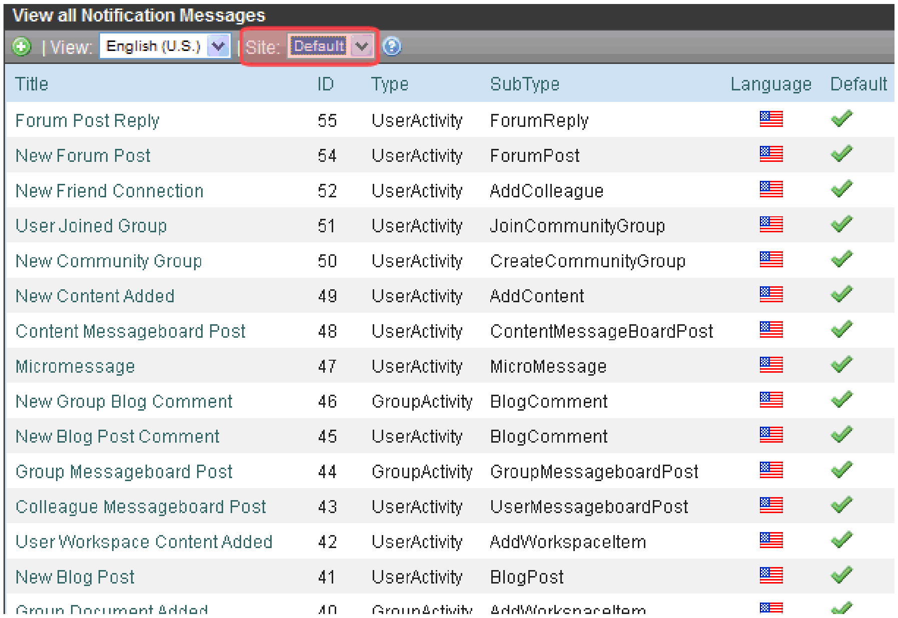
Exception: A user's colleagues receive notifications regardless of the site from which the message originated.

Notification Messages and Multi-Site

When creating Notification messages in a Multi-Site environment, you specify the site associated with message. This allows you to create customized messages for each site.

When a message type is created, it becomes the default message and is used by all sites. New messages of the same type can be assigned to each site in your environment.

To view the messages assigned to each site, go to the View All Notification Messages screen, click the **Site** dropdown, and select the site.



View all Notification Messages

| View: English (U.S.) | Site: Default |

Title	ID	Type	SubType	Language	Default
Forum Post Reply	55	UserActivity	ForumReply		✓
New Forum Post	54	UserActivity	ForumPost		✓
New Friend Connection	52	UserActivity	AddColleague		✓
User Joined Group	51	UserActivity	JoinCommunityGroup		✓
New Community Group	50	UserActivity	CreateCommunityGroup		✓
New Content Added	49	UserActivity	AddContent		✓
Content Messageboard Post	48	UserActivity	ContentMessageBoardPost		✓
Micromessage	47	UserActivity	MicroMessage		✓
New Group Blog Comment	46	GroupActivity	BlogComment		✓
New Blog Post Comment	45	UserActivity	BlogComment		✓
Group Messageboard Post	44	GroupActivity	GroupMessageboardPost		✓
Colleague Messageboard Post	43	UserActivity	UserMessageboardPost		✓
User Workspace Content Added	42	UserActivity	AddWorkspaceItem		✓
New Blog Post	41	UserActivity	BlogPost		✓
Group Document Added	40	GroupActivity	AddWorkspaceItem		✓

For example, you want a "Status Update" message targeted one way for an Intranet site and another way for your Social Club site. To accomplish this, create a two messages. The message for the Intranet site might state:

@SubjectUser.username@ has updated his status on Intranet with the following: @MicroMessage.Message@.

While your Social Club site might have a message that states:

@SubjectUser.username@ has updated his status on the Social Club with the following: @MicroMessage.Message@

Using Notifications with SSL

If your site uses SSL, you need to update the link in the Ektron notification service configuration file with that information. The file is located here: `your server\Program Files\Ektron\EktronNotificationService\Ektron.Notification.Service.exe.config`.

Below are the tags to be changed.

```
<siteNotification>
<sites>
<add name="769723537" url="https://your server" connectionString="server=your server;database=Intranet2;Trusted_Connection=true;User ID=;Password=;" />
</sites>
</siteNotification>
```

You must restart the Ektron Notification Service in order to enable these changes.

Using eSync with Notifications

When using eSync with Notifications, any new agents are not synched. This means that you must manually add new agents to each server in your configuration.

Once the agent exists on all servers in your configuration, eSync keeps them updated. For example, assume a membership user logs into the production server and updates his profile's **Activities** tab by changing the activities a custom agent will perform. eSync will sync those changes with the staging server.

See Also: "Adding an Agent" on page 16-139

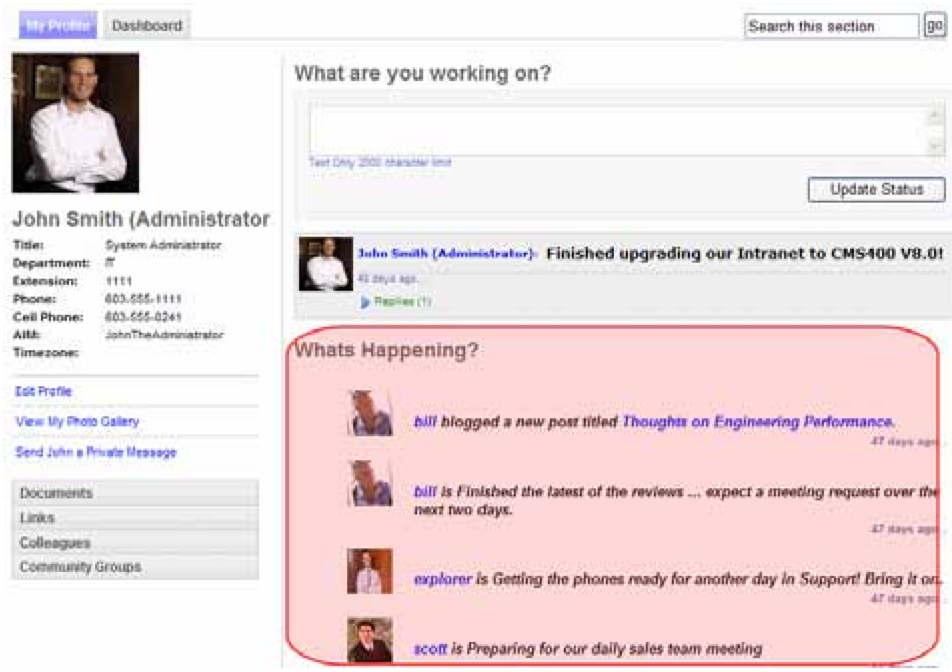
Activity Streams

As explained in "Notifications" on page 16-129, CMS400.NET users are notified by *agents* such as

- SMS
- Ektron email
- Activity Stream

This section explains how to manage the display of notification messages via the *Activity Stream* agent.

Sample Activity Stream



As you can see, an Activity Stream is a series of chronologically-arranged notification messages describing activities within Ektron CMS400.NET.

Before reading this section, you should be familiar with "Notifications" on page 16-129, which describes when messages get generated, for whom, how their text is created, etc.

Displaying an Activity Stream on Your Web Site

The following table describes the various ways of presenting an Activity Stream on your Web site.

<table>
<tr><th>For this kind of Web page</th><th>Use this</th><th>To see Notifications for</th><th>For more information, see</th></tr>
<tr><td>.aspx</td><td>ActivityStream server control</td><td rowspan="2">The user or group identified in the page’s query string.
If none is identified, the logged-in user sees his own notifications.</td><td>"ActivityStream Server Control" on page 16-169</td></tr>
<tr><td>PageBuilder</td><td>ActivityStream widget</td><td>"The ActivityStream Widget on a PageBuilder Page" on page 16-168</td></tr>
<tr><td>Ektron CMS400.NET Personalization</td><td>ActivityStream widget</td><td>- Yourself
- Your colleagues
- Your community groups</td><td>"The ActivityStream Widget on a PageBuilder Page" on page 16-168</td></tr>
<tr><td>Community Feature: your profile page</td><td rowspan="3">No action required - Activity Stream appears by default</td><td colspan="2">Yourself</td></tr>
<tr><td>Community Feature: a colleague’s profile page</td><td colspan="2">Colleagues
See Also: "Viewing the ActivityStream Widget on Another User’s Personalization Page" on page 16-164</td></tr>
<tr><td>Community Feature: group profile page</td><td colspan="2">Community Group of which you are a member</td></tr>
</table>

Making the ActivityStream Widget Available

The ActivityStream widget is installed with Ektron CMS400.NET. However, if you are upgrading from a previous version, you should sync your Widget list to make sure ActivityStream is available. To do this:

1. Navigate to the **Workarea** > **Settings** > **Configuration** > **Personalizations** > **Widgets** screen.
2. Click the **Sync** button ( ).

The ActivityStream Widget on a Personalization Page

Note: To learn about CMS400.NET‘s Personalization feature, see "Personalizing a Web Page" on page 9-302.

There are two scenarios to explain how the Activity Stream widget works on a personalization page.

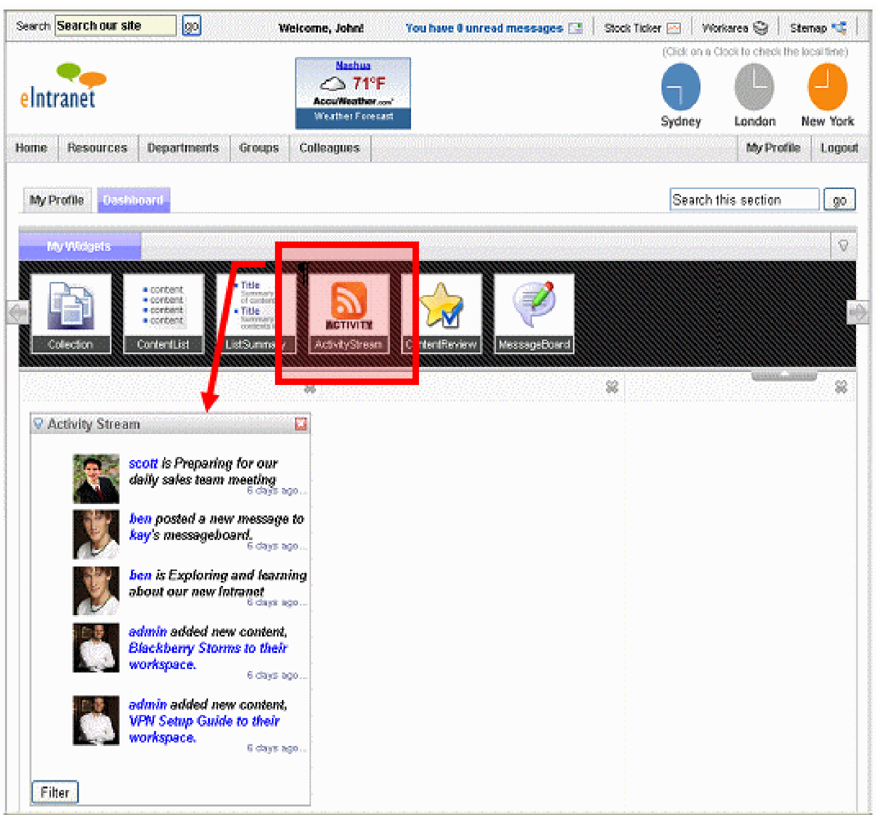
- "Viewing the ActivityStream Widget on Your Personalization Page" on page 16-163
- "Viewing the ActivityStream Widget on Another User's Personalization Page" on page 16-164

Viewing the ActivityStream Widget on Your Personalization Page

When you drag and drop an ActivityStream widget on a Personalization page, it displays activities performed by

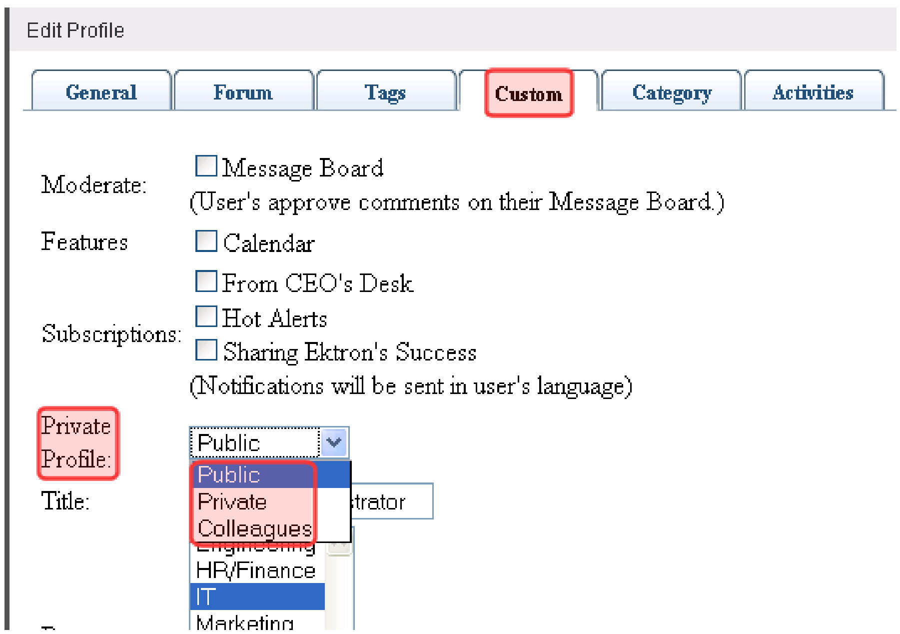
- you, the logged-in user
- your colleagues
- community groups to which you belong

See sample screen below.



Viewing the ActivityStream Widget on Another User's Personalization Page

When you view *another user's* personalization page containing this widget, the activities you see are controlled by that user's **Private Profile** setting (see illustration below) and whether he is your colleague.



The table below describes when you can see another user's Activity Stream.

If the user's Private Profile Setting is…	and the user is…	you can…
Public	a colleague	view his activities
Public	not a colleague	view his activities
Private	a colleague	view his activities
Private	not a colleague	only view his activities if you are an administrator
Colleague	a colleague	view his activities
Colleague	not a colleague	not view his activities

If you can view another user's activities, you see activities that he performs and activities his colleagues perform that relate to him.

From this widget, you can filter the Activity Stream to view only activities from specific users and community groups. See Also: "Filtering the ActivityStream Widget" on page 16-165

Filtering the ActivityStream Widget

Filtering means restricting the display of notifications in the ActivityStream widget to those from selected users or groups. For example, you only want to see activities performed by Kay Milford. In the filter, select Kay Milford, and the ActivityStream widget shows messages only from her.

As another example, you are the head of the Engineering department and want to see your employees' activities. To accomplish this, add them as colleagues. Then, in an ActivityStream widget, create a filter with their names. That widget only shows your employees' activities.

If your department has a community group, you could add that group to the filter. Then, in addition to your employees' activities, you would see the group's activities.

This feature, combined with the ability to add multiple ActivityStream widgets to a page, allows you to create separate activity streams that focus on people and groups of interest.

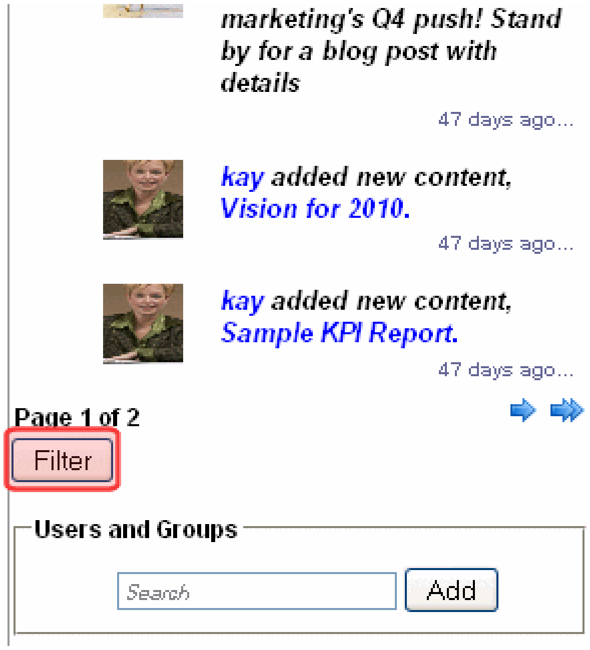
Below is an image showing one ActivityStream widget that displays all of a user's colleagues (on the left), and three other widgets with filters that focus on individual users.

You could take this example one step further. If Leah Mathis and Scott Markey both work in "Sales & Marketing" and Bill Smith, Works in "Engineering," you might only have two widgets, one for Scott and Leah and another for Bill.

Filtering an ActivityStream Widget

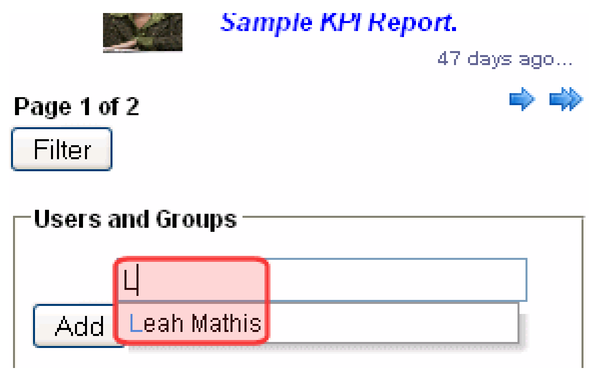
To filter the ActivityStream widget, follow these steps.

1. Click the **Filter** button at the bottom of the widget.



2. Enter the name of a user or community group in the **Users and Groups** text box by which to filter.

   As you start typing, an AutoComplete feature helps you narrow down the selection.

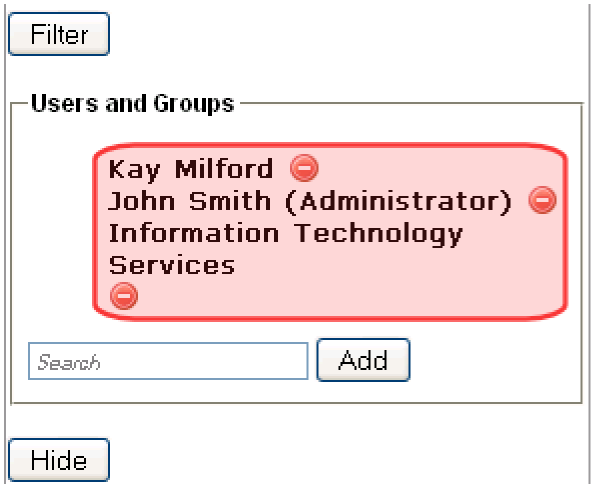


3. Once a valid name is in the text box, click the **Add** button.

Warning! A valid name is one that exactly matches a user's Display Name or community group's Group Name. If your entry does not match, the widget refreshes and no filter is added.

4. The ActivityStream widget refreshes, and only activities performed by the selected user or Community Group members appear.

   Also, the users or Community Groups you selected in Step 3 appear in the widget's filter area (see example below).



You can add as many users or Community Groups to the filter as you like, one at time. After you finish, you can hide the filter by clicking the **Hide** button.

Removing an Entry from the ActivityStream Widget Filter

To remove a user or Community Group from an ActivityStream widget filter, follow these steps.

Note: If you remove all users and groups from the filter, the widget shows notifications from *all* users whose activities you can view.

1. If you cannot see the filter's users or Community Groups, click the **Filter** button at the bottom of the widget.
2. Click the **Delete** button ( ) next to the user or Community Group you want to remove.
3. The ActivityStream widget refreshes, and the removed user or Community Group's activities disappear from the stream.

The ActivityStream Widget on a PageBuilder Page

Note: To learn about Ektron's PageBuilder functionality, see See "Building PageBuilder Pages" on page 6-1.

When used on PageBuilder page, the ActivityStream widget shows the logged-in user's activities by default. However, you can modify the widget to focus on another user's or community group's activities.

For example, you create a PageBuilder page about the CEO of your company and want to display notifications about activities that he, his colleagues, and his community groups perform on the site.

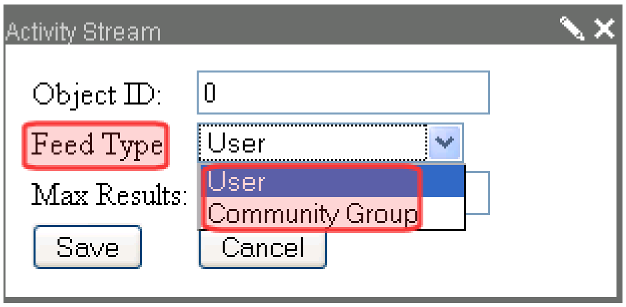
To accomplish this, add the ActivityStream Widget to a “See what the CEO is Up To” page. While doing that, specify the user ID assigned to your CEO (available from his User Profile). When an Intranet user visits the page, he sees a list of the CEO’s activities.

Displaying a Colleague’s or Group’s Notifications in the Activity Stream Widget

To display another user’s or Community Group’s activities in the ActivityStream widget, follow these steps.

Prerequisite: The ID number of the user or Community Group whose notifications will appear

1. Drag and drop the ActivityStream widget.
2. The following dialog appears.



3. Use the **Feed Type** dropdown to select **User** or **Community Group**.
4. In the **Object ID** Field, enter the user’s or Community Group’s ID.
5. Click **Save**.

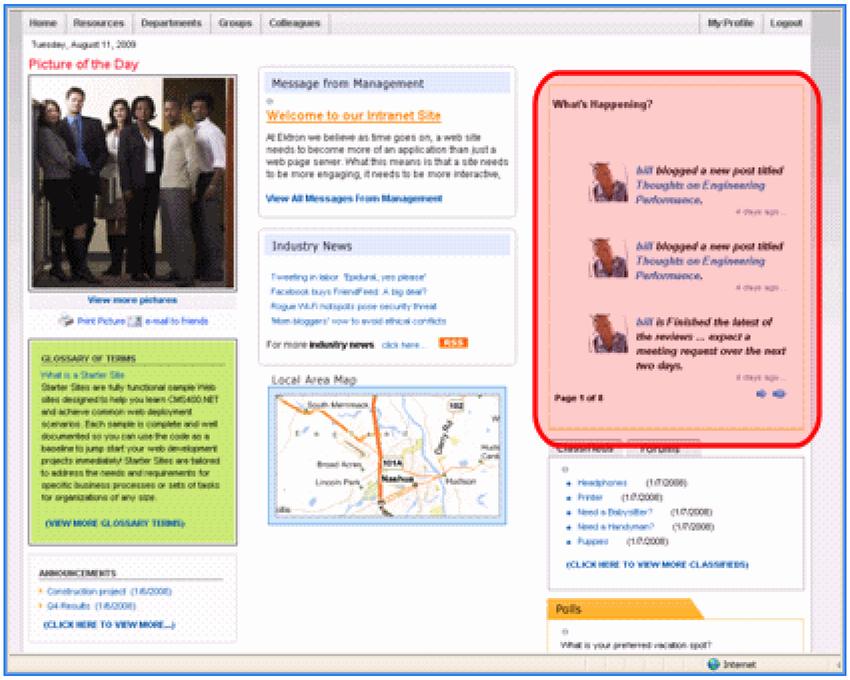
ActivityStream Server Control

The ActivityStream server control displays notification messages generated by Ektron CMS400.NET’s Notification system. For background information on the Activity Streams, see "Activity Streams" on page 16-160.

Below are some pages where you might use this control.

- a landing page where a user arrives after logging in
- a user’s profile page
- a group’s profile page
- any page where you want to show a user’s or group’s activities

The image below shows an intranet Home page with the ActivityStream server control highlighted. Whenever a user logs into the site, he sees a list of his colleagues' activities.



How the Control Determines the User or Group for which to Display Activities

When this control is added to a Web page, Ektron CMS400.NET looks for a `DefaultObjectID` defined in server control properties. If one is found, the activity stream is based on that user or group. If none is found, notifications are based on the pages's dynamic query string parameter, which typically identifies the logged-in user.

Quick Setup Instructions

To add this control to a page, drag and drop it on a Web form and set the following properties.

- **DefaultObjectID** - If you want a user's or community group's activity stream to appear in the control, enter that ID.
- **DefaultObjectParameter** - enter the default object parameter used on the QueryString to define an object's ID. For example, if you are passing the ID value of a community group, you might enter 'gid' for this property.

So, if you pass `http://~yoursite~/CGHome.aspx?gid=21` in the query string to a page containing this control, you see the activity stream for the Community Group whose ID is 21.

- **ObjectType** - select the whether the control is associated with a user or Community Group
- **TemplateUserProfile** and **ProfileParamName** - If you want a user's avatar in the activity stream to be a clickable link that leads to his profile page, set these properties.

ActivityStream Server Control Properties

The ActivityStream server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: ”Using CMS Explorer to Browse Your Ektron CMS400.NET Site” on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: ”Caching with Server Controls” on page 21-42.	Double
DefaultObjectID	The ID of the object whose activity stream will appear where you place this server control. For example, if you want this control to display Scott Markey's activities, and his USER ID is 142, place **142** here, and set the `ObjectType` property to **User**. To display the activity stream for the logged-in user, enter zero (**0**).	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String

Property	Description	Data Type
DynamicObjectParameter	Gets or sets the QueryString parameter to read a object ID dynamically. To use the default object ID, leave blank. For example, if you are passing the ID value of a community group, you might enter 'gid' for this property. So, if you passed `http://~yoursite~/CGHome.aspx?gid=21` on the QueryStrings to a page containing this control, you would see the activity stream for the group with an ID of 21.	String
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of notifications while controlling the amount of screen space. To accomplish this, the display is limited to the number set in the `MaxResults` property. If you set this property to true, and the number of items exceeds the MaxResults number, navigation aids appear below the last item.	Boolean
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the ActivityStream control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35.	String
MaxResults	The Maximum number of notifications to fetch. 0 (zero) = unlimited.	Integer
ObjectType	The type of object to which this control is assigned. Choices are: **User** - control is assigned to an individual **Group** - control is assigned to a community group	ActivityFeedType

Property	Description	Data Type
ProfileParamName	The parameter name to pass in the QueryString to the TemplateUserProfile page, if you want it to be anything other than id. For example, you may prefer `userid`, because it is more descriptive, as shown in the following example.  	String
Stylesheet	Specify the path to a style sheet for use with the Documents server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String
Suppress WrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateActivity	The URL path to a page that contains another ActivityStream server control. When this property contains a path and the destination page has an ActivityStream control whose `ObjectType` property is set to `Activity`, a user can click an ActivityStream's time span on the first page to open a second page that contains just that activity.	String

<table>
<tr><th>Property</th><th>Description</th><th>Data Type</th></tr>
<tr><td>Template
UserProfile</td><td>
The URL path to a page that contains the UserProfile server control. This path can be relative or absolute.
If you enter a path, a user can click any user’s name or avatar from the Message Board server control and be forwarded to his profile page. See illustration below.


Note that user templates can be defined in the Ektron CMS400.NET Workarea > Settings > Community Management > Templates screen.
However, if you assign a template in this field, this setting takes precedence over the setting on the Workarea Template screen.
</td><td>String</td></tr>
<tr><td>WrapTag</td><td>
Allows a developer to specify a server control’s tag.
The default is Span.
Span - The <span> tag is used to designate an inline portion of an HTML document as a span element.
Div - The <div> tag is used when you want to apply attributes to a block of code.
Custom - Allows you to use a custom tag.
</td><td>String</td></tr>
</table>

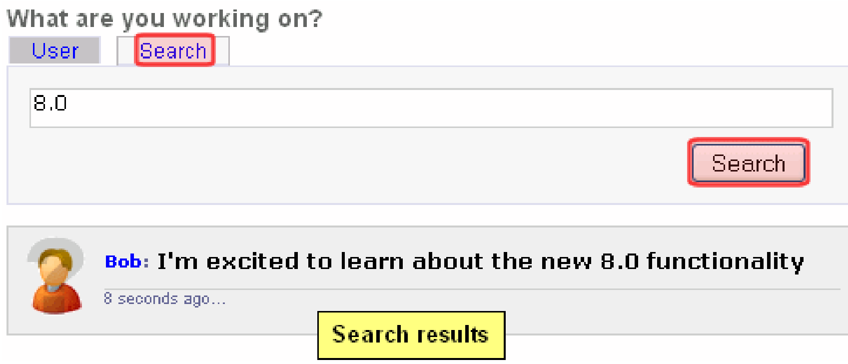
Micro-messaging Server Control

The Micro-messaging server control allows users to post brief messages. It resembles micro-blogging services like Twitter.

An example of the Micro-messaging control, within Ektron CMS400.NET’s sample Intranet site, is circled below.

A user can reply to another user’s micro-message, as illustrated below. See Also: "Replying to a Micro-message" on page 16-187.

The control also lets users search micro-messages. See Also: "Searching for Micro-messages" on page 16-184



This feature facilitates the building of tighter knit communities by allowing members to share information and feel as though they have a personal stake in that information.

The following topics explain Micro-messaging in more detail.

- "Micro-messages are an Activity Type" on page 16-177
- "Display Modes" on page 16-178
- "Making a Hyperlink to a Single Page Version of a Micro-message" on page 16-182
- "Searching for Micro-messages" on page 16-184
- "Replying to a Micro-message" on page 16-187
- "Filtering Micro-message Spam" on page 16-188
- "Micro-messaging Server Control Properties" on page 16-189

Note: A user's **Private Profile** setting has three possible values: **Public**, **Private** and **Colleague**. When discussing this control and these settings, **Private** and **Colleague** both act as **Colleague**.

Micro-Message Controls on Sample Sites

You can find examples of the Micro-message server control in these Ektron sample sites. You can copy and edit the samples as needed to build your own pages.

- Ektron Technology site > Login
  - user or colleague mode - User Profile page (top right corner)
  - time line mode - `http://your server/Intranet/timeline.aspx`
- Intranet Site > Login >
  - user or colleague mode - User Profile page (top right corner)
  - message mode - http://*your server*/Intranet/MicroMessage.aspx?id=*message id*
  - time line mode - `http://your server/Intranet/timeline.aspx`
- Developer Sample Site > Social Networking > MicroMessage and MicroMessage Api

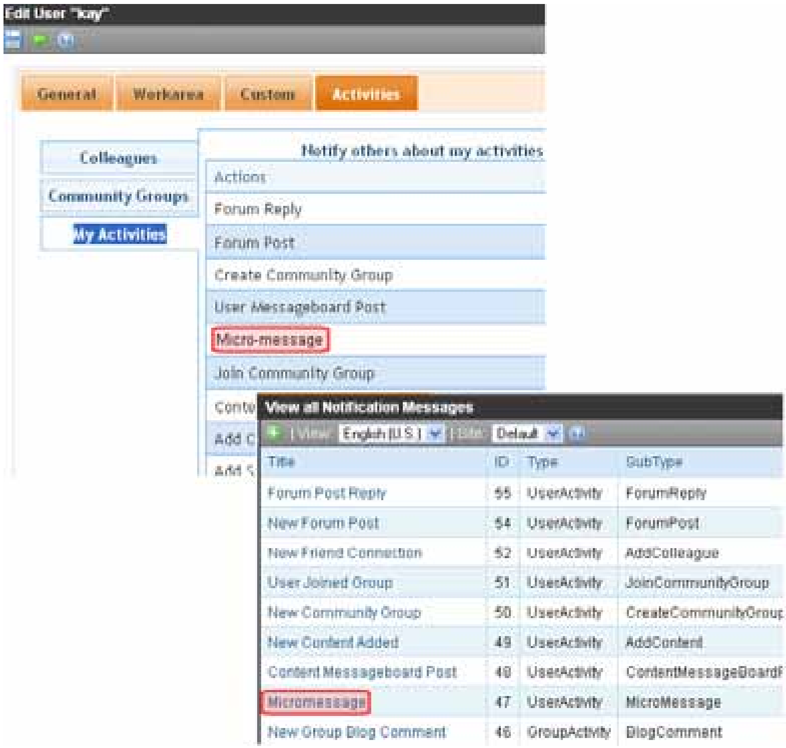
To download sample sites, go to `http://www.ektron.com/solutions/startersites/`.

Micro-messages are an Activity Type

A micro-message is type of Ektron CMS400.NET activity, like adding content or joining a Community Group. As such, a new micro-message can generate a notification. To learn more, see "Notifications" on page 16-129.

Like other notifications, Micro-messages can appear on an Activity Stream control. Micro-messages are circled in the example below.

Also like other activities, Micro-messaging appears on the **User Profile** > **Activities Tab** > **Colleagues** and **My Activities** subtabs, and has a Notification Message.



Display Modes

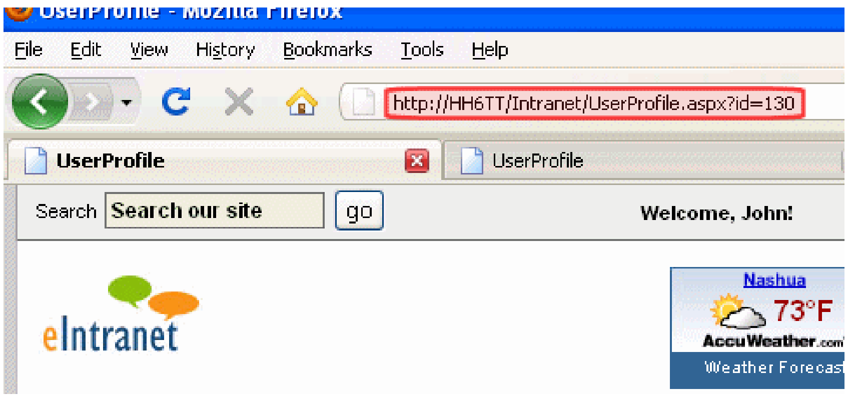
This Micro-messaging server control has four modes, which let you control the messages being displayed.

Mode	Displays	For more information, see
User	Micro-messages from the user associated with the control	"User Mode" on page 16-179
Colleagues	Micro-messages from the user associated with the control and his colleagues	"Colleagues Mode" on page 16-180
TimeLine	Micro-messages for all site users whose **Private Profile** setting is set to **Public**	"TimeLine Mode" on page 16-181
Message		"Message Mode" on page 16-182

Associating the Control with a User

Like other Ektron CMS400.NET server controls, there are two ways to specify the user associated with the control.

- you manually specify a user in the control's `DefaultObjectID` property. Do this when you want to display a particular user's micro-messages on a page.
- the user ID is retrieved from the page URL, which typically contains the logged-in user ID (see example below). Do this when you want to display the micro-messages of whoever is logged in.



User Mode

This mode displays micro-messages from the user associated with the control. See Also: "Associating the Control with a User" on page 16-179

Use this mode to show micro-messages for a specified user such as on a User Profile page. For example, when Mark views his own page in User Mode, he can

- see his messages
- submit a new micro-message. For example, he updates his status.
- search all micro-messages. See Also: "Searching for Micro-messages" on page 16-184.

Below is an example of the Micro-messaging server control with the Mode property set to `User`.

Using User Mode while Viewing Another User's Profile

A user can also view the control in User Mode when the control is associated with another user. For example, one user views another user's profile, which contains the Micro-messaging control in User Mode.

The visitor only sees micro-messages from the user who owns the profile. The first user cannot submit a micro-message from his colleague's profile page, nor can he search micro-messages.

For example, Bob and Steve are colleagues. When Bob views Steve's profile page, he

- sees all of Steve's messages
- sees messages from colleagues they have in common
- can*not* update his status
- can*not* search messages

Colleagues Mode

Colleagues Mode displays micro-messages from the user associated with the control *and his colleagues*. Use this mode on pages where you want to show micro-messages for these users, such as a user profile page.

When a logged-in user visits his page that contains a Micro-messaging control in colleagues mode, he can

- see his messages
- see his colleagues' messages
- update his profile
- search micro-messages. See Also: "Searching for Micro-messages" on page 16-184

Using Colleagues Mode while Viewing Another User's Profile

A user can also view the control in Colleagues Mode when the control is associated with another user. For example, one user views another user's profile, which contains the Micro-messaging control in Colleagues Mode.

The first user only sees micro-messages from the user who owns the profile and colleagues he has in common with the other user. The first user cannot submit a micro-message from his colleague's profile page, nor can he search micro-messages.

For example, Bob and Steve are colleagues. When Bob views Steve's profile page, he

- sees all of Steve's messages
- sees messages from colleagues they have in common
- can*not* update his status
- can*not* search messages

TimeLine Mode

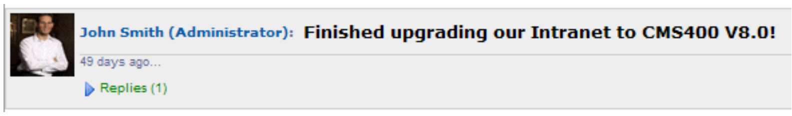
This mode displays micro-messages for all of a site's users whose **Private Profile** setting is set to **Public**. Use this mode to display an ongoing stream of micro-messages from all such users in chronological order, with the most recent at the top.

Whenever a user whose profile is set to Public submits a micro-message, it's added to the time line.

From the time line page, logged in users can also reply to and search micro-messages. See Also: "Replying to a Micro-message" on page 16-187, "Searching for Micro-messages" on page 16-184

Message Mode

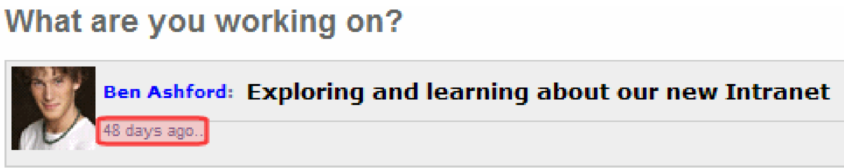
This mode displays a single micro-message on a page.



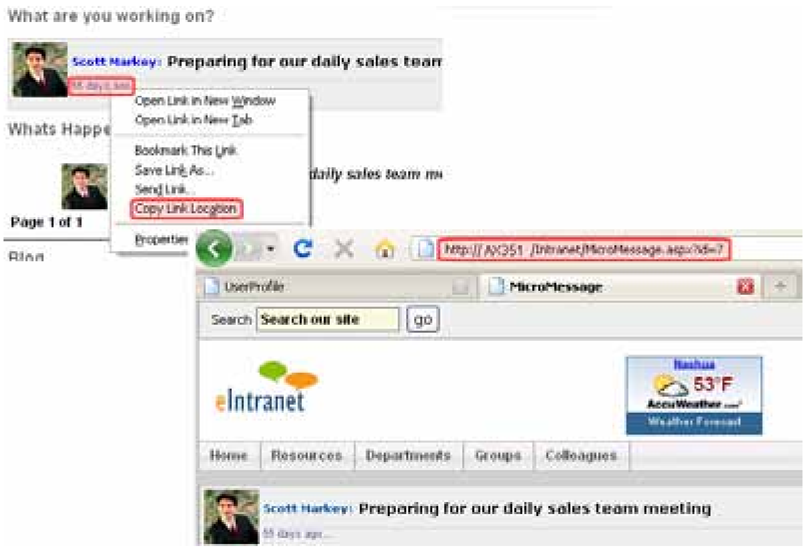
For example, John sends his boss a link to a micro-message that praises his work. When his boss clicks the link, he is taken to a page that contains this control. See Also: "Making a Hyperlink to a Single Page Version of a Micro-message" on page 16-182

Making a Hyperlink to a Single Page Version of a Micro-message

Each micro-message includes a *time lapse*, that is, the time between when the message was submitted and now. See example below.



Each micro-message's time lapse can become a hyperlink that contains the ID of that message and a destination window. As a result, users can click the link to view that message in the new window, as shown below.



The destination window must

- be identified in the properties of the Micro-messaging server control that displays the original message
- contain a Micro-messaging server control in Message Mode

Users can also copy the link and send it to another user, who can then view the message. To copy a time lapse's link information, hover over the link, right click, and select **Copy Shortcut** (if using Internet Explorer) or **Copy Link Location** (if using Firefox).

Note: If someone sends a micro-message link to another user who is ineligible to see the message, it does not appear. To see the message, either the user who submitted it has his profile set to **Public,** or the link recipient must be the message creator's colleague.

Below is an example of how to set up this capability.

- Page1.aspx contains a Micro-messaging server control that displays a user's micro-messages. The messages' time lapses are hyperlinks.
- Page2.aspx has a Micro-messaging server control in Message Mode. It displays the individual message whose time lapse was clicked on the first page.

Note: For a full description of the Micro-message server control properties, see "Micro-messaging Server Control Properties" on page 16-189.

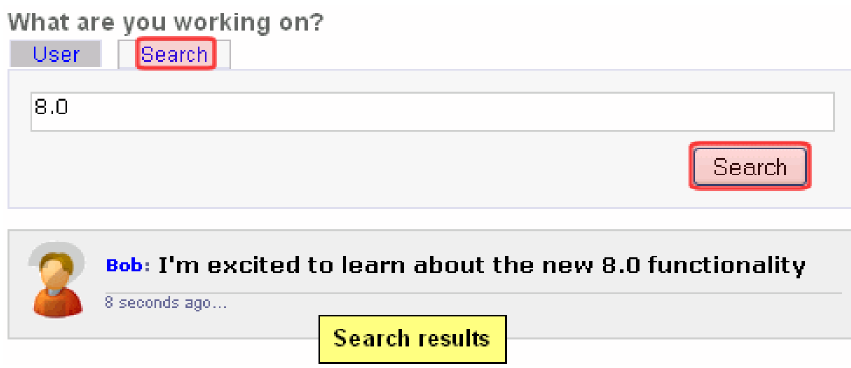
1. On Page1.aspx, add a Micro-messaging server control.
2. Set the `DynamicObjectParameter` to `id`.
3. Set the `TemplateMessage` to the path to Page2.aspx.
4. Set the `Mode` property to anything other than `Message`.
5. Save Page1.aspx.

6. On Page2.aspx, add a Micro-messaging server control.
7. Set the `DynamicObjectParameter` to `id`.
8. Set the `Mode` property to `Message`.
9. Save Page2.aspx.

Now, when you log in to your site and navigate to Page1.aspx, you see a list of your micro-messages. If you click the time lapse on any message, Page2.aspx loads, showing the message you clicked.

Searching for Micro-messages

The Micro-messaging server control includes search functionality that lets a user enter terms and returns micro-messages that match them. The search works with micro-messages only. It does *not* search content, products, users, or groups.



Also, when searching, a user can find micro-messages submitted by

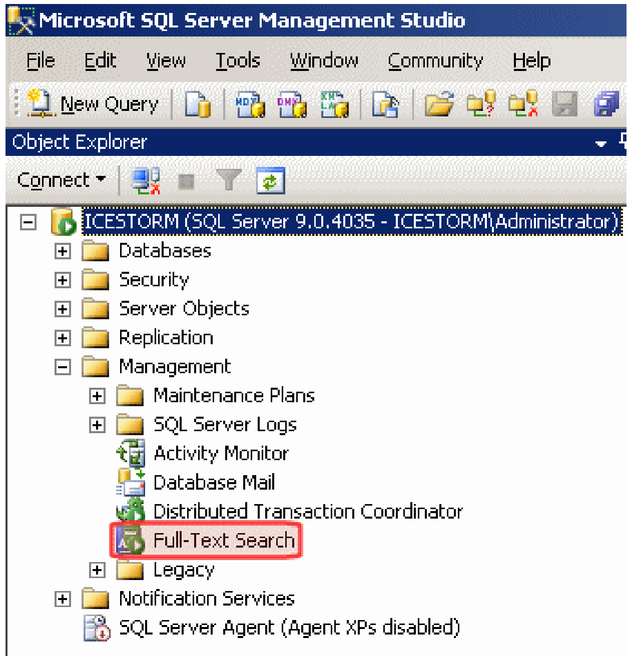
- himself
- his colleagues
- users whose profile is set to public

The following topics explain how to enable and use the micro-message search.

- "Enabling the Micro-message Search" on page 16-184
- "Entering Multiple Search Terms" on page 16-186

Enabling the Micro-message Search

The micro-message search requires your server to have the Full Text Search component of Microsoft SQL Server.



You can install the Full Text Search component during the installation of Microsoft SQL Server.

Installing the Full Text Search Component

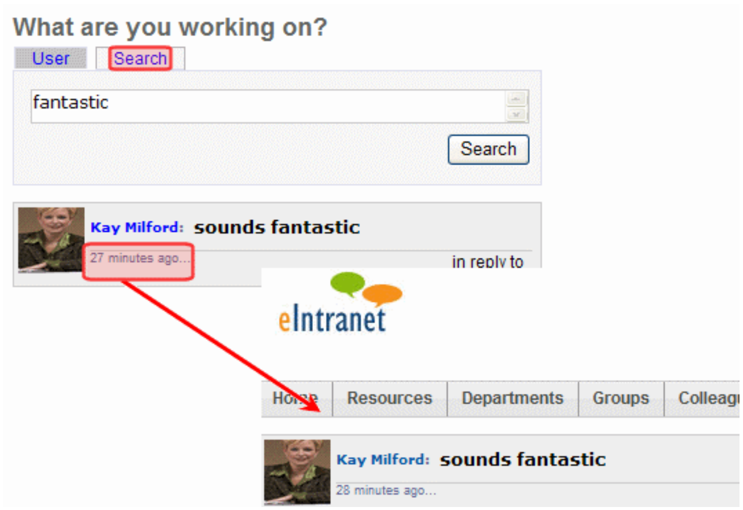
If the Full Text Search component is not installed, and you want to use the Micro-messaging search functionality, insert the SQL Server installation disc into your computer and look for **Full Text Search**.

After the Full Text Search is installed, run the FullTextIndex.sql script on your database. This script is located in:

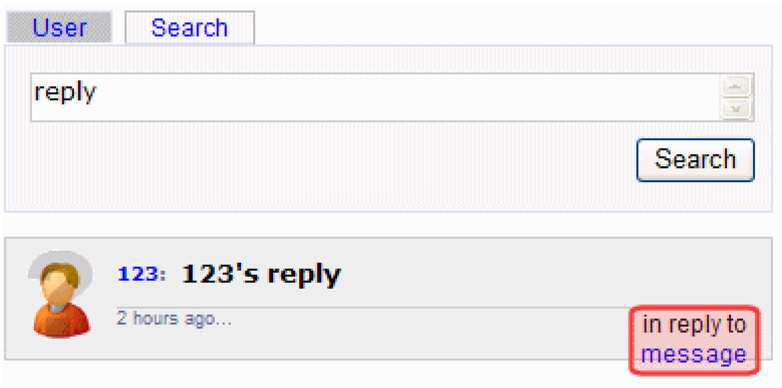
```
Program Files\Ektron\CMS400v80\Utilities\SiteSetup\Database\FullTextIndex.sql
```

Running a Micro-message Search

When Micro-message search is enabled, a **Search** tab appears on the control. To use the search, click the tab and enter search terms.



When results appear, you can click any message's time span to proceed to the message itself. If a reply appears among search results, you can click the link indicated below to view the original message.



Entering Multiple Search Terms

You can enter more than one search term. If you do, the terms have an "and" relationship. For example, if you enter **Community** and **Group**, only messages containing *both* Community *and* Group are found.

Multiple Search Term Example

Consider the following micro-messages:

Peter: *Wow, this is a great community.*

Paul: *I just joined the Motorcycle group*

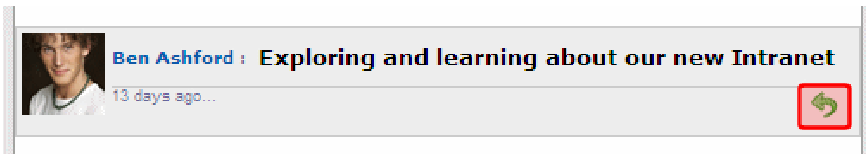
Mary: *I just created a new community group for Scrapbooking called "Clippers"*

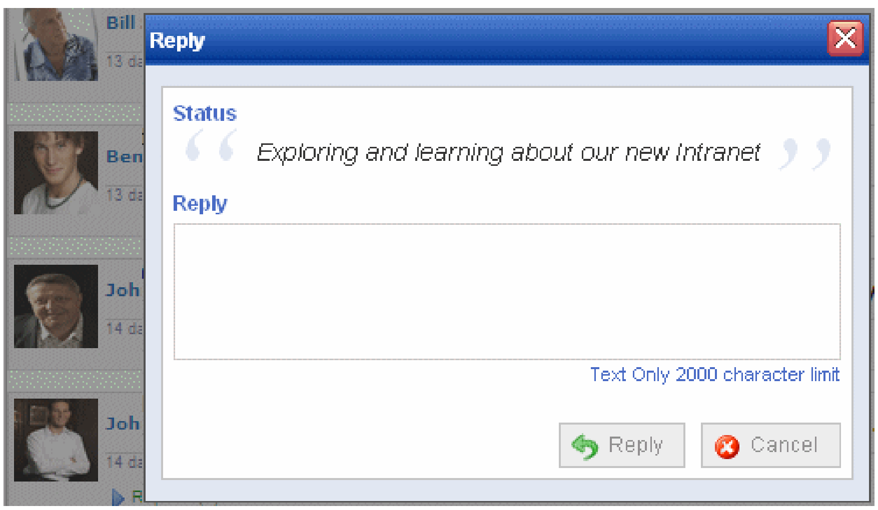
If you enter **Community Group** in the search box, the search returns only Mary's message, since it is the only one with both words.

Replying to a Micro-message

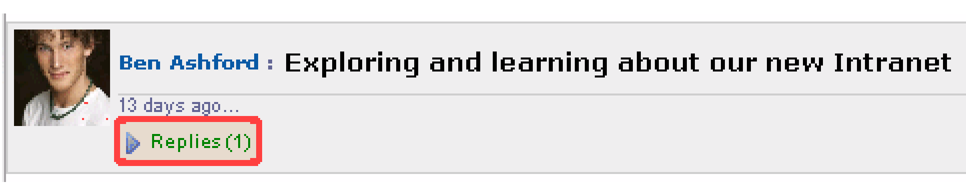
The Micro-message control allows users to reply to micro-messages and nests the reply with the original message. Anyone who can see a message can reply to it, and see all other replies.

To add a reply, hover over a message and click the Reply button ( ).
When you do, a dialog box appears in which you can enter a reply of up to 2000 characters. The box also displays the original comment.





Replies do not appear when a micro-message is viewed. Instead, a **Replies** link appears below the comment. The number of replies appears next to the link.



Click **Replies** to view them. They are ordered from newest at the top to oldest at the bottom.

To remove a reply, click the Delete button ( ); which appears when you hover over the reply. Only the user who submitted the reply and the message board owner can delete replies.

Filtering Micro-message Spam

You can filter spam from Micro-messages. Ektron defines spam filtering as preventing users from posting a micro-message or replying using:

- the same message more than once a day
- any second message within a specified time period after posting a first
- the same message within a specified time period

Note: If a user enters a micro-message and a reply that have the same text, each can be sent once without being stopped by the spam filter. However, if either is sent a second time within the specified time period, the spam filter blocks it.

The Micro-messaging server control also lets you define custom spam filters.

To define a spam filter, use the `SpamControlType` property on the MessageBoard server control. The table below provides possible values and examples of how to set that property.

As a developer I want to...	So I set the SpamControlType property to...	And I set the SpamTimeSpan property to ...
Prevent the same user from posting the same message more than once a day	**SameUserSameMessageSameDay**	
Prevent a user from posting any additional messages for 30 minutes	**SameUserTimeDelay**	**1800**

As a developer I want to...	So I set the SpamControlType property to...	And I set the SpamTimeSpan property to ...
Prevent a user from posting the same message for 2 hours	**SameMessageTimeDelay**	**7200**
Use my own spam filter code	**Custom** and add the code to the code behind page of the template containing the Micro-messaging server control. See Also: "Creating a Custom Spam Filter" on page 16-189	

Creating a Custom Spam Filter

You can create your own spam filter in the code behind of the page that contains the Micro-messaging control. To do this, set the `SpamControlType` property to `Custom`, call the `CustomSpamMethod` in the page load event, and point it to your custom spam filter method.

Below is a Visual Basic example that blocks the text "Hello World."

```
Partial Class Default
Inherits System.Web.UI.Page

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load

Me.MicroMessaging1.CustomSpamMethod(AddressOf SpamHandler)

End Sub

Private Function SpamHandler(ByVal data As Ektron.Cms.MicroMessageData) As Boolean

If data.MessageText = "Hello World" Then

Return True

End If
End Function
End Class
```

Micro-messaging Server Control Properties

The Micro-messaging server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-43.	Double
DefaultObjectID	The default object ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning! :** If you specify an external file, it is strongly recommended that you do not store this file your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicObjectParameter	Gets or sets the QueryString parameter to read a object ID dynamically. To use the default object ID, leave blank. For example, if you are passing the ID value of a user, you might enter 'uid' for this property. So, if you passed `http://~yoursite~/UPpage.aspx?uid=21` on the QueryStrings to a page containing this control, you would see the list of Micro-messages for the user with an ID of 21.	String
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of notifications while controlling the amount of screen space. To accomplish this, the display is limited to the number set in the `MaxResults` property. If you set this property to true, and the number of items exceeds the MaxResults number, navigation aids appear below the last item.	Boolean
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean

Property	Description	Data Type
Language	Set a language for viewing the ActivityStream control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MaxResults	The maximum number of messages to return. 0 (zero) = unlimited.	Integer
MaxSearchResults	The maximum number of messages to return when performing a micro-message search. 0 (zero) = unlimited.	Integer
Mode	Specify the type of micro-messages you want to display. Choices are: **User - micro-messages for logged-in user with search option** **Colleagues** - micro-messages for logged-in user and colleagues of a specified user with search option **TimeLine** - micro-messages from all site users whose Private Profile setting is set to Public; includes search option **Message** - a single specified message See Also: "Display Modes" on page 16-178	ActivityFeedType
ProfileParamName	The parameter name to pass in the QueryString to the TemplateUserProfile page, if you want it to be anything other than id. For example, you may prefer `messageid`, because it is more descriptive.	String

Property	Description	Data Type
SpamControlType	Assigns a spam filter to the micro-messages. The control supplies three predefined spam filters, and the ability to define your own. Note: Spam control is turned off by default. Filter choices are: **SameUserMessageDay** - prevents a user from posting the same message to the board more than once per day **SameUserTimeDelay** - prevents a user from posting another message for specified period of time. The amount of time is specified, in seconds, in the `SpamTimeSpan` property. **SameMessageTimeDelay** - prevents a user from posting an identical message for a specified period of time. The amount of time is specified, in seconds, in the `SpamTimeSpan` property. **Custom** - control uses custom spam filter code. See "Creating a Custom Spam Filter" on page 16-189. See Also: "Filtering Micro-message Spam" on page 16-188	
SpamTimeSpan	Sets the amount of time, in seconds, for which the `SameUserTimeDelay` or `SameMessageTimeDelay` spam filter delays a user from posting. These values can be selected in the `SpamControlType` property. See Also: "Filtering Micro-message Spam" on page 16-188	Integer
Stylesheet	Specify the path to a style sheet for use with the Documents server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateMessage	The URL path to a page that contains another Micro-messaging server control. When this property contains such a path, and the destination page has a Micro-messaging control whose `Mode` property is set to `Message`, a user can click a micro-message's time span on the first page to open a second page that contains just that message. See Also: "Making a Hyperlink to a Single Page Version of a Micro-message" on page 16-182	String

Property	Description	Data Type
TemplateUserProfile	The URL path to the page that contains the UserProfile server control. This path can be relative or absolute. If you enter a path, a user can click any user's name or avatar from the Micro-message server control and be forwarded to his profile page. See illustration below.	String

Template UserProfile *(Continued)*	Note that user templates can be defined in the Ektron CMS400.NET **Workarea > Settings > Community Management > Templates** screen. However, if you assign a template in this field, this setting takes precedence over the setting on the Workarea Template screen.	
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Flagging

Flagging allows a site visitor to flag a piece of content and provide feedback. Flagging enables your site visitors to moderate your site. This is especially important for sites with large amounts of visitor-generated content. Flagging also helps site visitors feel invested in the site.

For example, you create a flagging definition with the following options that let your site visitors decide if content is inappropriate.

- Sexually Explicit
- Mature (over 18 only) content
- Graphic Violence
- Hate Speech

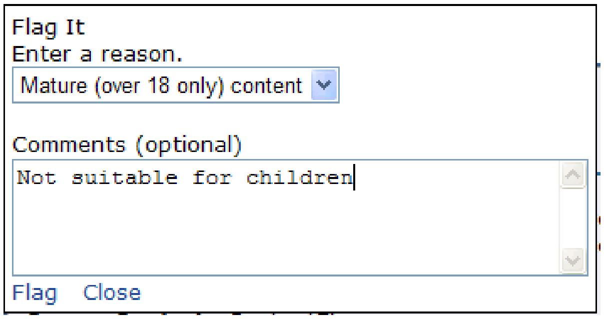
Flagging can also be used to let site visitors leave an opinion about a content item. Below is a sample list of options.

- Loved This Content
- Hated This Content
- I Could Take It or Leave It

Flagging is similar in function to the ContentReview server control. The main differences are

- Flagging feedback is not displayed on the site
- The Flagging control provides a user-defined list describing the reason for the flag

So, a flagging definition describes how a content item may be reviewed, and provides a list of choices that may be applied to content in a folder. Here is what one might look like on your site.



After you create a flagging definition, you assign it to relevant folders. All content in the folders can then be flagged with that definition.

As the final step in allowing site visitors to flag content, a developer must add a ContentFlagging server control to a Web page, and assign to it the ID of the content being flagged. See Also: "ContentFlagging Server Control" on page 16-204.

Flagged content appears in the following Workarea locations.

- **Content Flags** list on the Smart Desktop

- **Settings** > **Community Management** > **Flagging** > **Flagged Content**
- a content item's **View Content Reports** > **Flagging** tab

This section contains the following topics.

- "Flagging Definitions" on page 16-195
- "Flagged Content" on page 16-198

Flagging Definitions

The Flagging Definitions screen is located in the **Workarea > Settings > Community Management > Flagging**. From here, you can view a list of flagging definitions, work with them, or create new ones. In addition, you can filter the list by language.

This screen contains the following information about a flagging definition.

Field	Description
ID	The ID of the flagging definition.
Name	The name of the flagging definition.
Description	A description of the flagging definition.
Language	An image of a national flag associated with the language. For example, American English appears as .
Items	The number of flags in a definition. For example, if you have a flag definition for these movie ratings: - G - PG - PG-13 - R The items count for this flag definition would be four.

This section contains the following topics.

- "Adding a Flagging Definition" on page 16-196
- "Edit a Flagging Definition" on page 16-196
- "Deleting a Flagging Definition" on page 16-196
- "Assigning a Flagging Definition to a Folder" on page 16-197

Adding a Flagging Definition

To create a flagging definition, follow these steps.

1. In the **Workarea**, navigate to **Settings** > **Community Management** > **Flagging** > **Flagging Definitions**.
2. Select a language with which the flagging definition will be associated.
3. Click the Add button ( ).
4. The **Add Flagging Definition** screen appears.
5. Enter a **Name** and **Description** for the flagging definition.
6. Click the Option button ( ) to add a flag to this flagging definition.
7. Continue to click the **Option** button to add additional flags.
8. If necessary, change the order of the flags by clicking the Sorting buttons ( ). If you create a flag you want to remove, click the Remove button ( ).
9. Click the Save button ( ).

Edit a Flagging Definition

To edit a flagging definition, follow these steps.

1. In the **Workarea**, navigate to **Settings** > **Community Management** > **Flagging** > **Flagging Definitions**.
2. Click the flagging definition **Name** link or the **ID** link.
3. Edit the available fields.
4. Click the Save button ( ).

Deleting a Flagging Definition

When you no longer want to use a flagging definition, delete it. When a flagging definition is deleted, it is removed from all folders with which it is associated.

To delete a flagging definition, follow these steps.

1. In the **Workarea**, navigate to **Settings** > **Community Management** > **Flagging** > **Flagging Definitions**.
2. Click the flagging definition **Name** link or the **ID** link.
3. Click the Delete button ( ).

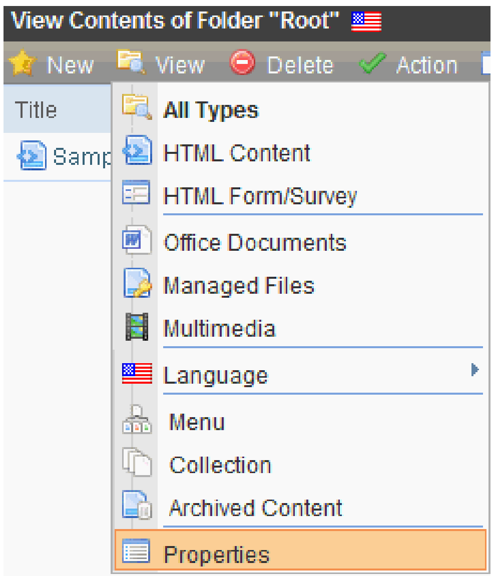
Assigning a Flagging Definition to a Folder

After creating a flagging definition, you assign it to one or more folders. When you do, the flagging definition may be applied to content in that folder.

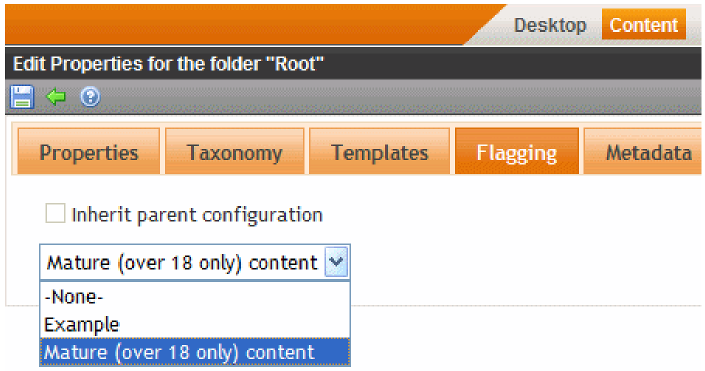
Like other folder properties, a folder's flagging definitions may be inherited by its child folders, although this does not occur by default.

To assign a flagging definition to a folder, follow these steps.

1. Create a flagging definition, as explained in "Adding a Flagging Definition" on page 16-196.
2. Click the **Content** tab on the Smart Desktop.
3. Navigate to the folder that contains the content that may be flagged.
4. Select **View > Properties** from the View menu.



5. The **View Properties** screen appears.
6. Click the Edit button ( ).
7. Click the **Flagging** tab.



8. Make sure the **Inherit Parent Flagging Configuration** check box is not checked.
9. Select a flagging definition from the **Flagging** drop down.
10. Click the Save button ( ).

Flagged Content

There are three places in the Workarea to work with flagged content.

- The **Smart Desktop**, which indicates the most recent flags applied to any content. See "Content Flags on the Smart Desktop" on page 16-198.
- **Settings** > **Community Management** > **Flagging** > **Flagged Content** shows all flagged content. See "Flagged Content in Settings > Community Management" on page 16-199.
- A tab on the **Content Reports** screen displays a list of content flags for a specific content item - See "Viewing a Content Item's Flags" on page 16-201.

Flagged content is more fully explained through the following topics.

- "Content Flags on the Smart Desktop" on page 16-198
- "Flagged Content in Settings > Community Management" on page 16-199
- "Viewing a Content Item's Flags" on page 16-201
- "Viewing a Flag's Details" on page 16-203
- "Editing a Flag's Details" on page 16-203
- "Deleting a Flag" on page 16-204

Content Flags on the Smart Desktop

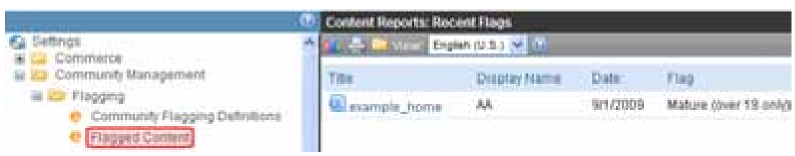
This area lists the ten most recently added content flags. From there, you can view a flag by clicking its Title.

To view all recent flags, click the **View recent flags** link. Clicking this link takes you to the Content Reports: Recent Flags screen. See Also: "Flagged Content in Settings > Community Management" on page 16-199

Flagged Content in Settings > Community Management

The Flagged Content area in **Settings > Community Management > Flagging > Flagged Content** allows you to display a list of flags assigned to content. By default, the list shows flags for the last ten days. You can change this by entering a new number in the **Show flags for the last # days field**.

See Also: "Flagging" on page 16-193



The information for each flag is explained in this table.

Field	Description
Title	The title of the content block being flagged. Clicking this link brings you to a detailed description of the content's flag.
Display Name	The name of the user who flagged the content as it is displayed on the Web site.
Date	The date the content was flagged.

Field	Description
Flag	The specific flag from the flagging definition for this content.
Comment	Comments added by the site visitor who flagged the content.

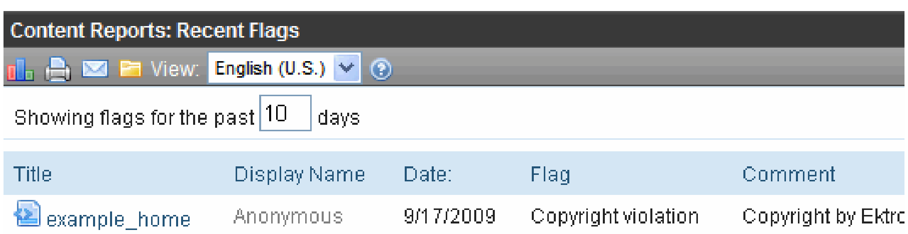
From this screen, you can perform the following actions:

- View the details of a submitted content flag - see "Viewing a Flag's Details" on page 16-203
- Generate a Flagged Content report - see "Generating a Flagged Content Report" on page 16-200
- Print a list of flagged content - see "Printing a List of Flagged Content" on page 16-200
- Filter flagged content by folder - see "Filtering Flagged Content by Folder" on page 16-201
- Filter flagged content by language - "Filtering Flagged Content by Language" on page 16-201

Generating a Flagged Content Report

By default the Content Reports: Recent Flags screen shows content flagged within the last ten days. To view a different date range, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Flagging** > **Flagged Content**.
2. In the **Showing flags for the last # days** field, enter a new number of days for which to show Flagged Content.



3. Click the **Report** button ().
4. The page refreshes and displays the new report.

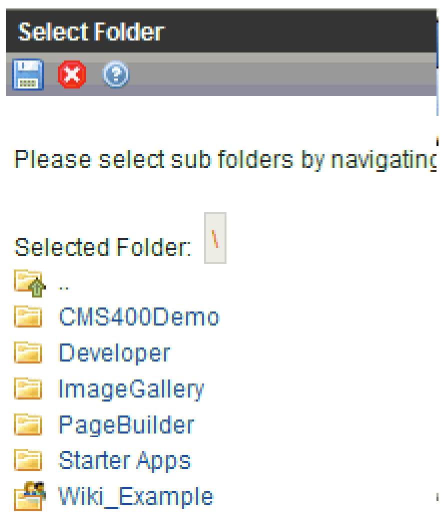
Printing a List of Flagged Content

On the Content Reports: Recent Flags screen, you can output the flagged content report to a printer by clicking the Print button (). This creates an HTML version of the list that opens in a browser. From there, you can print the list using the browser's print options.

Filtering Flagged Content by Folder

From the Content Reports: Flagged Content screen, you can filter flagged content by folder. This allows you to see flagged content for one folder. To do so, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Flagging** > **Flagged Content**.
2. Click the Filter button ()
3. The Select Folder screen appears.



4. Select a folder.
5. Click the Save button ().
6. The page refreshes, and any flagged content in the folder is shown.

Note: Only flagged content that falls within the time frame for the **Showing flags for the past # days** field is shown. For example, if the field is set to five when you filter by a folder, only content that's been flagged in the last five days appears.

Filtering Flagged Content by Language

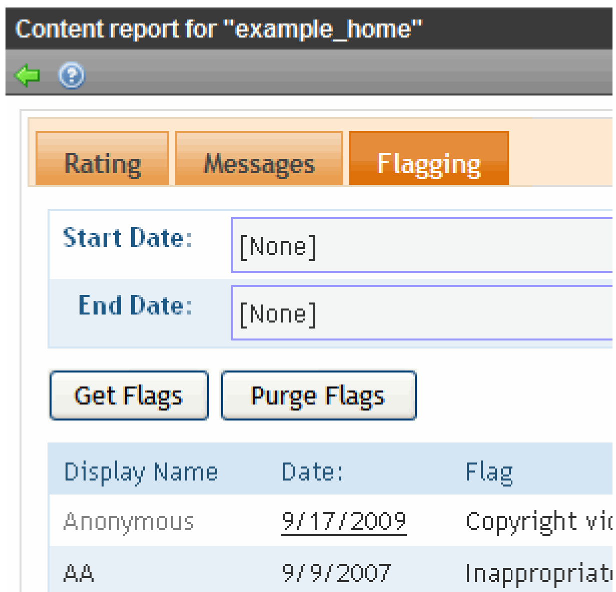
To see flagged content for a specific language, select the language from the **Language** drop down box. When the page refreshes, only flagged content associated with the language appears.

Viewing a Content Item’s Flags

You can also view flags for a specific content item. To see them, go to the **Content Report** screen > **Flagging** tab. From this screen, you can filter flags by a date range or see all flags associated with the content.

In addition, this screen contains a purge button, which allows you to remove all flags associated with this content. This subsection contains the following topics:

- "Viewing Flags Applied to a Content Item" on page 16-202
- "Purging a Content Item’s Flags" on page 16-203



Viewing Flags Applied to a Content Item

Follow the steps below to get flags for a content item.

1. In the **Workarea**, find the content block for which to retrieve content flags.
2. Click the title of the content block.
3. The **View Content** screen appears.
4. Click the Content Reports button ( ).
5. Click the Select Date button ( ) next to Start Date to select a start date.
6. Click the Select Date button ( ) next to End Date to select an end date.

Note: To retrieve all flags for a content item, leave the Start Date and End Date blank.

Note: To remove a Start Date or End Date, click the Delete Date button ( ).

7. Click the **Get Flags** button.
8. A list of flags applied to that content within the selected date range is displayed.

Purging a Content Item's Flags

If you need to delete flags for a content item, follow these steps.

1. In the Workarea, find the content block for which to purge content flags.
2. Click the title of the content block.
3. The **View Content** screen appears.
4. Click the Content Reports button ( ).
5. Click the Select Date button ( ) next to **Start Date** to select a start date.
6. Click the Select Date button ( ) next to **End Date** to select an end date.

Note: To purge all flags for a content item, leave the Start Date and End Date blank.

Note: To remove a Start Date or End Date, click the Delete Date button ( ).

7. Click the **Purge Flags** button.
8. The flags are removed.

Viewing a Flag's Details

Viewing a flag's detail information allows you to read the entire comment if it is truncated in one of the lists. You can also edit or delete a flag from this screen.

To view detailed flag and comment information, follow these steps.

1. Navigate to one of these area in the Workarea:
   - **Smart Desktop** > **Content Flags** widget
   - **Settings** > **Community Management** > **Flagging** > **Flagged Content**
   - **Reports** > **Contents** > **Content Flags**
2. Click either a flag's content title or the flag's date.
3. The flag's detail information appears.

See Also: "Editing a Flag's Details" on page 16-203; "Deleting a Flag" on page 16-204

Editing a Flag's Details

Editing a flag allows you to change the flag's selection or the comments for a flagged content item. This can be useful if a user selects a flag by mistake, or you want edit a flag's comments. For example, a user selects the "Offensive Content" flag and he meant to click "Copyright Violation".

To edit a flag or its comment information, follow these steps.

1. Navigate to one of these area in the Workarea:
   - **Smart Desktop** > **Content Flags**
   - **Settings** > **Community Management** > **Flagging** > **Flagged Content**
   - **Reports** > **Contents** > **Content Flags**
2. Click either a flag's content title or the flag's date.
3. The flag's detail information appears.
4. Click the Edit button ( ).
5. Change the flag or edit the comments.
6. Click the Save button ( ).
7. The flag's information is changed.

Deleting a Flag

When you do not need a flag, you can delete it from the system. When you do, the flag is permanently removed.

To delete a flag, follow these steps.

Note: To remove all flags associated with a specific content item, see "Purging a Content Item's Flags" on page 16-203.

1. Navigate to one of these area in the **Workarea**:
   - **Smart Desktop** > **Content Flags**
   - **Settings** > **Community Management** > **Flagging** > **Flagged Content**
   - **Content Reports** > **Flagging tab** for a content item
2. Click either a flag's content title or the flag's date.
3. The flag's detail information appears.
4. Click the Delete button ( ).
5. A dialog appears asking you to confirm the deletion.
6. Click **OK**.

ContentFlagging Server Control

Note: To learn about creating and managing the content flags used in this server control, see "Flagging" on page 16-193.

After you add this control to a Web form, a site visitor who views nearby content can flag it and provide feedback. This is similar to the ContentReview server control. The main differences are:

- The feedback is not displayed on the site
- The control provides is a user-defined list describing the reason for the flag

Lists can be centered on content that is inappropriate for some viewers. For example:

- Sexually Explicit
- Mature (over 18 only) content
- Graphic Violence
- Hate Speech

Flagging can also be used to notify administrators about the quality of the content, helping you to create a recommended content list. Below is an example of a flagging definition's options.

- Loved This Content
- Hated This Content
- I Could Take It or Leave It

Having a way to flag content is a necessity for sites with a large quantity of site-visitor generated content. Content flagging spreads moderation of your site to your visitor base and helps site visitors feel invested in the site.

ContentFlagging Server Control Properties

The ContentFlagging server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
DefaultContentID	The default content ID for this control to use when there is no matching dynamic parameter value passed.	Long
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Work-area folder, the file will be lost when you upgrade.	String
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically. To use the default content ID, leave blank.	String
FlagImage	Enter a path to an image that overrides the text in the `FlagText` property. When the image is clicked, the flag dialog appears.	String
FlagText	Text for the link that is shown to allow flagging. For example, you might use "Click here to flag this content." The `FlagImage` property overrides this property. When the text link is clicked, the flag dialog appears.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control. **False** = Display control.	Boolean
Language	Set a language for viewing the ContentFlagging control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String

Property	Description	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Email Invites for Community Management

The Community Platform's email notification feature enables Ektron CMS400.NET to generate email that invites a user to join the site, a community group or become a colleague of another user.

For example, a message might be sent when someone in a community group wants another user to join the group.

Creating the Email Message

You can create an email message to be sent when a user invites another user to join a group, the site or invite them to be a friend. A simple editor lets you apply some XHTML formatting the message.

Including Variables in the Default Message

The messages can include variables that retrieve information about the person who's sending the invite or the link to join a group and display it in the message text. The variables are surrounded by at signs (@). For example:

```
@appSenderName@ is used to display the name of the user sending the invite.
```

In the email, this text might read:

```
Alan Administrator has invited you to join the Marketing Community Group.
```

You can use the following variables in the body of an email notifications.

Variable	Displays this information in the email
@appOptionalText@	Text that the user types into the Optional Text box on the Invite server control.
@appSenderName@	The name of the person sending the invitation
@appFriendDisplayName@	The name of the person to which the invite is being sent.
@appInvitedEmail@	The email address of the person being invited.
@appInviteId@	Used for appending the invite ID to the registration URL. For example: Click here to accept.
@appGroupName@	The name of the group a person is being invited to join.

To create a message, follow these steps.

1. In the Workarea, go to **Settings > Community Management > Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the message.
4. At the **Type** field, select either **FriendInvitation, SiteInvitation or GroupInvitation**.
5. Select whether to make the email message a Default message.
6. In the **Subject** box, add a subject for the email.
7. In the editor, enter the message text. Use the variables listed in the table above to retrieve information about the about the invitation and display it in the message.
8. Click the Save button ( ).

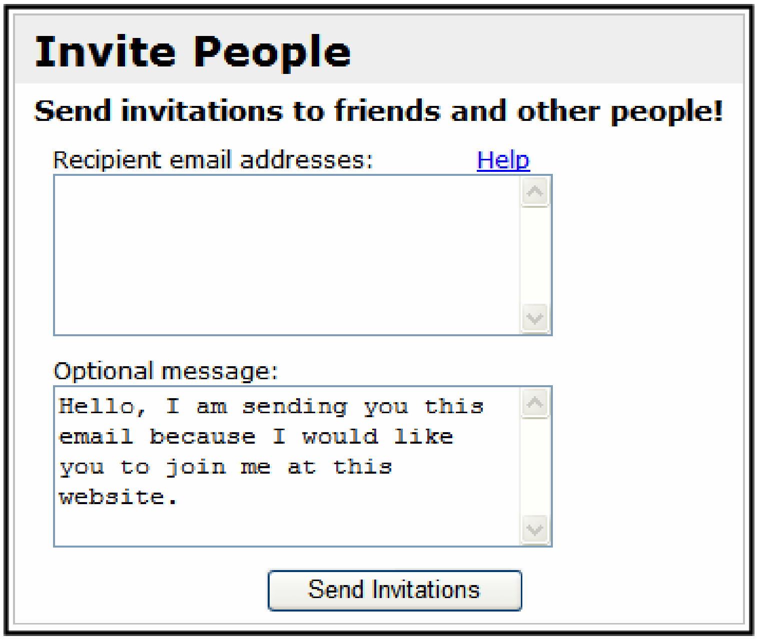
Invite Server Control

IMPORTANT!

Warning! The default *From* email address used to send all invitations is invitation@example.com. Ektron, Inc. strongly recommends you change this address for use with your site. See Also: "Changing an Invitation's From Email Address" on page 16-209.

The Invite server control allows site users to invite people via email to join the site and become their colleagues. The server control displays a dialog box that allows a user to enter multiple email addresses separated by commas, semi-colons, spaces or separate lines.

The dialog box also has an area for an optional message which you define in the `OptionalMessageText` property. On the Web page, a user can add additional information to this message or remove it completely. The message is the message that appears in the email.



The *From* address that's used when the control sends an invite is a single address for all users. The default is invitations@example.com. You or your site's administrator should change this address. See Also: "Changing an Invitation's From Email Address" on page 16-209

Changing an Invitation's From Email Address

To change the *From* email address that is used when an invitation is sent, open your site's web.config file and change the value of following key.

```
<add key="ek_InvitationFromEmail" value="invitations@example.com"/>
```

Invite Server Control Properties

The Invite server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `DisplayXslt` property value is ignored.	String
FriendMessageId	The ID of the message to send in the link section of the colleague request email. This type of request is sent when the Invite server control's system detects that an email in the list is already registered with the site. This message is defined in the **Workarea** > **Settings** > **Community Management** > **Messages**. If set to 0 (zero), the server control uses the default message.	Long
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
InviteMessageId	The ID of the message to send in the link section of the Invite request email. This type of request is sent to people who are not registered with the site. This message is defined in the **Workarea** > **Settings** > **Community Management** > **Messages**. If set to 0 (zero), the server control uses the default message.	String

Property	Description	Data Type
Language	Set a language for viewing the Invite server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
OptionalMessageText	The body text of the email message. The text appears in the Invite server control's dialog box and can be edited by users when they use the Invite control.	String
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Style-sheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

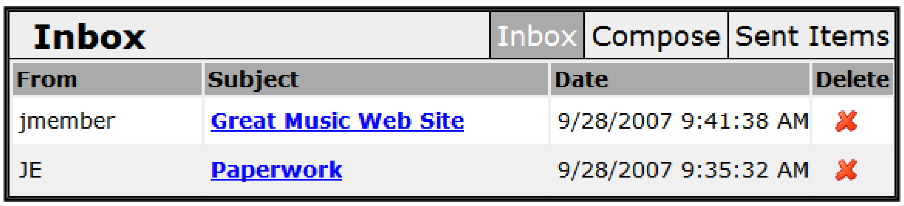
Messaging Server Control

The Messaging server control allows site users to send and receive messages. This control utilizes an Inbox and Sent Items system to control where messages are displayed. Messages that have been sent to a user appear in the Inbox of recipients. These messages also appear in the Sent Items list of the users who have sent them.

Messages are created using the provided editor. Developers can customize the height and width of the editor. They can also control toolbar items in the editor and whether or not the user can edit a message using HTML.

Message recipients can be limited to a user's colleagues, or they can be expanded to include all CMS400.NET users.

To learn how a site user interacts with this control on the site, see "Messaging" on page 16-216.



Pre-Populating the To: Field of a Message

You can pre-populate the To: field of a message with one or more users' names by setting the `RecipientParamName` property to a given QueryString parameter. This allows you to create a link on a page, such as "Send a Message to this user" or "Send a message to all users in this group."

For example, if you create a link on a Web page to the template containing the Messaging server control, pass a user's ID in the QueryString as UID and populate the `RecipientParamName` property with "UID", the server control reads the user's ID and fills in the To: field with the user's name. Here is how the Link might look:

```
messaging.aspx?g=pmessage&uid=1
```

You can pass multiple user IDs by creating a list of ID parameters and IDs. For example:

```
messaging.aspx?g=pmessage&uid=1&uid=20&uid=12&uid=18
```

IMPORTANT!

Warning! You must include the `g=pmessage` parameter in the QueryString to open the Messaging server control to its editor. Otherwise, the server control opens to the Inbox.

The VB example below creates a dynamic hyperlink that populates the To: field of a message with all of a logged in user's colleagues. For this example to work, you need to add a Literal control to the Web form and name it **Lit1**.

Notes are included as green comment text.

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
Dim frnds As New Ektron.Cms.API.Community.Friends()
Dim apicontent As New Ektron.Cms.ContentAPI
Dim dirUsrData() As Ektron.Cms.DirectoryUserData

If (apicontent.UserId > 0) Then
dirUsrData = frnds.GetFriends(apicontent.UserId)
If ((Not IsNothing(dirUsrData)) AndAlso (dirUsrData.Length > 0)) Then
Dim idx As Integer
Dim friendsList As String = String.Empty
For idx = 0 To dirUsrData.Length - 1
friendsList += "&uid=" dirUsrData(idx).Id.ToString()
Next
Lit1.Text = "<a href=""webformPM.aspx?g=pmessage&uid=" + friendsList + """>Send a
message to my friends</a>" '''Replace webformPM.aspx with the Web form containing your
messaging server control and make sure the ReciepientParamName property of that control
is set to “uid” for this example.
Else
lit1.Text = "The logged in user currently has no friends"
End If
Else
lit1.Text = "You must be logged in to run this demo"
End If

apicontent = Nothing
frnds = Nothing
End Sub
```

Messaging Server Control Properties

The Messaging server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** If you specify an external file, it is strongly recommended that you do not store	String

Property	Description	Data Type
	this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	
EnablePreSearch	When set to True, all users are pre-loaded and displayed in the search results when browsing for users (an empty string search). If the `FriendsOnly` property is set to True, only colleagues are pre-loaded and displayed.	Boolean
FriendsOnly	When set to True, users can only send messages to people on their colleagues list. Default is True. **True** = send messages to colleagues only. **False** = send messages to all CMS400.NET users.	Boolean
GroupParamName	Enter the QueryString parameter used to pass the ID of a community group. The default is **gid**. Use this property when you want to email all the group's members.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
JavascriptEditorHeight	Set the height in pixels for the editor. The default is **400**.	Integer
JavascriptEditorHTMLMode	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Set to **True** to allow users to edit their posts and replies in HTML. The default is **False**.	String
JavascriptEditorToolbar	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Decide which buttons are available in the Javascript Editor.	String

Property	Description	Data Type
JavascriptEditorWidth	Set the width in pixels for the editor. The default is **625**.	Integer
Language	Set a language for viewing the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
ProfileParamName	This property identifies the QueryString parameter used to pass the ID of a user to a profile page or location template when a user name is clicked in the Browse User screen. The default is ID. The parameter defined in this property is appended to the QueryString of the path defined in the `ProfileUrl` property. The default is ID. **Warning! Important:** This parameter needs to match the parameter set in the UserProfile server control's `DynamicParameter` property on the page defined in the `ProfileUrl` property.	String
ProfileUrl	The URL of the profile page template. This page is opened in a new window when a user clicks a display name on the Browse Users screen. This allows a user to get additional profile information about the potential message recipient.	String
RecipientParamName	Enter the QueryString parameter used to pass the ID of a user. For example, if the QueryString is `?uid=1`, then enter "uid" in this property. By creating a comma separated list of user IDs in the QueryString, you can pass multiple users. For example: `?uid=1,20,12,18` This property is typically used when you want to pre-populate the To: field of a message. See Also: "Pre-Populating the To: Field of a Message" on page 16-212	String
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String

Property	Description	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
UserSearchDisplayXslt	The XSLT used to display the user search control inside the Messaging server control. The default is MsgUserSelect.xsl. **Warning! :** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.	String
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Messaging

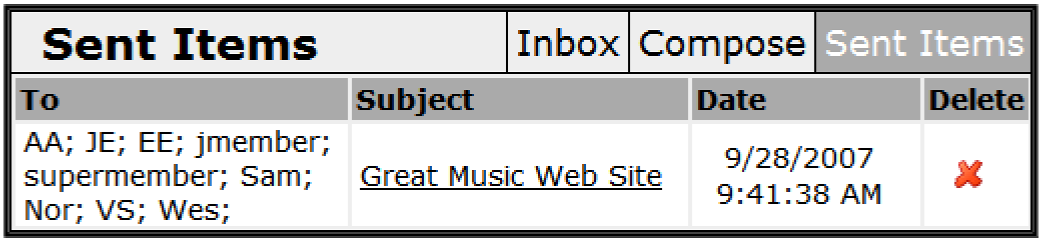
By default, when a logged in user visits the Messages page, the Inbox appears. You can see who sent the message, the subject and the date the message was sent.

From this screen, users can:

- view a list of messages sent to them. See "Viewing a Message" on page 16-217.
- compose a new message. See "Compose a New Message" on page 16-219.
- delete a message. See "Delete a Message" on page 16-218.
- navigate to the sent messages list. See "Sent Messages" on page 16-216.

Sent Messages

Sent Messages provides a list messages you've sent to other users. On this screen, you can see to whom the message was sent, the subject and date it was sent.



From the Sent Messages list you can:

- view a messages details. See "Viewing a Message" on page 16-217.
- compose a new message. See "Compose a New Message" on page 16-219.
- delete a sent message. See "Delete a Message" on page 16-218.

Viewing a Message

To view a message's details, click the message's subject. The details of a message include who the message is from, to whom it was sent, the subject, date sent, and body of the message.

Actions you can take from the message details screen include:

- Reply to a message. See "Reply to a Message" on page 16-217.
- Forward a message. See "Forward a Message" on page 16-218.
- Moving to the Next or Previous message. See "Moving to the Next or Previous Message" on page 16-218
- Print a message. See "Print a Message" on page 16-218.
- Delete the message. See "Delete a Message" on page 16-218.
- Compose a new message. See "Compose a New Message" on page 16-219.

Reply to a Message

When replying to a message, you reply only to the person who sent you the original message. A reply contains the details of the original message. The details of the original message can be edited or removed from the new message.

To reply to a message, follow these steps:

1. Find the message to which you want to reply and click the subject.
2. Click **Reply**.
3. The message editor screen appears with the original message's details in the body of the message.
4. Add your reply.

5. Click the Send button.
6. The message is sent.

Forward a Message

When forwarding a message, you can select to whom the message is sent. A forwarded message contains the details of the original message which can be edited or removed from the new message.

To forward a message, follow these steps:

1. Click **Forward**.
2. The message editor screen appears with the original message's details in the body of the message.
3. Add any additional information to the message.
4. Click the Send button.
5. The message is sent.

Moving to the Next or Previous Message

Web site users can navigate through their messages by clicking the Next or Previous link located in the header of a message. Clicking the Next link opens the next newest message in the list. Clicking the Previous link opens the next oldest message in the list. Once you have reached the end of the list, that option's link is unavailable. For example, when a user reaches the newest message in the list, the Next link is greyed out and cannot be clicked.

Print a Message

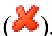
To print a message, follow these steps:

1. Click **Print**.
2. The Print dialog box appears.
3. Select a printer.
4. Click the Print button.

Delete a Message

Deleting a message permanently deletes it from CMS400.NET.

To delete a message, follow these steps:

1. Click the Delete button ().
2. A dialog appears asking you to confirm the deletion.

3. Click **OK**.
4. The message is deleted and you are returned to the Inbox or Sent Messages.

Compose a New Message

Clicking Compose launches the Compose a Message screen. To compose a message, follow these steps:

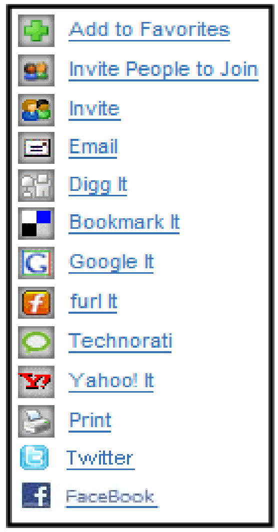
1. Click **Compose**.
2. The Compose Message screen appears.
3. Click the **Browse Users** link.
4. Select people to be entered in the **To:** field.
5. Add a subject to the **Subject** field.
6. Add text to the body of the message in the editor.
7. Click the Send button.

SocialBar Server Control

The SocialBar server control allows users of the community Web site to bookmark colleagues, community groups and content. When the Social Bar is associated with users, it is used to send colleague requests and remove colleagues when a user visits another user's profile page. When it's associated with a group, it can be used to join and leave community groups or invite people to join the group. When associated with content, the Social Bar can be used to add and remove content items and URLs in a user's Favorites.

The Social Bar is also used to bookmark Web pages with Social Bookmarking services, such as Digg.com or del.icio.us. By default, Digg.com and del.icio.us are loaded in the `Items` property of the server control. See Also: "Items Property" on page 16-226

In addition to these features, users can use the Social Bar to print or email the Web page and invite non-site users to become members of the site. Clicking the Invite item forwards a user to a Web page where the Invite server control is located. See Also: "Invite Server Control" on page 16-208.

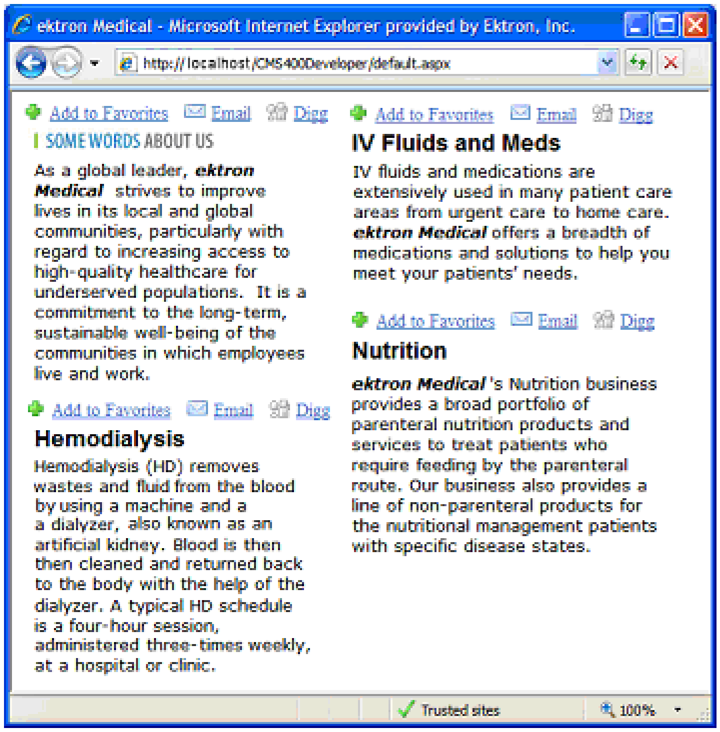


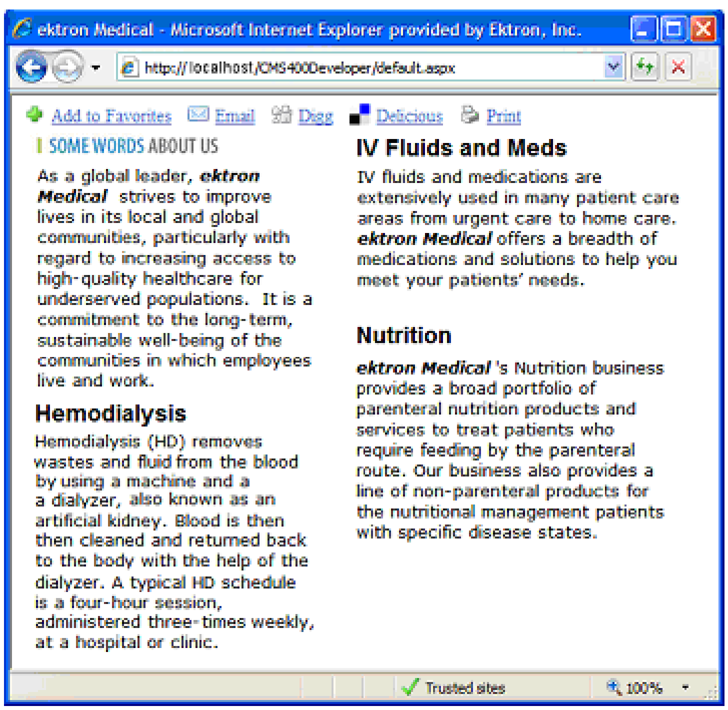
Note: Facebook is available in version 8.01.

Adding a Web Page's URL to a User's Favorites Via the Social Bar

You can allow users to add a Web page's URL to their Favorites when they click **Add to Favorites** on the Social Bar. Typically, this would be done when more than one content item appears on a Web page and you do not want to have more than one Social Bar on the page.

The first image below shows a web page with multiple content items and a Social Bars associated with each item. In this example, when a user clicks **Add to Favorites** on a Social Bar, the content item associated with it is added to his Favorites. In the second image, one Social Bar appears on the Web page with multiple content items. In this example, when a user clicks **Add to Favorites** on the Social Bar, the Web page's URL is added to his Favorites.





To allow users to add a URL to their Favorites from the SocialBar server control, follow these steps.

1. Drag and drop a SocialBar server control on a Web form.

2. Make sure the `DefaultObjectID` property is set to **0** (zero).
3. Leave the `DynamicObjectParameter` property blank.
4. If it is not already there, add the **Addto** item to the comma separated list of items in the `Items` property.
5. Set the `ObjectType` property to **Content**.

Private Messaging from the Social Bar

You can send private messages to another user or the administrator of a Community Group from the Social Bar by adding either PrivateMessageUser or PrivateMessageAdmin to the `Items` property list. See "Items Property" on page 16-226 for additional information.

When a Social Bar appears on a user's profile page, you can use the PrivateMessageUser item to create a link that allows another user to message the user whose profile page is being viewed.

When the Social Bar is used on a Community Group's page, you can use the PrivateMessageAdmin item to create a link that allows a user to message the administrator of the group.

For the private message link to appear in the Social Bar, the page that contains the Messaging server control must be defined in the `MessagingUrl` property. See Also: "Messaging Server Control" on page 16-211

To allow users to send private messages from the SocialBar server control, follow these steps.

1. Drag and drop a SocialBar server control on a user's profile or community group's page.
2. Set the `ObjectType` property to either Group or User.
3. Add either **PrivateMessageUser** or **PrivateMessageAdmin** to `Items` property.
4. Add the URL where the Messaging server control appears to the MessagingUrl
5. Make sure the `DynamicObjectParameter` is set, if necessary.

Tweeting the URL a User is Currently Browsing

You can allow site visitors to use Twitter to tweet their current browsing location by adding the Twitter item to the list of parameters in the SocialBar's Items property. Once the item is added, a Twitter icon and link appear in the Social Bar. When a user clicks the link, Twitter is launched. Once the user logs into their Twitter account, his current browsing location is loaded in the "What are you doing?" status box. The user can then click Twitter's **Update** button to post the status.

To allow users to tweet the URL they are currently browsing, follow these steps.

1. Drag and drop a SocialBar server control on a Web form.
2. Make sure the `DefaultObjectID` property is set to **0** (zero).

3. Leave the `DynamicObjectParameter` property blank.
4. If it is not already there, add the **Twitter** item to the comma separated list of items in the `Items` property.
5. Set the `ObjectType` property to **Content**, **User** or **Group** depending on the type of page you are creating.

SocialBar Server Control Properties

The SocialBar server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For	Double

Property	Description	Data Type
	example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	
DefaultObjectID	The default object ID for this control to use when there is no matching dynamic parameter value passed. If you set this property set to 0 (zero) and leave the DynamicObjectParameter blank, the social bar can be used to add Web pages to your favorites.	Long
DisplayXslt	Determines how the Social Bar items are displayed on the page. Enter the path to a custom XSLT file. The path can be relative or absolute. **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicObjectParameter	Gets or sets the QueryString parameter to read a object ID dynamically. To use the default object ID, leave blank.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
IncludeIcons	Select whether icons are displayed next to each item. **True** = Display icons next to each item. **False** = Do not display icons next to each item.	Boolean
InviteURL	The URL to the Invite server control's Web page. There are two variables used within the URL that represent the Object ID and the Object Type. **{0}** - represents the object's ID. **{1}** - represents the object type. You need to have both variables in the link. The Web form can be relative or absolute. Below is an example. `invitepage.aspx?id={0}&type={1}`	String
Items	A comma separated list of items that you want to appear on the Social Bar. See "Items Property" on page 16-226 for information.	String

Property	Description	Data Type
Language	Set a language for viewing the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MessagingUrl	The Web page where the Messaging server control is contained. This property is used when you have either the PrivateMessageUser or PrivateMessageAdmin item in the Items property. See "Items Property" on page 16-226 for information on these items. If a value appears in the `ek_RedirectFromLoginKeyName` key in the web.config file, the user will be returned to the original URL after sending the message. By default, this value is `RedirectUrl`. If you remove this value and do not add another, the person sending a message sees a note stating "Your message has been sent." For more informationless "Settings in the web.config File" on page 1-95.	String
ObjectType	The type of object to which this control is assigned. Choices are: **Content - this control is assigned to content.** **User** - this control is assigned to an individual. **Group** - this control is assigned to a community group. **Data Type:** Ektron.Cms.Common.EkEnumeration.CMSSocialBarTypes	
Stylesheet	Specify the path to a style sheet for use with the server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `Mark-upLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Description	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Items Property

The `Items` property controls which items appear in the Social Bar. Below is a list of items that can appear in the Social Bar.

Item	Description
Addto	When this server control is associated with a user the Addto item appears as: ▪ **Add a Colleague** - when the user is viewing another user's profile page and can add them as a colleague. ▪ **Cancel Colleague Request** - when the user is viewing another user's profile page who he asked to be a colleague but the user has yet to accept. ▪ **Remove From Colleagues** - when the user is viewing a current colleague's profile page. When the control is associated with a Community Group, the Addto item appear as: ▪ **Join Group** - when the user visits a community group that he has not joined. ▪ **Leave Group** - when the user already belongs to a community group. ▪ **Cancel Request to Join** - when the user has tried join a group that is restricted and has yet to be accepted. When the control is associated with Content, the Addto item appears as: ▪ **Add to Favorites** - when the user views content that is not in their Favorites. ▪ **Remove Favorites** - when the user views content that is in their Favorites.

Item	Description
Invite	A link to the Web page that contains the Invite server control. This control allows you to invite people to register on the site and become a colleague. **Warning!** : For the Invite item to be active, a link to the page containing the Invite control must be entered in the `InviteURL` property. See Also: "InviteURL" on page 16-224.
GroupInvite	Opens a dialog that allows you to invite colleagues or people who are not registered on the site to join the group.
Email	Email this Web page. Clicking this item launches a user's email with the subject and body loaded with the information about the content, user or community group.
Digg	Appears as Digg It. Launches Digg.com, a social bookmarking service.
Delicious	Appears as Bookmark It. Launches del.icio.us, a social bookmarking service.
Facebook	Appears as Facebook. Launches Facebook, a social network servuce. (Available in version 8.01.)
Google	Appears as Google It. Launches Google's social bookmarking service.
Furl	Appears as Furl It. Launches Furl, a social bookmarking service.
Technorati	Appears as Technorati. Launches Technorati, a social bookmarking service.
Twitter	Launches Twitter, a social network service, which allows users to communicate what they are doing to other Twitter users. When the Twitter link is clicked and a user logs in to a Twitter account, the link for the page which contains the Social Bar control is added to the Status box. See Also: "Tweeting the URL a User is Currently Browsing" on page 16-222
Yahoo	Appears as Yahoo! It. Launches Yahoo's social bookmarking service.
Print	Print the Web page. Clicking this item launches a print dialog box.

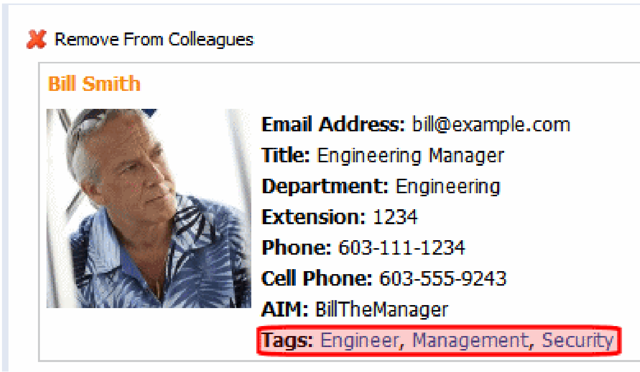
Item	Description
PrivateMessageUser	Creates a link that allows you to send a Private Message to a user. See Also: "Private Messaging from the Social Bar" on page 16-222
PrivateMessageAdmin	Creates a link that allows you to send a Private Message to a Community Group's administrator. See Also: "Private Messaging from the Social Bar" on page 16-222

Tags

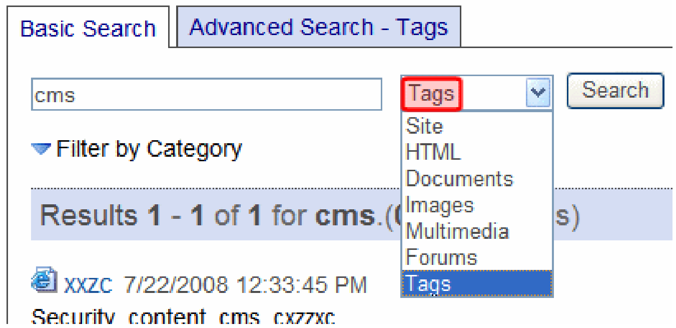
Note: This section discusses Tags for use with the Community Platform. Information on tagging blog entries can be found in "Tags on the Summary Page" on page 7-681.

Tags are keywords that can be assigned to users, groups, content, and library items.

On a Web site, tags for a user or group appear in a profile, helping site visitors to learn about a user or group.

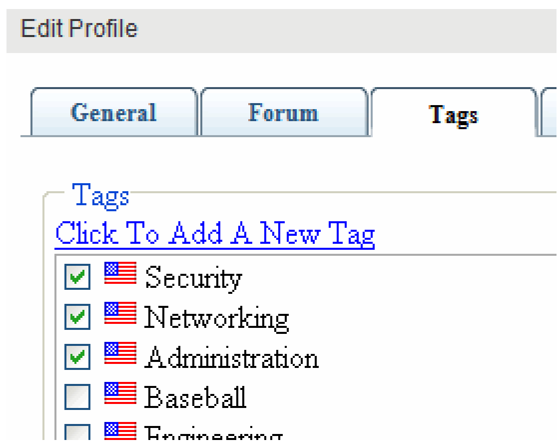
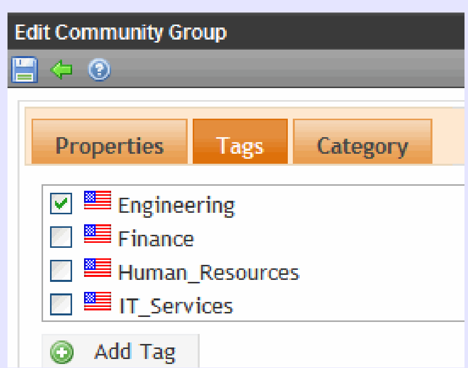


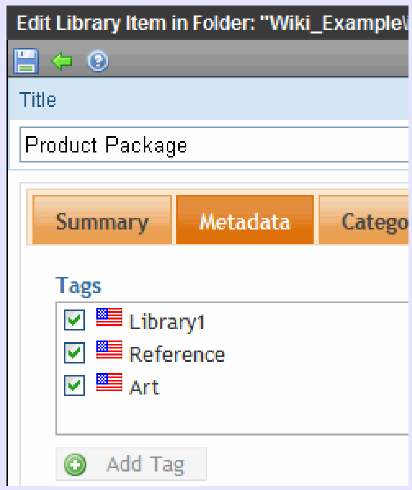
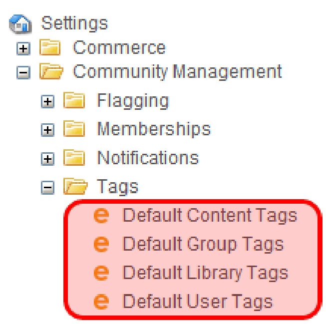
Tags also allows users to perform tag-based searching, as shown below.



So, for example, you could tag all content related to a new product release with the name "Widgets 2.0." Anyone could enter that term into the Search box, click **Tags** from the dropdown list (shown above), then the **Search** button to find all related content.

In the Workarea, tags are used in the following locations.

Location	Image
User Information screen's **Tags** area, for users or membership users	
The Community Group screen's **Tags** tab	

<table>
<tr><th>Location</th><th>Image</th></tr>
<tr><td>A content item’s **Metadata** tab > **Tags** area</td><td></td></tr>
<tr><td>A library item’s **Metadata** tab > **Tags** area</td><td>
</td></tr>
<tr><td>**Settings > Community Management > Tags**</td><td>
</td></tr>
</table>

DEVELOPER'S NOTE

Note: The CommunityGroupBrowser, CommunityGroupProfile, and CommunityGroupList Server Controls can display group tags and link them to a list of all groups that share the tag. Also, the TagCloud server control displays a weighted list of tags. See Also: "TagCloud Server Control" on page 16-238

The rest of this section explains tags through the following topics.

- "Tag Types" on page 16-231
- "Creating Default Tags" on page 16-231
- "Creating User-Created Tags" on page 16-235

- "Managing Tags" on page 16-236
- "Viewing a Tag's Details" on page 16-237
- "Deleting Tags" on page 16-237

Tag Types

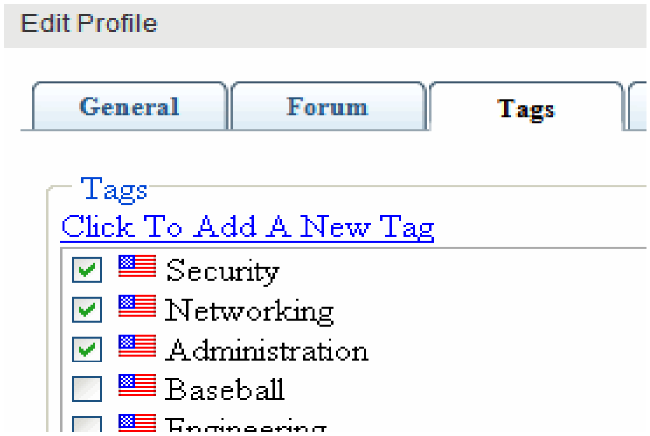
There are basic two types of tags, and they are contrasted below.

Type	Description	For more information, see
Default	- created by system administrator in **Settings > Community Management > Tags** area - appear as checkbox options wherever tags can be applied	"Creating Default Tags" on page 16-231
User-created	- created by user as needed wherever tags can be applied	"Creating User-Created Tags" on page 16-235

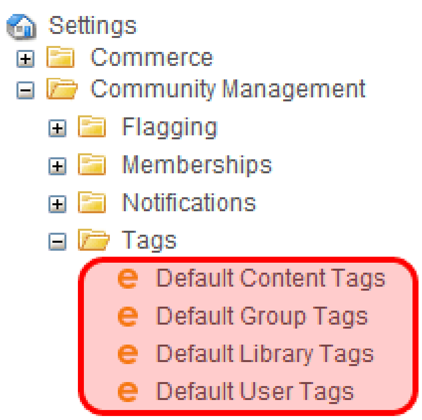
Creating Default Tags

An Ektron CMS400.NET administrator can create default tags for each object (user, user group, content or library item). For example, you want to allow users to associate themselves with a favorite race car driver. You create a default user tag for each driver's name.

When a user creates or edits an item for which you created the default tags, they appear and the user clicks inside check boxes to assign them.



Ektron CMS400.NET provides separate screens for creating default tags for user groups, users, content and library items. They are available via **Settings** > **Community Management** > **Tags** (shown below).

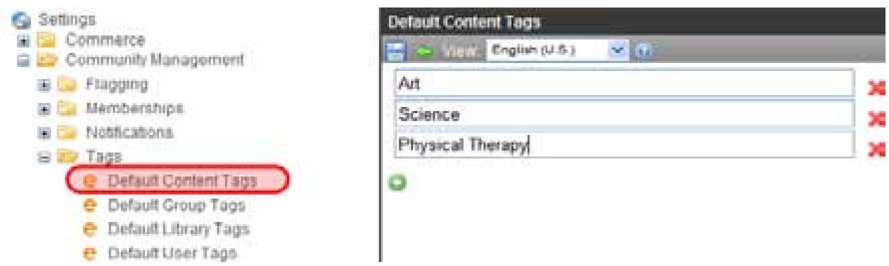


See Also:

- "Adding Default Group Tags" on page 16-233
- "Adding Default User Tags" on page 16-233
- "Adding Default Content Tags" on page 16-234
- "Adding Default Library Tags" on page 16-234

Adding Default Group Tags

The Default Group Tags screen lets you add tags that may be assigned to community groups.



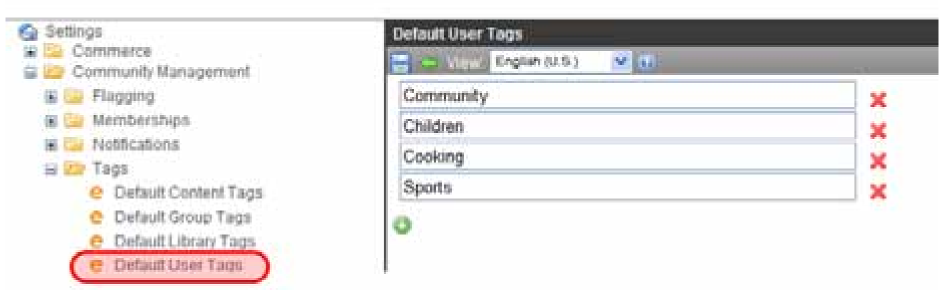
See Also: "Tags" on page 16-228

To add a Default Group Tag, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Tags** > **Default Group Tags**.
2. Select a language for the tag.
3. Add the tag in the empty text box. If no empty box appears, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

Adding Default User Tags

The Default User Tags screen allows you to add tags that may be assigned to a user.



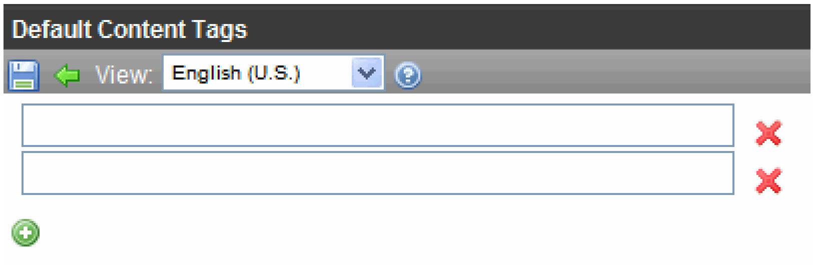
See Also: "Tags" on page 16-228

To add a Default User Tag, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Tags** > **Default User Tags**.
2. Select a language for the tag.
3. Add the tag in the available text box. If no text box is available, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

Adding Default Content Tags

The Default Content Tags screen allows you to add tags that may be assigned to a content.



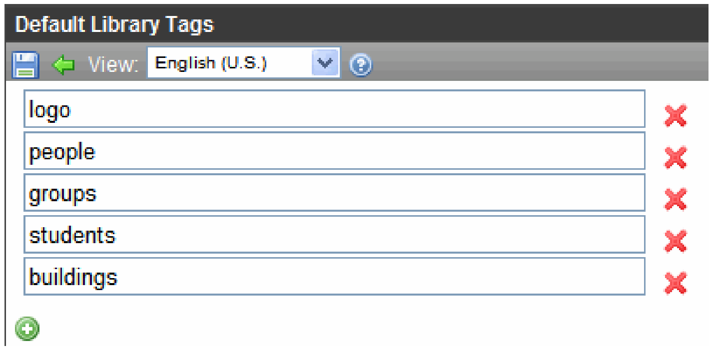
See Also: "Tags" on page 16-228

To add a Default Content Tag, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Tags** > **Default Content Tags**.
2. Select a language for the tag.
3. Add the tag in the available text box. If no text box is available, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

Adding Default Library Tags

The Default Library Tags screen allows you to add tags that may be assigned to a library.



See Also: "Tags" on page 16-228

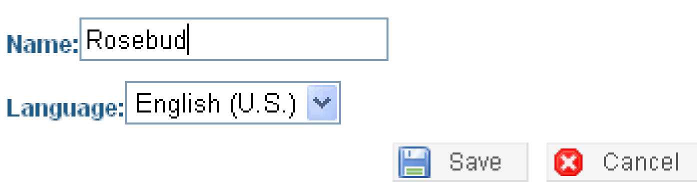
To add a Default Library Tag, follow these steps.

1. In the Workarea, navigate to **Settings** > **Community Management** > **Tags** > **Default Library Tags**.
2. Select a language for the tag.
3. Add the tag in the available text box. If no text box is available, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

Creating User-Created Tags

In addition to applying default tags, users, community group leaders, and content editors can create their own tags. This allows for a more diverse and creative list of tags.

For example, a user is editing content. He reviews the default tags but decides that none is correct. So, he creates and assigns a new tag: **Rosebud**. That tag is now applied to that content.



The user-created tag also appears on the **Settings** > **Community Management** > **Tags** screen, where you can see its ID number.

Tags

View: English (U.S.)

ID	Name
1	Security
2	Content
3	CMS
4	Library1
5	Reference
6	Art
11	Rosebud

If someone creates another tag with the same exact name, the new tag will share the ID number with the previous one, and the **Times Used** will increase from **1** to **2**. However, the new tag will not appear as a default on any screen.

Managing Tags

Administrators manage tags from the **Settings** > **Community Management** > **Tags** screen. This screen displays all default and user-created tags. You can filter the list by language. Click any tag's name to see its details. See Also: "Viewing a Tag's Details" on page 16-237 and "Tags" on page 16-228

Tags

View: English (U.S.)

ID	Name	Times Used	Language
1	Security	3	
2	Content	4	
3	CMS	3	
4	Library1	1	
5	Reference	1	
6	Art	1	

This screen displays the following information about each tag.

Field	Description
ID	Its integer ID
Name	Its title
Times Used	The number of times a tag has been assigned
Language	Its language. This appears as a national flag. For example, American English appears as .

Viewing a Tag's Details

When you click a tag's name, its details appear on the View Tag screen.

Field	Description
ID	The integer ID of the tag.
Language	The language assigned to the tag.
Name	The title of the tag.
Tagged Type	Shows how the tag is assigned: to a community group, user, content, or library item. See Also: "Adding Default Group Tags" on page 16-233 and "Adding Default User Tags" on page 16-233
Times Used	The number of times this tag is assigned to each Tagged Type.

Deleting Tags

As mentioned above, there are two basic tag types: user-created and default. (See Also: "Tag Types" on page 16-231). The following table contrasts how to delete tags.

Tag Type	Result	Procedure
User-created	Delete a single tag	1. Open the item's **Tags** area. For example, for content, edit the **Metadata** tab. 2. Uncheck the checkbox next to the tag. 3. Publish the content.
	Delete all occurrences of a tag	1. Go to the **Settings > Community Management > Tags** screen. 2. Click the tag. 3. Click the delete button ( ). 4. A confirmation screen appears. 5. Click **OK**.
Default	There are two methods for deleting default tags. Each has different results.	
	Deleting a Default Tag • No longer available for assignment to users, content, etc. • Existing links to it remain	1. Go to **Settings > Community Management > Tags** 2. Select the screen for the kind of tag you want to delete (group, user, content or library). 3. Select the language. 4. Click the red ( ) to the right of the tag you want to delete (see below). 5. You are asked if you are sure. Click **OK**. 6. Click the save button ( )
	Deleting a Default Tag and All of its Links • No longer available for assignment to users, content, etc. • Existing links to it are deleted	1. Go to the **Settings > Community Management > Tags** screen. 2. Click the tag. 3. Click the delete button ( ). 4. A confirmation screen appears. 5. Click **OK**.

TagCloud Server Control

The TagCloud server control depicts a weighted list of tags assigned to users, community groups, content, or library items. Each tag's size is proportional to the number of times it is assigned.

For example, there are two tags, Mom and Dad. If the Mom tag is used five times and the Dad tag is used twice, the Mom tag is approximately twice as large.

See Also: "Tags" on page 16-228

Determining the Contents of the Tag Cloud

Use the `TagType` property to determine which types of tags appear in the cloud. For example, set `TagType` to `User` to display user tags.

Setting a Maximum Number of Tags

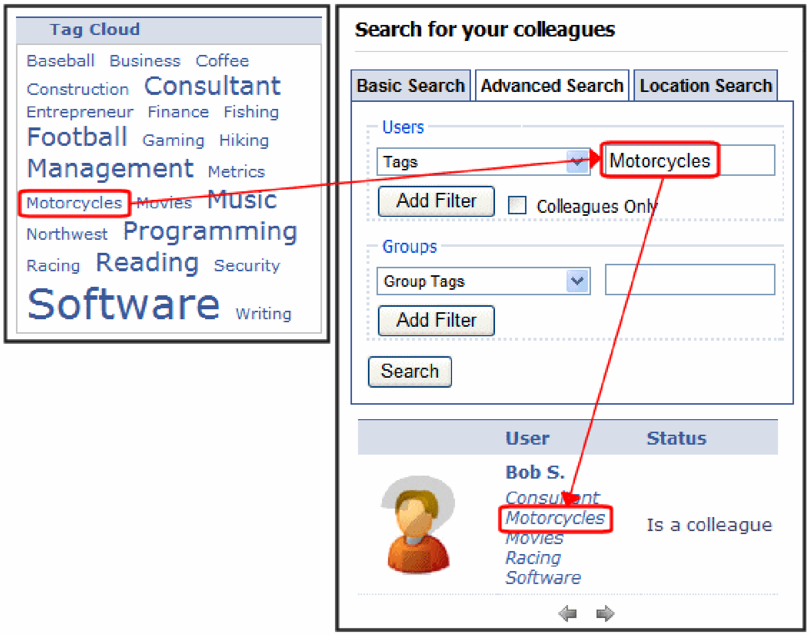
You can set a maximum number of tags to display via the `MaxTagsDisplayed` property. This property makes sense if the `Orderby` property is set to `Taggedcount`. In this case, the cloud only displays items with the highest number of tags.

Sorting the Tags

Use the `OrderBy` property to sort tags within a cloud. Your choices are `alphabetical` or by `Taggedcount` (the number of times an item is tagged). Then, use the `OrderByDirection` property to determine if items are sorted in ascending or descending order.

Linking Tag Cloud Items

Within a tag cloud, you can link tags to their source items. If you do, site visitors can click a tag to launch a search of all users, community groups, content, or library items to which the tag is assigned. For example, if someone views a user-based tag cloud and clicks **Motorcycles**, the community search page appears, showing all users tagged with Motorcycles.



To make a tag cloud's items searchable, add a path to the Web form containing the Search server control in the `TagTemplate` property.

TagCloud Server Control Properties

The TagCloud server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this	Double

Property	Description	Data Type
	property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
DynamicParameter	By default, the `TagTemplate` property passes a `TagId` parameter, whose value is the tag that a site visitor clicked in the tag cloud. Use this property to manually override that parameter and set the TagID value by hand.	String
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
Language	Set a language for viewing the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String

Property	Description	Data Type
MaxTagsDisplayed	The maximum number of tags to display. Set to 0 (zero) for unlimited. If you set a maximum, and more than that number of tags are applied, then only the most frequently-used tags appear. For example, if you enter ten, the ten tags applied the most number of times appear.	Integer
OrderBy	The criteria by which the tags are ordered within the tag cloud. Choices are: - **TaggedCount** - sort by how many times a tag is assigned - **Text** - sort alphabetically by tag name	String
OrderByDirection	Select the direction of the `OrderBy` property. Choose Ascending or Descending.	String
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Style-sheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Description	Data Type
TagTemplate	If you want a tag cloud's items to link to a page that shows *all* items with that tag, add a path to a Web form page that hosts the appropriate search control. The path can be relative or absolute. See Also: "Linking Tag Cloud Items" on page 16-239 ■ If the `TagType` is `User` or `Community Group`, enter a page hosting a Community Search server control. ■ If the `TagType` is `Content` or `Library`, enter a page hosting a Web Search server control. For example, in the Ektron CMS400.NET Intranet starter site's `tagcloud.aspx` page, the first two TagCloud controls link to users and community groups. So, this property is set to `CommunitySearch.aspx`, a Web form that hosts the CommunitySearch server control. When a site visitor clicks a tag cloud item, the Community Search page displays, populated with search results for the clicked tag. The visitor can click any result to see more about it. 	String

Property	Description	Data Type
TagTemplate (continued)	The following five parameters are added to the link's QueryString, and pass tag information to the destination Web form. Its search server control uses the parameters to populate the search. - **searchtag** or **searchgrptag** - searchtag represents the tag's text for users; searchgrptag represent the tag's text for community groups - **TagId** - the clicked tag's ID - **TagLanguage** - the clicked tag's language; only search results in this language appear - **TagCount** - the number of times the tag has been assigned - **TagType** - the tag's type: user, community group, content or library item. This value is obtained from the `TagType` property (described below). In addition to these parameters, you can add your own by defining them in the path. If you do, the above five parameters are appended to yours.	
TagTemplateTarget	Determines the type of window that appears on this Web form when a user clicks an item in the dynamic content box. The default is _self. **_Self** - opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame	ItemLinkTargets
TagType	Select the type of tags that appear in the tag cloud. Choices are: - User - CommunityGroup - Content - Library	String

Property	Description	Data Type
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag	String

CommunitySearch Server Control

The CommunitySearch server control allows a site user to find users or community groups registered on the Web site. Once the results are returned, a user can add a colleague or join a community group.

When a user hovers over the display name or community group name link, profile information appears. How much information appears depends on the status of the user performing the search and the profile settings of the user or group returned in the results.

The CommunitySearch control provides three types of searches:

- **Directory** - filter users by a letter in the alphabet. A user can select whether to sort by first or last name. See "Using the Directory Tab to Filter for Users" on page 16-246.
- **Basic Search** - allows users to search for users and groups on the site. See "Performing a Basic Community Search" on page 16-246.
- **Advanced Search** - allows users to search based on individual or multiple criteria. See "Advanced Community Searching" on page 16-247.
- **Location Search** - Allows a user to search based the given location of a user or community group. See "User Location Searches" on page 16-248.

The following additional topics are covered in this section.

- "Using Community Search Results" on page 16-249
- "Restricting the CommunitySearch to Return Membership Users" on page 16-252
- "Filtering Search Results by Category" on page 16-252
- "Showing a User's Custom Properties" on page 16-255
- "CommunitySearch Server Control Properties" on page 16-256

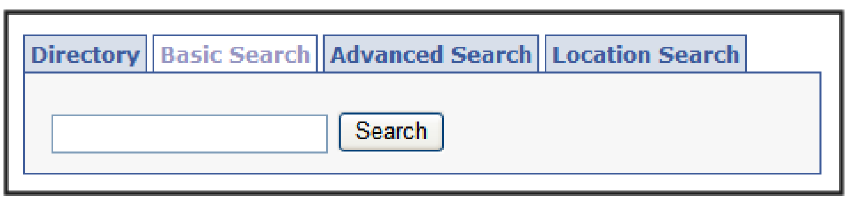
Using the Directory Tab to Filter for Users

The Directory tab in the Community Search allows a user to filter the list of users based on the selection of a letter in the alphabet. For example, John wants to find all users whose first name begin with the letter S. John navigates to the CommunitySearch control on his site, clicks the Directory tab and selects First Name from the Sort By list. Then, he selects the letter S from list of letters. Next, the control displays a list of users whose first name begins with S.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Performing a Basic Community Search

A Basic search is the easiest to perform and returns the widest array of results.



A Basic search uses the following criteria:

- Email
- Display Name
- First Name
- Last Name
- Custom User Properties
- Personal Tags
- Group Name

- Group Description
- Group Tags

To use a basic search, a user enters a name, email, group name, tag, or a word he believes might appear in a group's description into the text box. Then, he clicks the **Search** button. Any matches are returned in the results. See Also: "Using Community Search Results" on page 16-249.

Users can also perform wildcard searches, but the wildcard must appear *after* the first letter in the search. For example, you can search for J*, but not *J. The example, J*, returns all users and community groups that start with **J** or have a word that starts with **J** in their email, tags, or description.

Advanced Community Searching

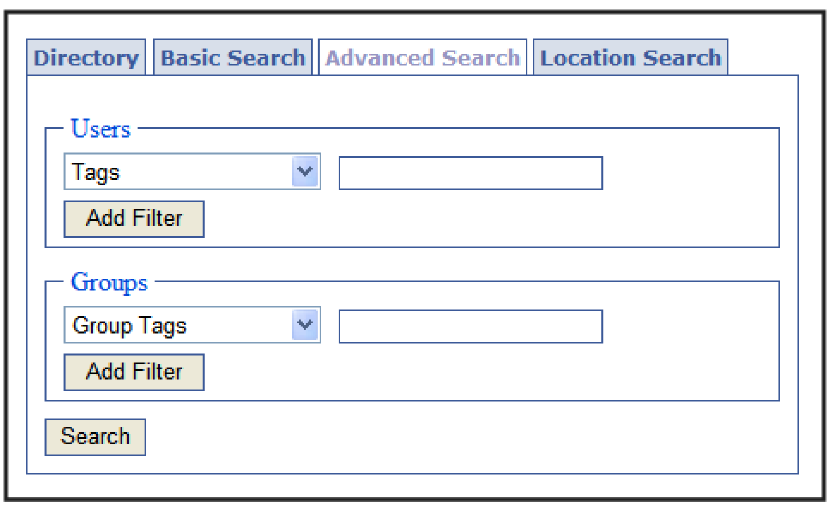
The Advanced tab on the CommunitySearch server control allows a user apply multiple criteria on community groups and users.

While the criteria are mostly same as a basic search, the advanced search also lets users search on taxonomy category when a taxonomy ID is defined either in the `GroupTaxonomyID` property, `UserTaxonomyID` property or both properties.

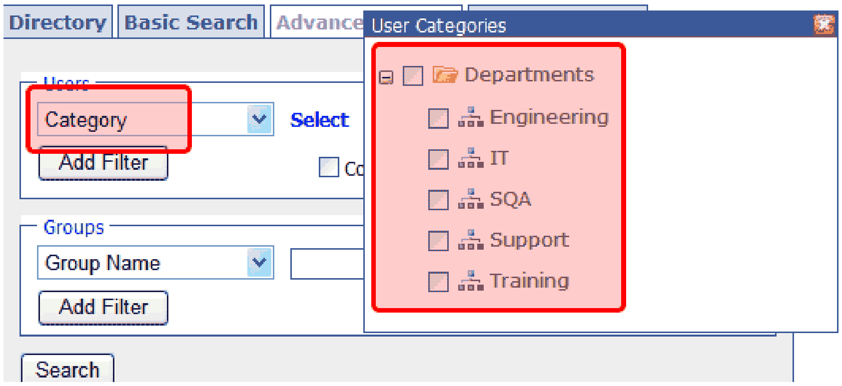
IMPORTANT!

Warning! If both the `GroupTaxonomyID` and `UserTaxonomyID` properties are set to 0 (zero) or if there are no users or groups assigned to the selected taxonomy, the category option does not appear on the Group or User drop down list.

See Also: "Performing a Basic Community Search" on page 16-246



Multiple search criteria have an “and” relationship, so results must match each filter. For example, if you select the Tags filter and the Display Name filter, users or groups must match both criteria to appear in the results. If a user or community group matches only one criterion, it does not appear in the results.



To search using the Advanced tab, follow these steps.

1. Navigate to a Web page that hosts the CommunitySearch control.
2. Click the **Advanced Search** tab.
3. Select the criteria by which to filter the search results.
4. Click **Add Filter** to add additional filter.
5. Enter text in one of the text boxes.

TIP!

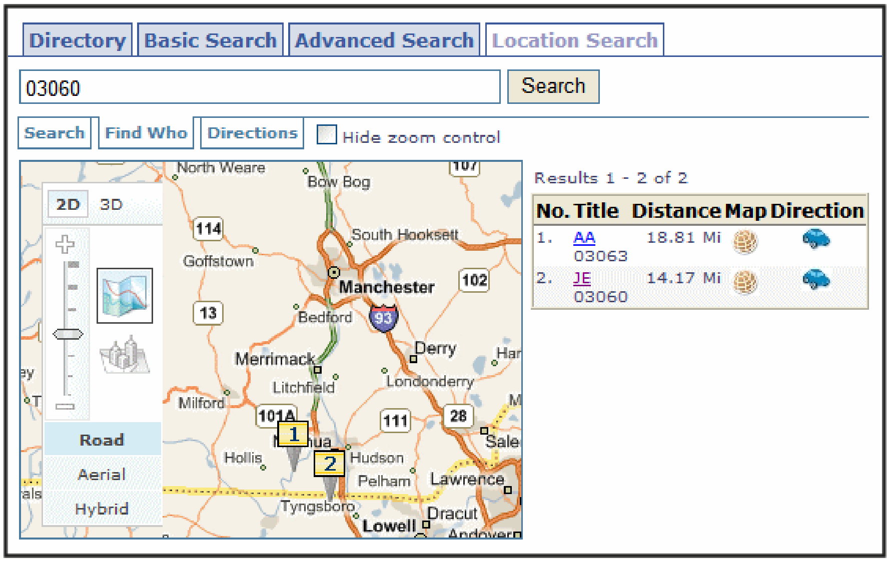
Note: If a user enters text in both the Users and Groups text boxes, the search returns any matching users or groups.

6. Click the **Search** button.

User Location Searches

The Location tab lets a user search for another user based on location. User results are displayed as pins on a map.

For users to be found in the search, they must fill out the Address field in their profile. CMS400.NET retrieves the longitude and latitude for the address to populate the user location search.



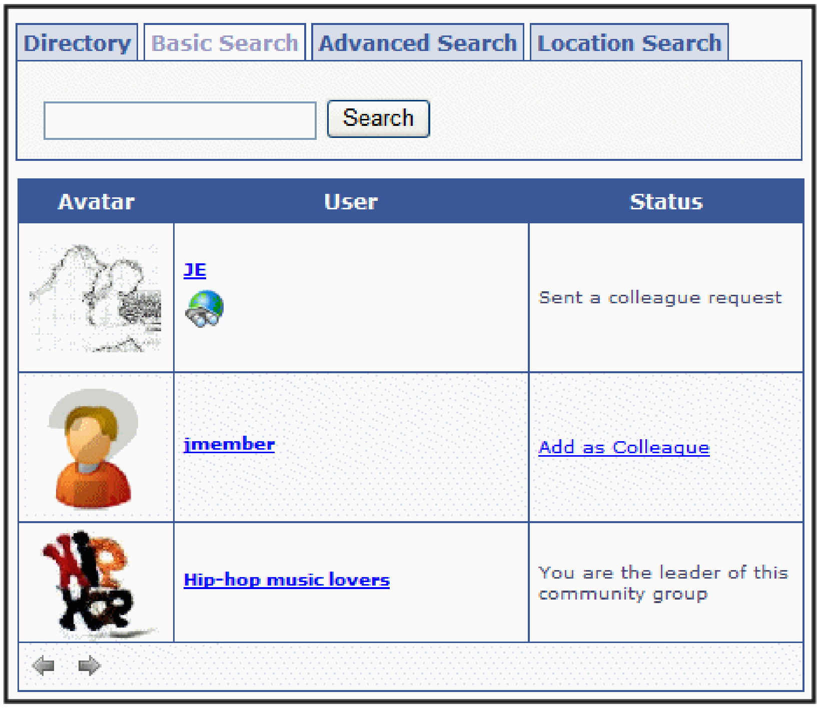
IMPORTANT!

Warning! This tab imports the Map server control. To learn about the Map server control and how to enable location searches for your site, it is strongly recommended that you review the Map server control chapter. See "Map Server Control" on page 9-318.

If you have not enabled location searches for you site, you can prevent the Location tab from being shown by setting the `EnableMap` property to false. This also prevents the Map icon from being displayed next to a user's name in the search results when the user has entered an address in the Address field of his profile.

Using Community Search Results

Once a search is complete, a list of users and groups who match the search term appears. This list shows an avatar, display name and status for each user or group. In addition, if a user has entered a valid address in his profile, a map icon () appears below the user's name. Clicking this icon launches the location tab with a map showing the user's location.



The Status column indicates whether the user is already a colleague, or if you can add them as a colleague via a colleague request. It also allows you to join a Community Group if you are not already a member.

Click the **Add as Colleague** link to send the colleague request or the **Join this Group** link to join the community group. Status information for each user or group is only displayed when you are logged into the site.

When is a User's Profile Accessible in Search Results

When a user is logged in and hovers the mouse over the display name link, a floating profile window pops-up. Several factors determine whether a user's profile is displayed in the pop-up. The table below shows an example of when a user's profile is accessible in the search results. This example uses John and Jane. John is a user with a profile and Jane is a user performing a search.

John's Profile is …	Jane is a …	and Her Login Status is …	The ResultsProfile Property is …	Therefore John's Profile is …
Public	User	Logged Out	Full	Accessible
Public	User	Logged Out	NonPrivate	Accessible

John's Profile is …	Jane is a …	and Her Login Status is …	The ResultsProfile Property is …	Therefore John's Profile is …
Public	User	Logged Out	NonPrivate-Authenticated	**Not** accessible
Public	User	Logged Out	None	**Not** accessible
Public	User	Logged In	Full	Accessible
Public	User	Logged In	NonPrivate	Accessible
Public	User	Logged In	NonPrivate-Authenticated	Accessible
Public	User	Logged In	None	**Not** accessible
Public	Colleague	Logged Out	Full	Accessible
Public	Colleague	Logged Out	NonPrivate	Accessible
Public	Colleague	Logged Out	NonPrivate-Authenticated	**Not** accessible
Public	Colleague	Logged Out	None	**Not** accessible
Public	Colleague	Logged In	Full	Accessible
Public	Colleague	Logged In	NonPrivate	Accessible
Public	Colleague	Logged In	NonPrivate-Authenticated	Accessible
Public	Colleague	Logged In	None	**Not** accessible
Private	Colleague	Logged Out	Full	Accessible
Private	User	Logged Out	NonPrivate	**Not** accessible
Private	User	Logged Out	NonPrivate-Authenticated	**Not** accessible
Private	User	Logged Out	None	**Not** accessible
Private	User	Logged In	Full	Accessible
Private	User	Logged In	NonPrivate	**Not** accessible

John's Profile is …	Jane is a …	and Her Login Status is …	The ResultsProfile Property is …	Therefore John's Profile is …
Private	User	Logged In	NonPrivate-Authenticated	**Not** accessible
Private	User	Logged In	None	**Not** accessible
Private	Colleague	Logged Out	Full	Accessible
Private	Colleague	Logged Out	NonPrivate	**Not** accessible
Private	Colleague	Logged Out	NonPrivate-Authenticated	**Not** accessible
Private	Colleague	Logged Out	None	**Not** accessible
Private	Colleague	Logged In	Full	Accessible
Private	Colleague	Logged In	NonPrivate	Accessible
Private	Colleague	Logged In	NonPrivate-Authenticated	Accessible
Private	Colleague	Logged In	None	**Not** accessible

Restricting the CommunitySearch to Return Membership Users

When searching for users, the CommunitySearch server control can return all users or only return Membership Users. As a developer, you can restrict users to searching for Membership Users by setting the `MembersOnly` property to True.

You might want to restrict user searches to Membership Users when creating a public facing site. This prevents site visitors from finding CMS400.NET users. Alternatively, when you create an internal site, such as a company intranet, you might want to allow searching for all users.

Filtering Search Results by Category

The Filter by Category feature helps a site visitor zero in on relevant users and groups. As explained in ”Taxonomy” on page 9-253, the Taxonomy Feature lets users assign information categories to user and groups. For example, you might categorize employees by department:

- accounting

- human resources
- purchasing
- manufacturing

As new users and groups are created, you should apply relevant taxonomy categories to them. This makes it easier to find them on your site, because a site visitor can search by category along with search text. For example, you might quickly find all employees in manufacturing whose first name is Tom.

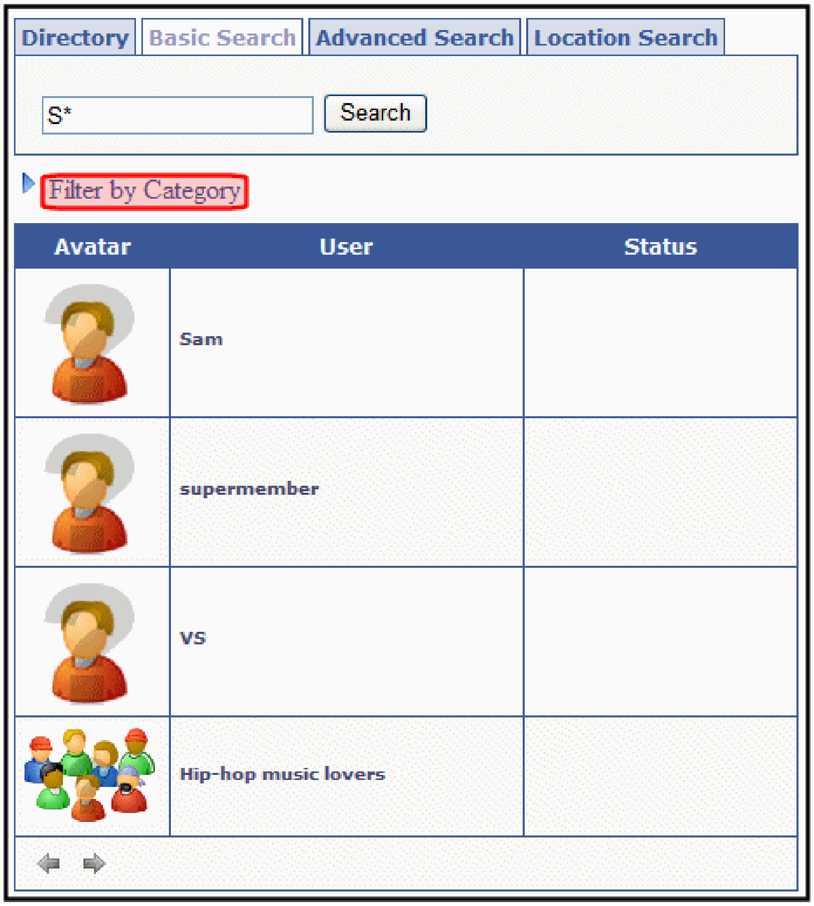
TIP!

Note: This additional search criterion relies on the assignment of taxonomy categories to users and groups. If they are not categorized, the filter hides relevant but non-categorized users/groups. For example, someone enters a new user (Tom in Manufacturing) but doesn't assign a department to him. If a site visitor on the search page enters Tom and selects the manufacturing category, he will not find that user even though he exists in Ektron CMS400.NET.

Effect of Setting EnableFilteringResults to True

If you set the `EnableFilteringResults` property to **true**, initially the site visitor sees no difference. However, if he enters a search term that returns one ore more users or groups to whom a taxonomy category is assigned and clicks the **Search** button, he sees **Filter by Category** above the results (illustrated below).

Note: If no categories are assigned to the users in the search results, the **Filter by Category** link does not appear.

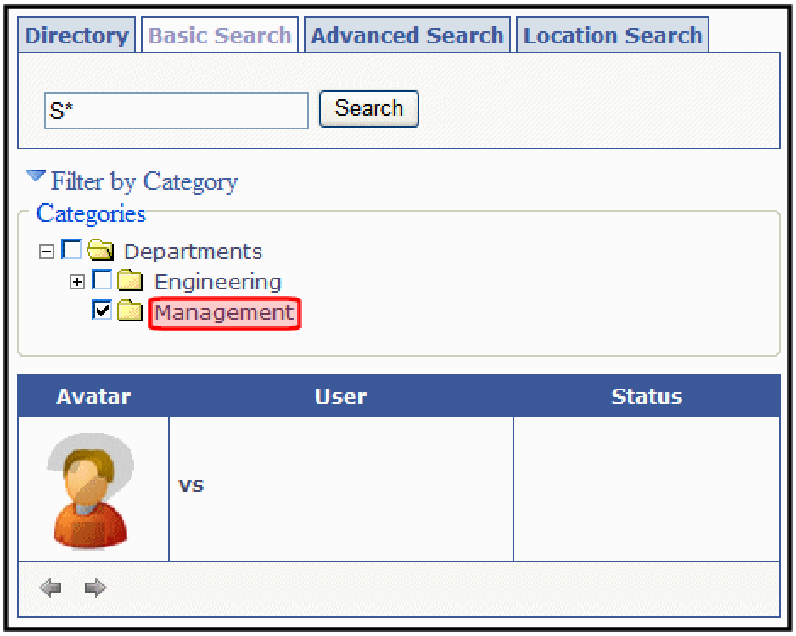


If he clicks **Filter by Category**, the visitor sees all taxonomies with at least one user or group that contains the search text. He can then select categories from the taxonomy structure. If he does, the results refresh, and only user and groups that contain the search text *and* are assigned to the selected categories appear. If a visitor selects several categories, content that is assigned to any selected category appears.

Note: If the visitor selects a parent category, all of its child categories are selected by default.

In the example above, the site has four users or groups with the letter **S**.

If the user selects **Filter by Category** then drills down to **Management**, only one user is found.



If a site visitor performs any of the following actions, all taxonomy category selections are cleared, and a new search is performed.

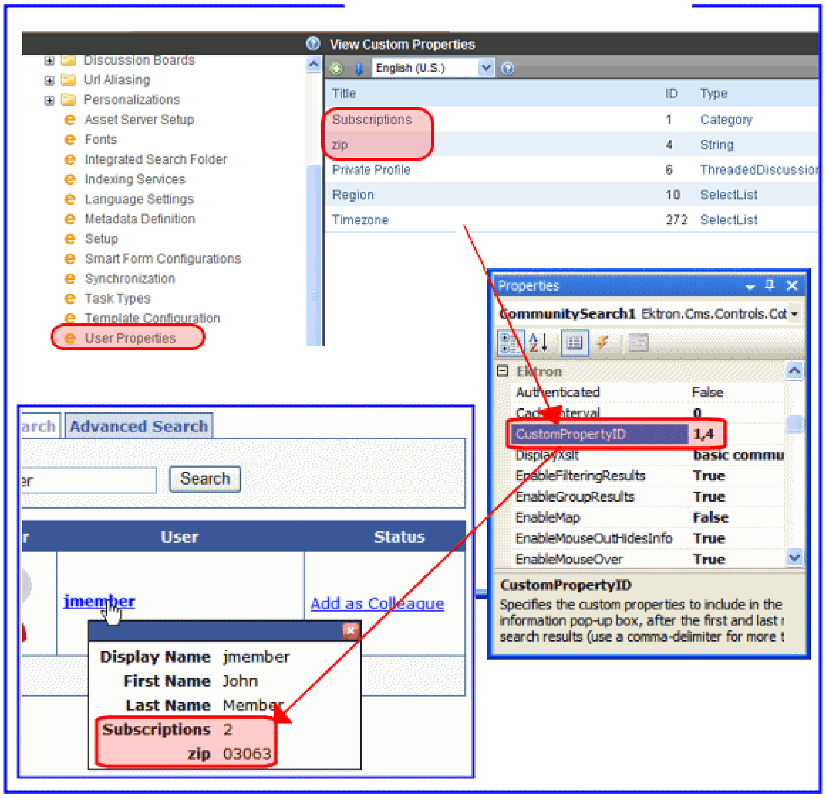
- clicks the **Search** button
- presses <Enter>
- performs an **Advanced Search**

On the other hand, if a site visitor closes folders in the taxonomy structure, all selected categories remain selected.

Showing a User's Custom Properties

In search results, you can have a user's custom properties appear in the information pop-up box when his link is hovered over. To have custom properties appear, add a comma delimited list of custom property IDs to the `CustomPropertyID` property.

Custom properties are created by the site administrator and applied by a user. See Also: "Custom User Properties" on page 15-16

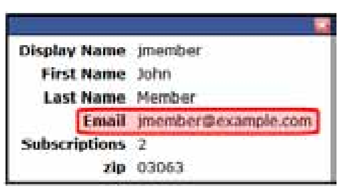


CommunitySearch Server Control Properties

The CommunitySearch server control properties are described in this table.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double

Property	Description	Data Type
CustomPropertyID	Specify a comma delimited list of custom property IDs. These custom properties appear in the pop-up information box for a user when search results are returned. See Also: "Showing a User's Custom Properties" on page 16-255 	Integer
DisplayXslt	Determines how information is displayed on the page. Enter the path to the XSL file. It can be relative or absolute. The default file is CommunitySearchDirectory.xsl. **Warning! :** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.	String
EnableFilteringResults	Set to **true** to display a **Filter by Category** option when this server control appears. This option helps a site visitor zero in on relevant content by selecting taxonomy categories. Set to **false** to suppress the **Filter by Category** option. See Also: "Filtering Search Results by Category" on page 16-252	Boolean
EnableGroup Results	Set to true to include community groups in the search results. Set to false to prevent community groups from appearing in search results.	Boolean
EnableMap	Set to false to hide the map functionality in this control. This hides the Location tab when the control is displayed on a Web site and the map properties in Visual Studio. See Also: "" on page 16-259	Boolean
EnableMouseOver	When set to False, the profile pop-up is disabled when hovering over a display name in the search results. **True** = Enable the profile pop-up when hovering over a display name. **False** = Disable the profile pop-up when hovering over a display name.	Boolean

Property	Description	Data Type
EnableMouseOutHidesInfo	When this property is set to True and user moves their mouse away from a search result's information pop-up box, the box disappears. When this property is set to False, a user needs to click the close button in the upper right corner of the information pop-up box to hide it.	Boolean
EnableUnauthorizedSearching	When set to True, a user does not need to be logged in to perform a user search. When set to False, a user must logged in to perform a user search, otherwise the control displays a message stating that log-in is required. **True** = a user does not need to be logged in to perform a user search. **False** = a user must be logged in to perform a user search.	Boolean
EnableUserResults	Set to true to include users in the search results. Set to false to prevent users from being returned in the search results.	Boolean
FriendsOnly	Set to True to limit the results to a user's colleagues. When set to False, returns all matches	Boolean
GroupTaxonomyID	Enter the ID of the taxonomy you want to associate with this control. This allows users to search for community groups based on the taxonomy with which they area associated. If set to 0 (zero), the Category option does not appear in the Group drop down list on the Advanced tab.	Long
Hide	Used to hide output of the control in design time and run time. **True** = Hide control **False** = Display control	Boolean
InfoBoxShowsEmail	Setting this property to True causes a user's email to appear when his name is hovered over in the search results.  	Boolean
Language	Set a language for viewing the server control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Description	Data Type
LoadingImage	The image to display while the User Search is loading. The default is `<site root>\Workarea\images\application\ajax-loader_circle_lg.gif`.	String
MapControl	This property allows you to set properties for the Location Tab's map. These properties are identical to the properties in the Map server control. For information on the Map control's properties, see "Map Server Control" on page 9-318. The `EnableMap` property must be set to true to see the Map control properties. See Also: "" on page 16-257 **Note:** Only Ektron's Map server control properties are described in this section. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help. Datatype: Ektron.Cms.Controls.Map	
MarkupLanguage	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 21-35	String
MaxTagCount	The maximum number of personal tags to display for each user in the search results.	Integer
MembersOnly	When set to True, this server control only returns Membership Users. When set to False, the control returns CMS400.NET Users and Membership Users.	Boolean
PageSize	The maximum number of user results to show per page.	Integer
ResultsProfile	Determines whether profile information is displayed. This is based on the state of the user performing the user search. See "When is a User's Profile Accessible in Search Results" on page 16-250. Choices are: **full** - always show user profile information. **nonprivate** - display user profile information only when a user's profile is not marked private. **nonprivate-authenticated** - display user profile information only when a user's profile is not marked private and the user performing the search is logged in. **none** - never show user profile information.	String

Property	Description	Data Type
SearchPrivate	When set to False, this property prevents users with profiles marked as private from being returned with user search results.	Boolean
ShowNameEmail	When set to True, populates the drop down list with these additional options: **First Name** - perform searches based on a user's first name. **Last Name** - perform searches based on a user's last name. **Email** - perform searches based on a user's email address. When set to False, the drop down list is populated with these properties: **Tags** - perform searches based on a user's tags. **Display Name** - perform searches based on a user's display name.	Boolean
StartingTab	Select which tab appears when the control is first rendered on a Web page. Choices are: - basic - advanced - location	String
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Stylesheet` property is ignored.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateGroupProfile	The URL path of the community group template. This path can be relative or absolute.	String
TemplateParamName	Sets a QueryString parameter for the ID of users or groups that are returned in the search results. This parameter is passed to the template page defined in the `TemplateUserProfile` or `TemplateGroupProfile` property when a user clicks the Location (map) icon associated with a search result.	String

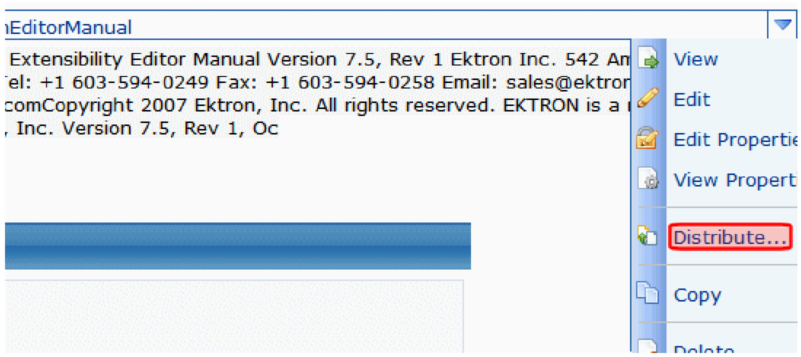
Property	Description	Data Type
TemplateTarget	Defines the way a the template appears when the Location link is clicked. Choices are: **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned BASE target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	ItemLinkTargets
TemplateUserProfile	The URL path of the user profile template. This path can be relative or absolute.	String
UserTaxonomyID	Enter the ID number of the taxonomy associated with users to appear in this server control. This allows a user to search for another user based on the taxonomy with which they area associated. If set to 0 (zero), the Category option does not appear in the User drop down list on the Advanced tab.	Long
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Distributing Content to Another Ektron CMS400.NET Folder

Ektron CMS400.NET supports the *distribution* of Community Documents to any CMS folder. (A community document is either HTML content or an asset created via the Community Documents server control.)

For example, your Marketing Department uses the Community Documents server control to create and edit content. After completing a press release, they use the **Distribute** menu option to copy it from the private collaboration folder to a public content folder. Once there, the document can pass through an approval chain or be published immediately.

The Distribute option can insert new content or overwrite existing content in any folder.



The Distribute Option is more fully explained through these topics.

- "Enabling the Distribute Option" on page 16-262
- "Distributing a Community Document" on page 16-263

Enabling the Distribute Option

Only a member of the Ektron CMS400.NET Administrators group can enable the Distribute option. Do this for every Community Group that will use it. You can do so from the Workarea or after logging in to the Web site.

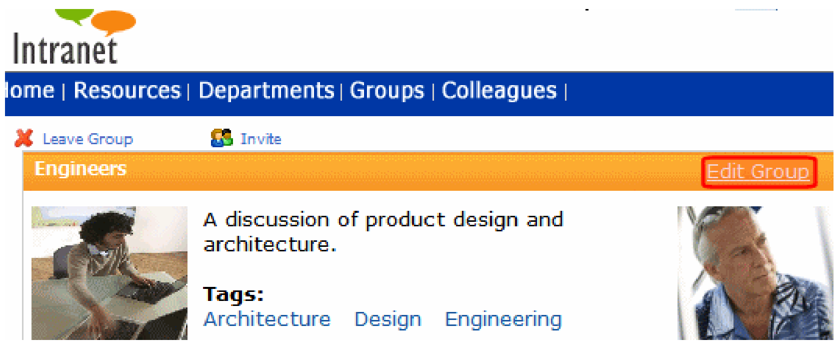
From the Workarea

1. From the Ektron CMS400.NET Workarea, go to **Settings** > **Community Management** > **Community Groups** > **Groups**.
2. Click the group for which you want to enable the Distribute option.
3. Click the **Edit** button ( ) .
4. Check the **Enable Distribute** check box.
5. Click the Save button ( ).

From the Web Site

1. Log into a site that uses the Community Management features as a CMS administrator or a Group Administrator.

2. Navigate to a Web page that hosts a Group Profile page.
3. Click the Edit Group link (circled below).



4. Check the **Enable Distribute** check box.
5. Click the Save button ().

Distributing a Community Document

There are two procedures for distributing a community document the first time. When doing so, ask yourself the following question.

What are you doing?	Read this procedures
Replacing an existing file in an Ektron CMS400.NET folder. The file types must match.	"Distributing a New Community Document that Overwrites an Existing One" on page 16-267
Placing a file in an Ektron CMS400.NET folder for the first time	"Distributing a New Community Document" on page 16-264

Warning! After a community document is distributed the first time, the original document is forever linked to the destination document. You cannot break the link.

If you want to later revise the document, you would typically edit it in the collaboration folder and select the Distribute option again. When you do, you are asked to confirm replacing the document in the destination folder. You are not allowed to select another folder.

If you really must distribute it to another folder, delete the document in the destination folder. This action breaks the link between documents. Once the link is broken, you can distribute the document to another folder.

"Distributing Content After the First Time" on page 16-269 explains how subsequent edits are handled.

Prerequisites

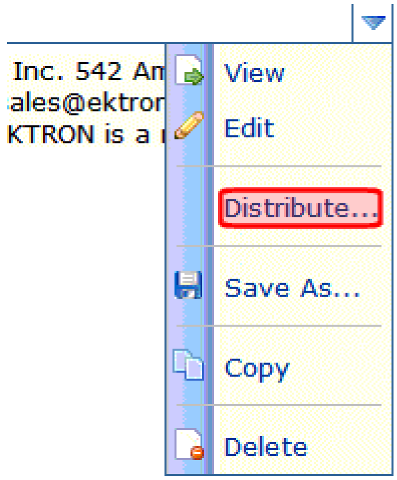
- You log in as one of the following
  - Administrator of the group whose documents are being distributed
  - Ektron CMS400.NET user assigned Community Group Administrator role for that group
  - CMS administrator
- The content's status is Approved.
- You have permission to add, delete, and restore content to the destination folder. (If you do not, the folder doesn't appear on the folder selection screen.) See Also: "Folder Permissions" on page 5-43

Distributing a New Community Document

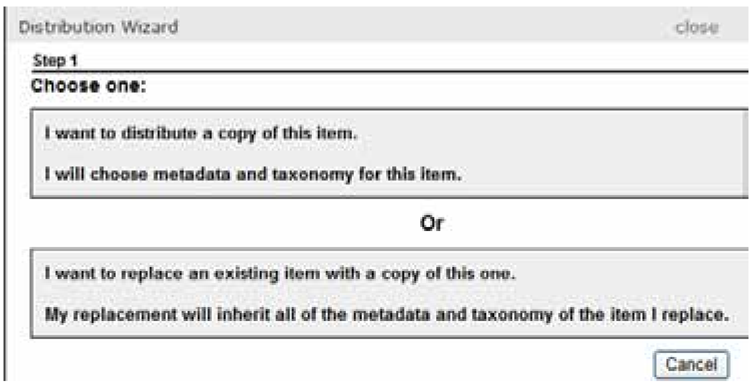
When distributing a Community Document that does not exist in Ektron CMS400.NET for the first time, you identify a destination folder and, if required, metadata and taxonomy categories. This information is collected through a series of screens that guide you through the process.

Note: If you are using Ektron CMS400.NET with Microsoft Sharepoint Integration, after selecting the folder (in Step 8), the document is copied to that folder even if you later click the screen's **Close** button. See Also: "Ektron's Microsoft Office SharePoint Server Connector" on page 19-41.

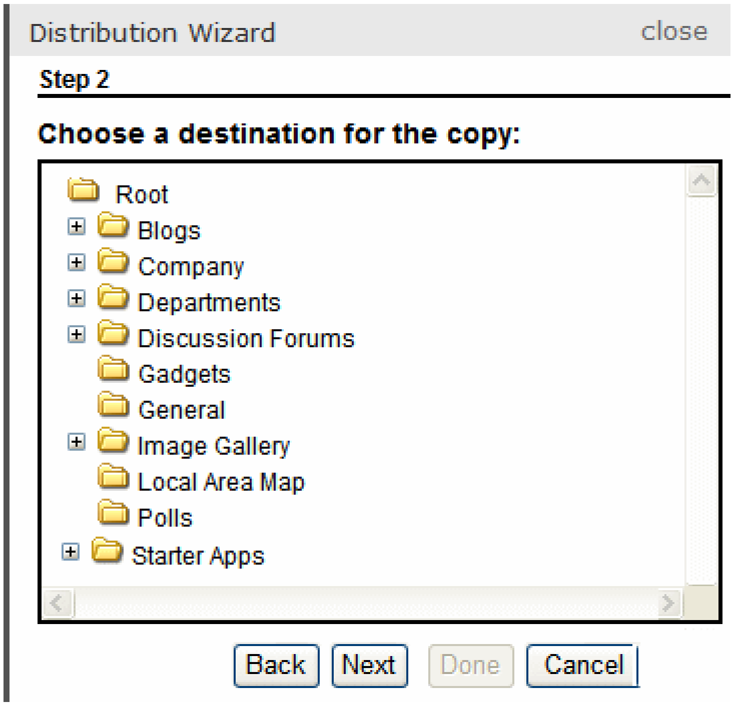
1. Log in to the Web site that contains content you want to distribute.
2. Navigate to the Web page that contains content you want to distribute.
3. Click the triangle to the right of the content or asset you want to distribute.
4. Click **Distribute** from the dropdown menu.



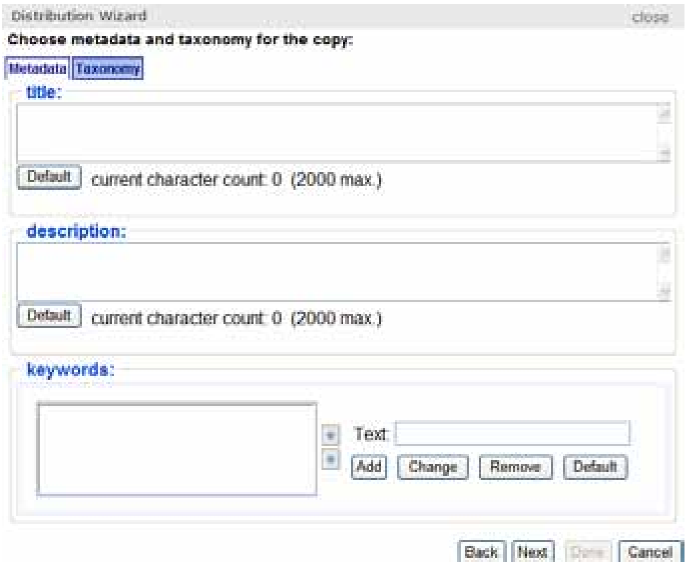
5. The following screen appears.



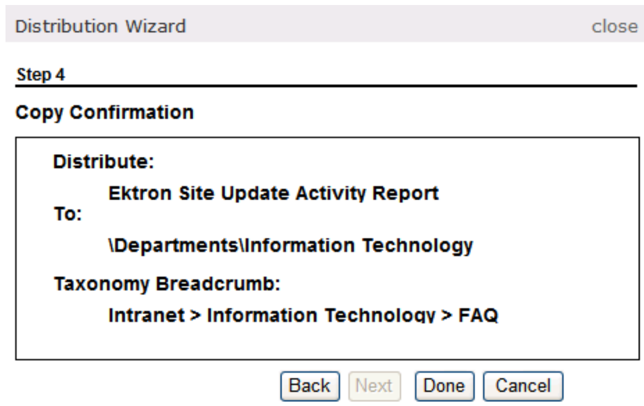
6. Click in the top box, which begins **I want to distribute a copy of this item**.
7. The following screen appears



8. Select the folder to which you want to distribute the content.
9. Click **Next**.
10. The following screen appears if metadata or a taxonomy category is required for the folder.



11. Enter any required metadata or taxonomy. See Also: "Working with Metadata" on page 7-146 andSee "Taxonomy" on page 9-200 .
12. A confirmation screen appears. Click **Done**.



13. Ektron CMS400.NET copies the selected document to the selected folder.

Distributing a New Community Document that Overwrites an Existing One

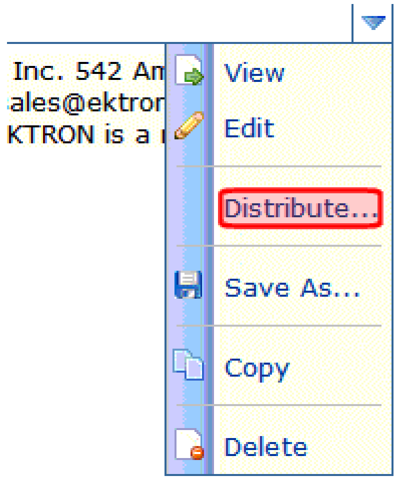
Note: This process only occurs the first time you overwrite a document. For a description of subsequent updates, see See "Distributing Content After the First Time" on page 16-269"Distributing Content After the First Time" on page 16-269.

During this procedure, you identify a destination folder and content to be replaced. Since the content's type that you are distributing must match the content being replaced, you only see content whose types match.

Upon replacing, any metadata and taxonomy categories applied to the existing content are applied to the new. Also, the content title and ID number from the existing content are maintained -- they are not replaced by the title and ID number of the new content. Finally, the existing content's summary is maintained and can be edited if needed.

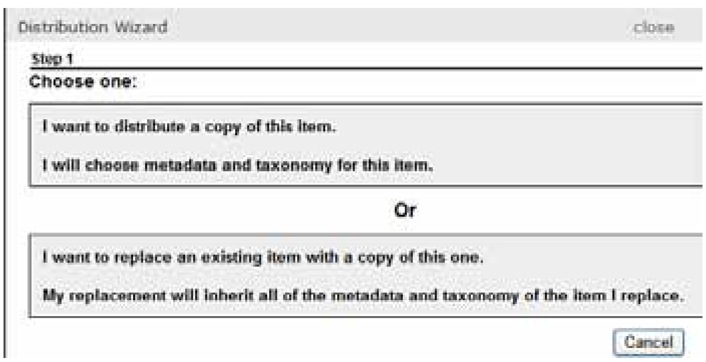
This information is collected through a series of screens that guide you through the process.

1. Log in to the Web site that contains the content you want to distribute.
2. Navigate to the page that contains that content.
3. Click the triangle to the right of the document you want to distribute.
4. **Distribute** appears on the dropdown menu.

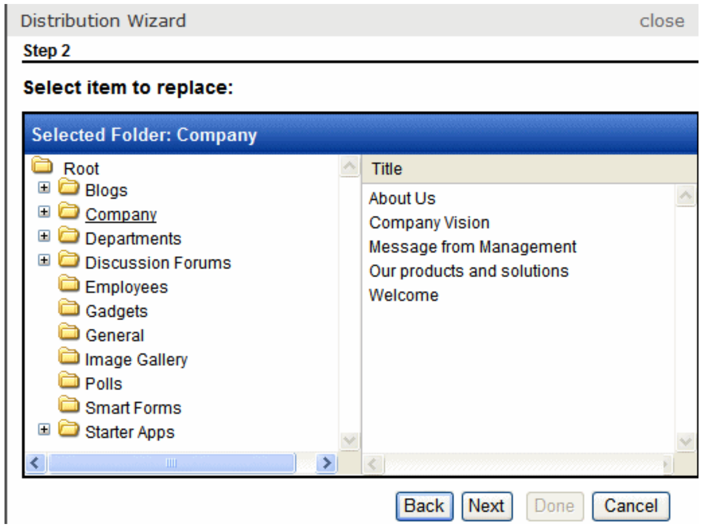


5. Click **Distribute**.
6. The following screen appears.

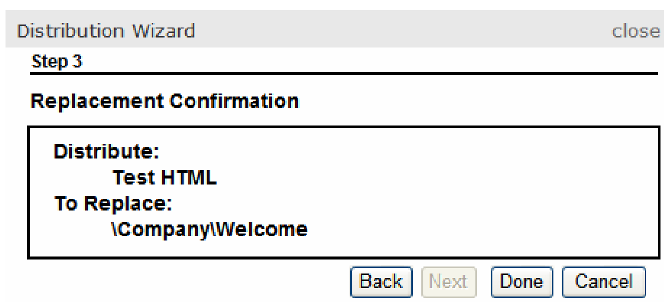
Note: The following screen only appears the first time you overwrite a file. To overwrite the file subsequently, see "Distributing Content After the First Time" on page 16-269.



7. Click the lower box, which begins **I want to replace an existing item**.
8. The following screen appears.



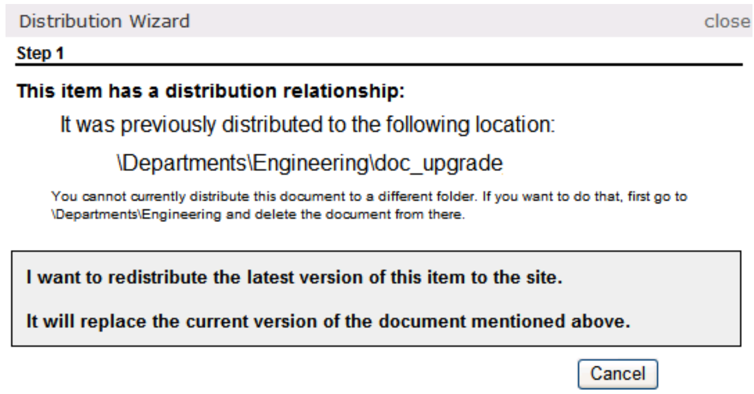
9. Navigate to and select the content you want to replace. Only content whose type matches the document you selected in Step 3 appears.
10. Press **Next**.
11. A confirmation screen appears. Click **Done**.



12. Ektron CMS400.NET overwrites the selected document with the one you selected in Step 3.

Distributing Content After the First Time

If you later try to **Distribute** the same document (whether you added a new document or overwrote an existing one), a screen like the following appears.



You can copy the latest version of the document to the distribution folder by clicking in the gray box whose text begins **I want to redistribute...** However, you cannot distribute the document to another folder. (If you want to do so, first delete the document from the destination folder. Then, you can use either procedure to distribute the document to any folder.)

When distributing content after the first time, its metadata and taxonomy categories appear on the Metadata/Category screen by default. You can change them if desired.

As with the replace option, existing content's title and ID number are maintained -- they are not replaced by the new content's title and ID number. And, the existing content's summary is maintained and can be edited if needed.

Chapter 17

eCommerce

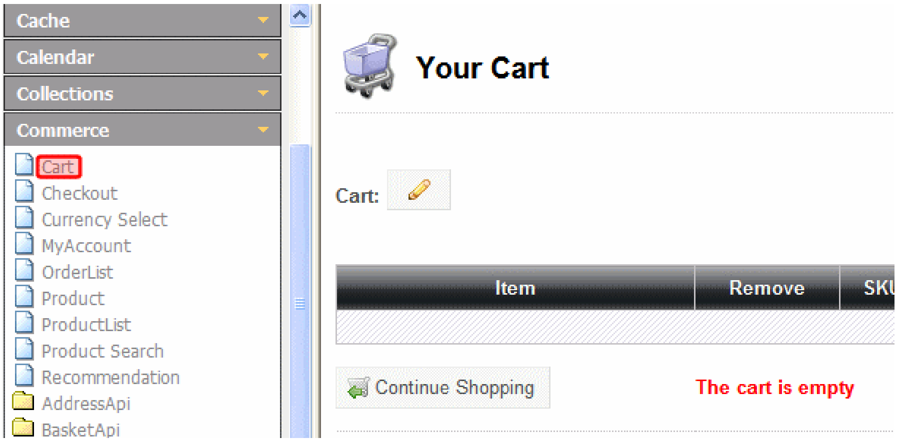
> **Note:** The eCommerce feature requires special license from Ektron, Inc. If you do not see this feature under **Ektron CMS400.NET**'s **Settings** area, it may be because your license does not support eCommerce. For licensing information, contact sales@ektron.com.

eCommerce documentation consists of the following top level topics.

(continued in Introduction)

Sample eCommerce Site

To see a sample eCommerce site, download the Developer Sample Site. Within that site, you can try out a customer shopping experience by going to `http://`*site root*`/cms400developer/developer/default.aspx` then **Commerce** > **Cart**. The following shopping cart screen appears.



You can add items to the cart then proceed through a sample checkout process.

The following eCommerce server controls are used to facilitate this process.

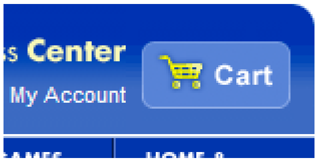
- "Cart Server Control" on page 17-3
- "Checkout Server Control" on page 17-16

Cart Server Control

The Cart server control allows a site visitor to work with products they have selected to purchase. Think of this as a shopping basket. As a site visitor navigates around your site selecting products to purchase, they are added to a cart.

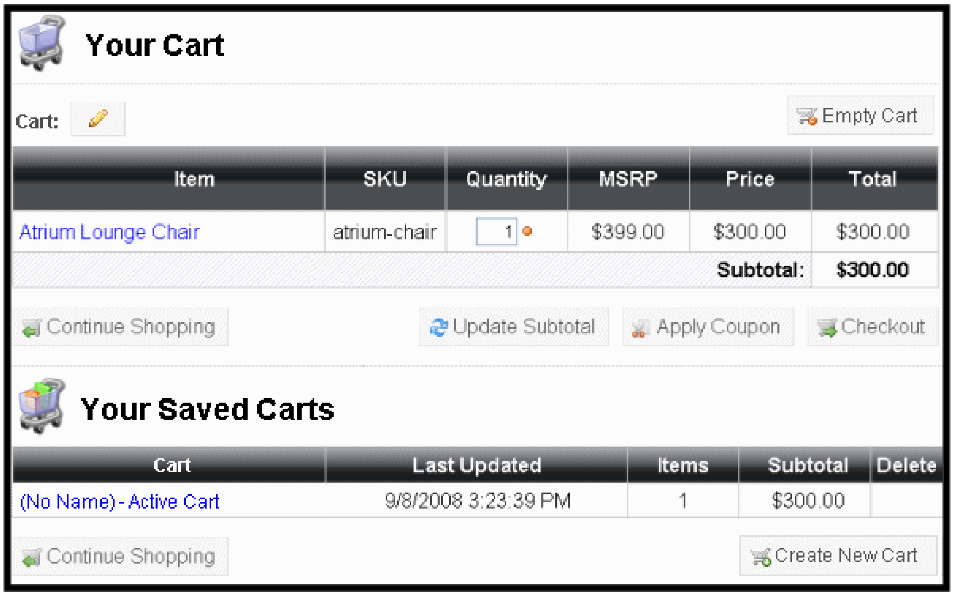
A site visitor typically reaches the Cart server control from a product description or list page. A product description page is one that contains a Product server control. Product list pages contain server controls that create a list of products; for example, the ProductList, ProductSearch or RecommendationAdding an Item to a Cart controls. Inside these controls, there is a button or link that allows a site visitor to add the product to the cart.

You could also create a link from a master page or menu that allows site visitors to view their cart. This allows a site visitor to navigate directly to their cart when they arrive at your site.



Cart Server Control Areas

The Cart server control is made up of two major areas. The top part of the control represents the current cart a site visitor is working with. This area is known as Your Cart. The bottom represents a site visitor's saved carts. This area is known as Your Saved Carts. The saved cart information appears only when a site visitor is logged in. See Also: "Creating a New Cart" on page 17-7.



The **Your Cart** area displays the Item, SKU, Quantity, Manufacturer's Suggested Retail Price, Sale Price, Subtotal and Total. From this cart, a site visitor can update the quantity and subtotal information, apply coupons and check out. The site visitor can also choose to continue shopping or empty the cart.

The **Your Saved Cart** area contains a list of carts the site visitor has saved and are awaiting checkout. This allows the site visitor to select products and save them for future purchase. This area contains:

- the name of each cart
- the last time it was updated
- how many products in each cart
- the subtotal of each cart
- an option to delete a saved cart
- an option to create a new cart

Clicking a saved cart makes it the current cart and its products are displayed in the **Your Cart** area. A site visitor can then proceed with checking out.

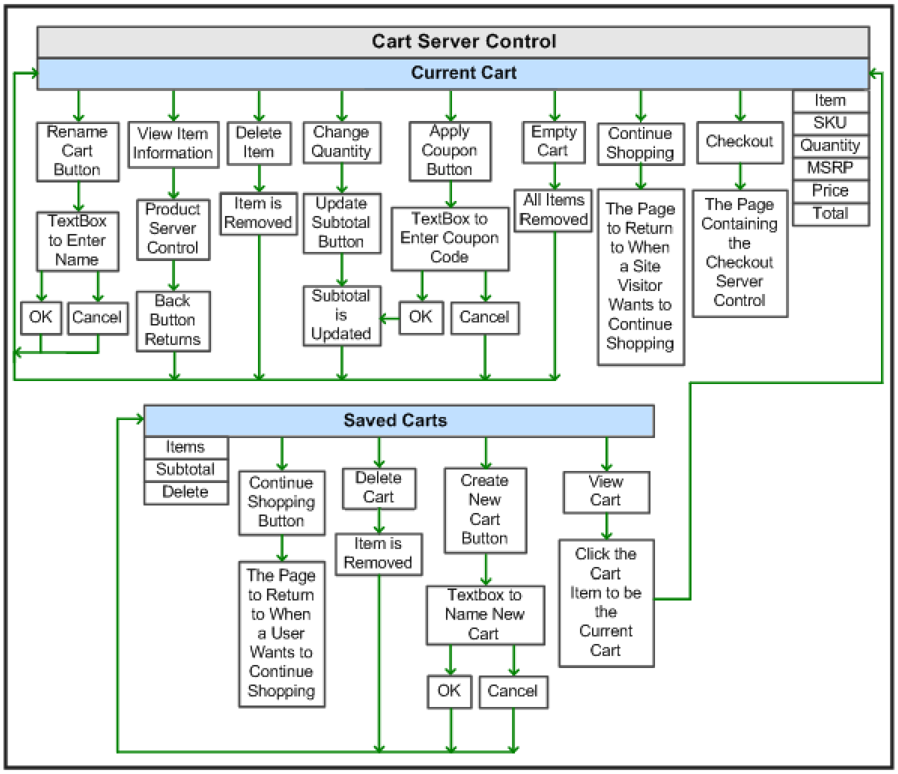
The following topics are discussed in this section:

- "Flow of the Cart Server Control" on page 17-6
- "Working with a Cart" on page 17-6
- "Cart Server Control Properties" on page 17-13

Flow of the Cart Server Control

A site visitor typically arrives at this control by clicking the **Add to Cart** button in the Product, ProductList, ProductSearch or Recommendation server controls.

Below is an image depicting the flow of the Cart server control.



Working with a Cart

This section explains how a logged in site visitor would use the Cart server control. It contains these subsections.

- "Adding an Item to a Cart" on page 17-7
- "Creating a New Cart" on page 17-7
- "Displaying an Item's information" on page 17-8
- "Assigning or Changing the Name of the Cart" on page 17-9
- "Changing an Item's Quantity" on page 17-10
- "Removing an Item from the Cart" on page 17-10

- "Continuing to Shop" on page 17-10
- "Applying Coupons" on page 17-11
- "Emptying the Current Cart" on page 17-12
- "Checking Out" on page 17-12
- "Deleting a Saved Cart" on page 17-12

Adding an Item to a Cart

Items are added to a cart when a site visitor clicks the **Add to Cart** link or button in the following server controls.

- Product
- ProductList
- ProductSearch
- Recommendation

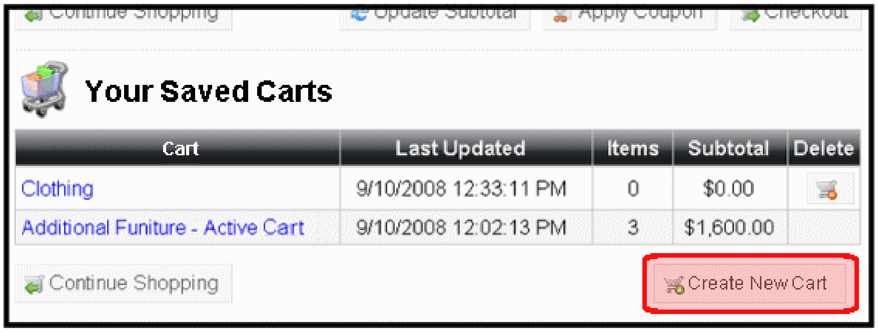
Once Add to Cart is clicked, the item is appended to the current cart's list of items. If the site visitor does not have an existing cart, a new one is created.

Creating a New Cart

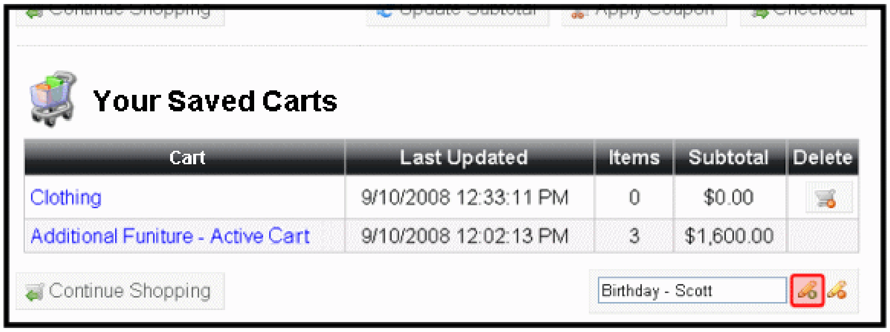
A site visitor automatically creates a new cart the first time he adds a product to the cart. If needed, a site visitor can create multiple carts while using the Cart server control. This allows for the grouping of products being purchased. For example:

- site visitors might wish to create carts based on concepts, such as, Son's Birthday or Item Type.
- site visitors want to use separate payment types. For example, a site visitor might want to place some products on one credit card and place the rest on another. By having two carts, the site visitor can proceed with two separate checkouts allowing them to use multiple credit cards.
- site visitor needs to prioritize purchases. For example, a site visitor knows they want to purchase certain products, but cannot afford them until a later date. He can add these products to a separate cart then continue to purchase products he can afford now. This helps the site visitor remember purchases they want to make and drives additional sales for your site.

To create a new cart, click the **Create New Cart** button in the **Saved Cart** area.



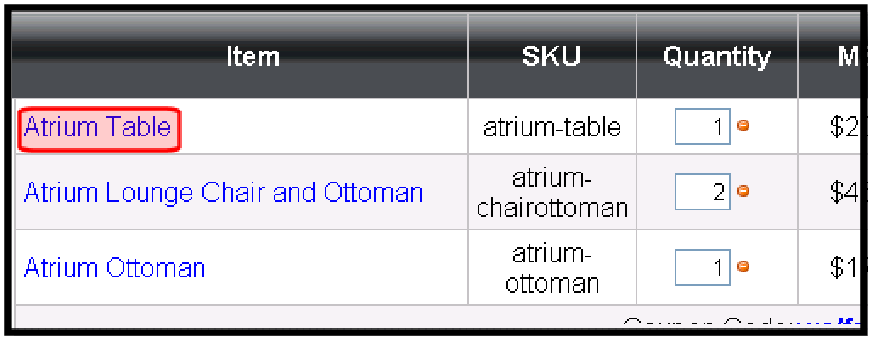
The button is replaced with a text box. Next, enter the name of the new cart in the text box and click the **OK** button.



Once the site visitor clicks OK, the cart is added to the list of Saved Carts and becomes the active cart. A site visitor can then click the **Continue Shopping** button to select products to add to the new cart.

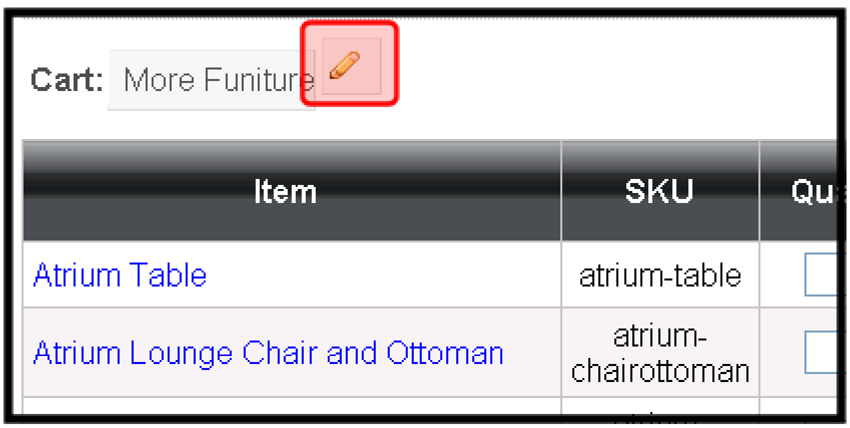
Displaying an Item's information

In the Cart server control, a product's title is a link. When clicked, it takes you to the product's detail page. To navigate back to the cart, click the back button. By default, the server control uses the product's QuickLink information to provide a path to the product. You can override this functionality by adding a new path to the TemplateProduct property.

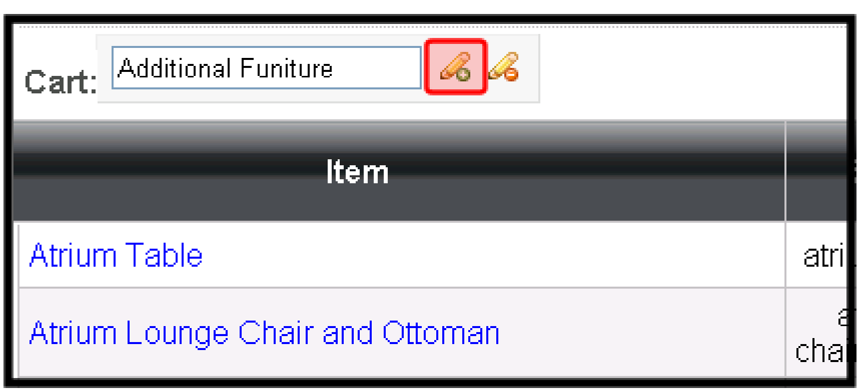


Assigning or Changing the Name of the Cart

Assigning a name to a cart makes it easier for site visitors to identify a cart in their saved cart list. A site visitor can assign or change the name of a cart by clicking the **Edit** button located next to the cart's name.

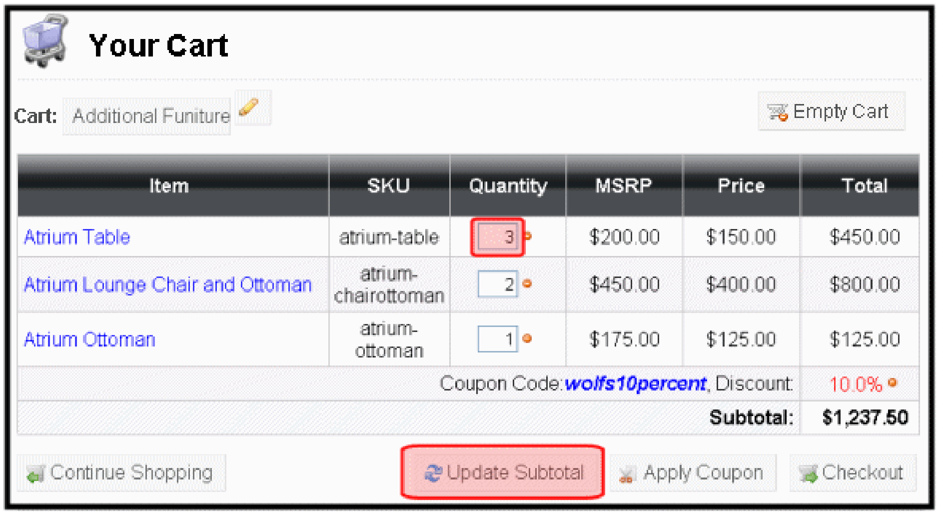


Once clicked, the button and name are replaced with a text box that allows the site visitor to enter a new name for the cart. When finished, click the **OK** button.



Changing an Item’s Quantity

To change a product’s quantity, enter the new amount in the Quantity column’s textbox located in the same row as the product you want to change. Next, click the **Update Subtotal** button. This will recalculate the total price for the product and update the subtotal. The image below shows the Atrium Table quantity change to three.



Removing an Item from the Cart

A site visitor can remove a product from the cart by clicking its Remove From the Cart button ( ) in the Remove column. Once the site visitor clicks the button, the product is removed from the cart and the Subtotal is updated.

Continuing to Shop

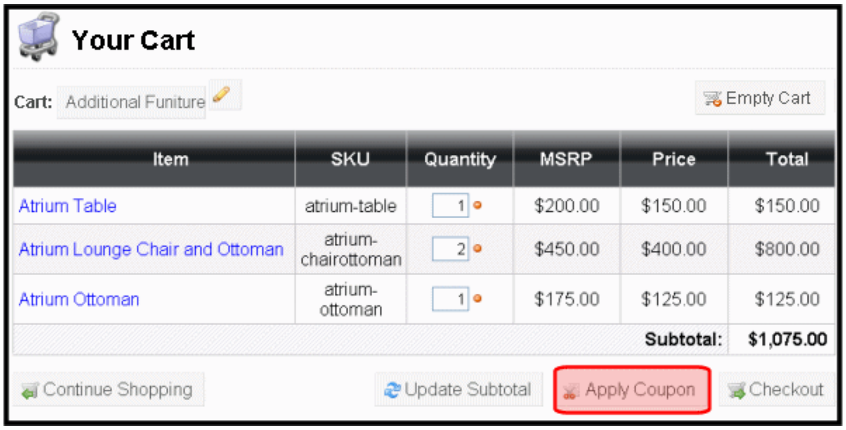
A site visitor can continue to shop by clicking the **Continue Shopping** button. This takes the site visitor back to a template defined in the cart server control’s `TemplateShopping` property. For example, you might send the site visitor to a page containing a ProductList or ProductSearch server control. See Also: "Product List Server Control" on page 17-165 and "ProductSearch Server Control" on page 17-170.

As a developer, you need to add the path to this page to the `TemplateShopping` property. If the page is in the same folder as the page that contains the Cart server control, just enter the page’s name.

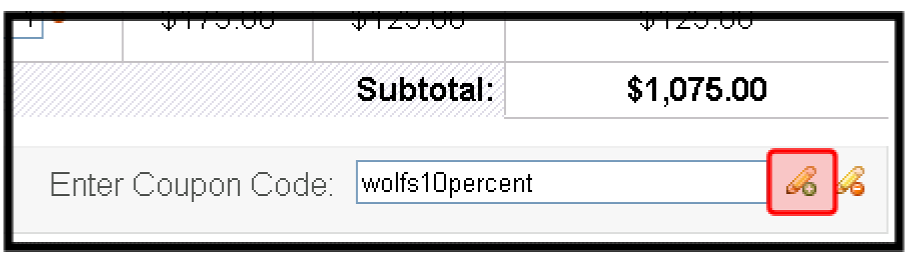
Applying Coupons

If you have coupons defined in the Workarea and the `EnableCoupons` property is set to True, a site visitor can enter coupons to discount the purchase. How coupons affect the purchase is defined in the Workarea > Settings > Commerce > Catalog > Coupons. See Also: "eCommerce Coupons" on page 17-225

To apply a coupon, a site visitor clicks the **Apply Coupon** button.

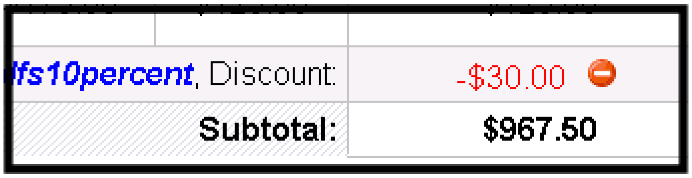


The button area changes to text box where the site visitor can enter the **Coupon Code**. The site visitor then enters a code and clicks the **OK** button.



Once a site visitor clicks **OK**, the discount appears above the **Subtotal** and he can continue to shop, checkout, view other carts or delete the coupon.

A site visitor can remove the coupon by clicking the **Remove Coupon** button.



Emptying the Current Cart

To clear all of the products in the current cart, a site visitor clicks the **Empty Cart** button. Once clicked, a dialog box appears and the site visitor can click the **OK** or **Cancel** button.

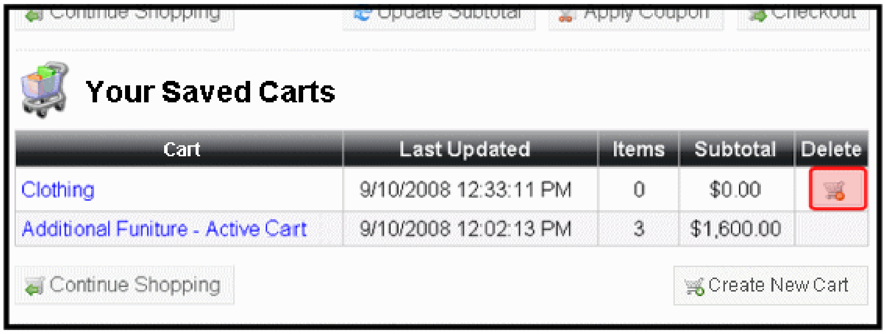
Checking Out

Once a site visitor is satisfied that the current cart contains all products they want, the quantity of each product is correct and all coupons have been applied, he can click the **Checkout** button. At that point, the site visitor is taken to the page that contains the Checkout server control. The path to the page is defined in the `TemplateCheckout` property. If the page containing the Checkout server control is in the same folder as the Cart server control, just enter the page name. See Also: "" on page 17-16.

If a site visitor has an item in his cart that is out of stock, the **Checkout** button is disabled (hidden).

Deleting a Saved Cart

A site visitor can delete a saved Cart by clicking on the **Delete Cart** button. Clicking this button instantly deletes the cart.



Controlling the Cart's Display with a User Control

Ektron provides the ability to control the Cart server control's display through a user control. This allows you to easily change the look and feel of the Cart server control in a visual environment; for example, in Microsoft Visual Studio. To do this add the path of the user control to the `UserControlUrl` property.

For example, you could create multiple user controls with different "skins" for the Cart server control. Then, dynamically populate the `UserControlUrl` property with the location of the user control (skin) as needed. Lets say you have an eCommerce site that sells books and toys. When some one is purchasing books, you might want to have a more library looking cart. If someone is purchasing toys, you might have a colorful cart with bright images.

Ektron provides a sample user control for the Cart server control. Its location is `<siteroot>\Workarea\ControlTemplates\Commerce\Cart\CartUserControl.ascx`.

Code behind for this user control is in the `CartUserControl.ascx.cs` file.

Warning! If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of the Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.

Note: If there is an error in the code behind for the user control, the page will appear blank when the server control loads.

Cart Server Control Properties

The following table explains the properties of the Cart control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Workarea and can use it to browse to Content, Collections.	String
CustomXml (Code Behind Only)	Enter a string of XML. This property provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-37	String
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses Cart.xsl. This file is located in <Site Root>\Workarea\Xslt\Commerce **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
DynamicProductParameter	The QueryString parameter name which is used to pass the product ID to the product details page. For example, if your QueryString parameter for products is ID, enter that in this property. Then, when site visitors clicks a product's title, this parameter is passed with the product's ID to the product details page.	String
EnableCoupons	Set to true to allow a site visitor to enter coupon codes for discounts. When set to false, the **Apply Coupon** button is hidden. See Also: "Applying Coupons" on page 17-11 **True** = coupon entry is available. **False** = coupon entry is not available. **Note**: Coupons are created in the Workarea > Settings > Commerce > Catalog > Coupons section. See Also: "eCommerce Coupons" on page 17-225	Boolean
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the cart. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LoadingImage	The image to display while the cart is loading. The default is ajaxloader_circle_lg.gif. This file is located in <siteroot>\Workarea \images\application.	String

Property	Description	Data Type
MarkupLanguage As of 7.6.1 this property does not work. It should work in a future release.	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 3636 There is a sample `Basket.ekml` file located in `<siteroot>\Workarea\Template\Basket` If you enter a file in this property, it overrides the `DisplayXslt` properties.	String
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet. The default is **Cart.css**. This file is located in: `<Site Root>\Workarea\csslib\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside of the Workarea folder. If you make changes to this file and do not move it out of the Workarea, this file and the changes will be lost when you upgrade.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateCheckout	The template location that contains the Checkout server control. This is the page a site visitor is sent to when he clicks the **Checkout** button. If the template file is located in the same folder as the Web form containing this server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Checking Out" on page 17-12	String
TemplateProduct	The template location that contains the Product server control. This is the page a site visitor is sent to when he clicks the name of a product in his cart. This page provides details about the product. See Also: "Displaying an Item's information" on page 17-8. When this property is left blank, the server control uses the Product's QuickLink information. If the template file is located in the same folder as the Web form containing this server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Displaying an Item's information" on page 17-8	String

Property	Description	Data Type
TemplateShopping	The URL to navigate to when the site visitor clicks the **Continue Shopping** button. This URL could lead to a template containing a ProductSearch or ProductList server control that would allow a site visitor to select additional products. See Also: "Continuing to Shop" on page 17-10. For information the ProductSearch or ProductList controls, see "ProductSearch Server Control" on page 17-170 or "Product List Server Control" on page 17-165	String
UserControlUrl	The URL of the User Control that manages the display of the Cart. This path can be relative or absolute. A sample user control is located in `<siteroot>\Workarea\ControlTemplates\Commerce\Cart\CartUserControl.ascx`. **Warning! Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Work-area folder. If you make changes to this file and do not move it out of the Work-area folder, this file and the changes will be lost when you upgrade. **Warning! Important:** If you use this property, the `DisplayXslt` property is ignored and the server control is hidden. See Also: "Controlling the Cart's Display with a User Control" on page 17-13	String

Checkout Server Control

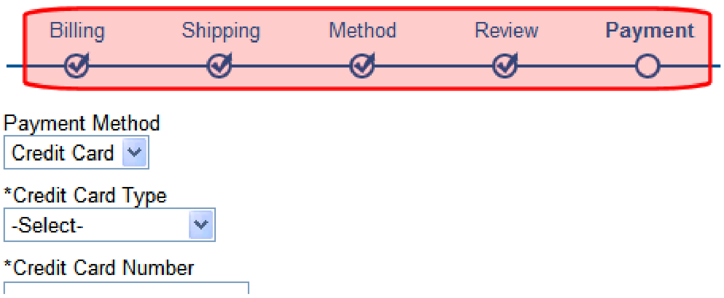
Warning! When using the Checkout server control, you should always have an SSL certificate installed for your Web site and set the control's `IsSSLRequired` property to **True**. This protects your customers' payment information while it is being transmitted. Do not use a self-signed SSL certificate -- obtain one from a trusted certificate authority.

The Checkout server control allows a site visitor to navigate through the checkout process. This process includes:

- adding billing and shipping information
- selecting a shipping method
- reviewing the order
- submitting the order and credit card information
- notification that checkout process is complete

Site visitors typically arrive at this server control by clicking the **Checkout** button on the Cart server control. They also might reach this server control from a Checkout link you create on your site.

The control provides a navigational aid that indicates the customer's step in the checkout process. At any point, the customer can move forward to the next step or backwards to previous ones.

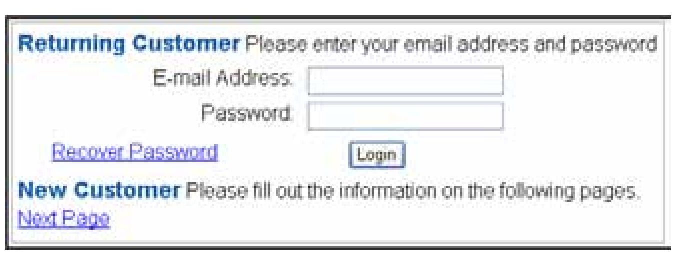


As appropriate, some of the wizard's steps do not appear. For example, if merchandise is not tangible, the shipping screen does not appear.

Logging In or Setting Up an Account

Warning! When using the Checkout Server Control, the **Enable Verify Email** setting in the Workarea must be unchecked. Otherwise, new users will receive an error message when they sign-up using this control. To verify this setting, access the Workarea as an administrator and navigate to **Settings** > **Configuration** > **Setup**. Next, make sure **Enable Verify Email** is unchecked. If not, click the **Edit** button, uncheck the box and click the **Save** button.

If a site visitor is an existing user and is not logged in when he reaches this server control, the control provides a way for him to log in. Optionally, this screen could also show a link that allows existing users to recover their password. To enable this link, add a template path to the `TemplateRecoverPassword` property. Your organization should decide how to handle this functionality. For example, you could create a template with a Membership Server Control and set that control's `DisplayMode` property to ResetPassword. See Also: "Membership Server Control" on page 16-30.



If the site visitor is not an existing user in the system, he can proceed with checking out by clicking **Next Page**. here, he can enter billing information.

After completing the Billing Information screen, a membership user account is created, and he is logged in. The new user can then proceed through the checkout.

Storing a Site Visitor's Information

When a logged-in site visitor has previously purchased products from this site, using this system, billing and shipping information are already filled out. This information is stored in Ektron CMS400.NET and can be edited each time a user checks out. However, because CMS400.NET does not store credit card numbers, that information must be entered each time.

Checkout Server Control Screens

The Checkout server control is broken up into several sections. Each section represents a portion of the checkout process.

- "Billing Information" on page 17-18
- "Shipping Information" on page 17-19
- "Shipping Method" on page 17-19
- "Review Order" on page 17-20
- "Submit Order" on page 17-20
- "Order Complete" on page 17-21

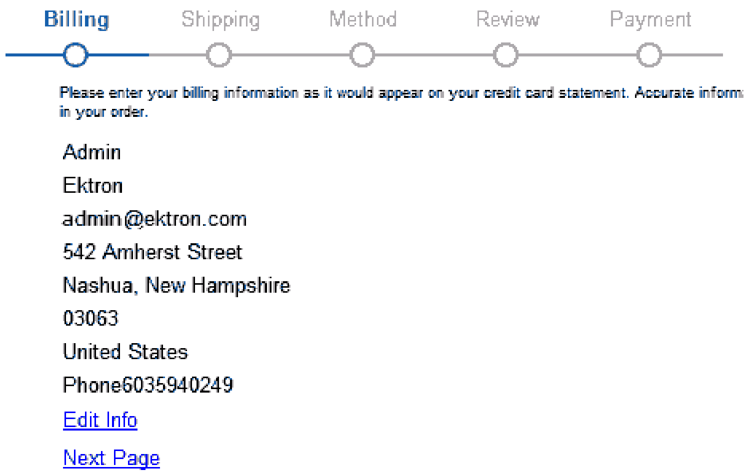
Billing Information

This section allows site visitors to add their billing information including:

- First Name, Last Name
- Company (Optional)
- Address, City, State, Postal Code

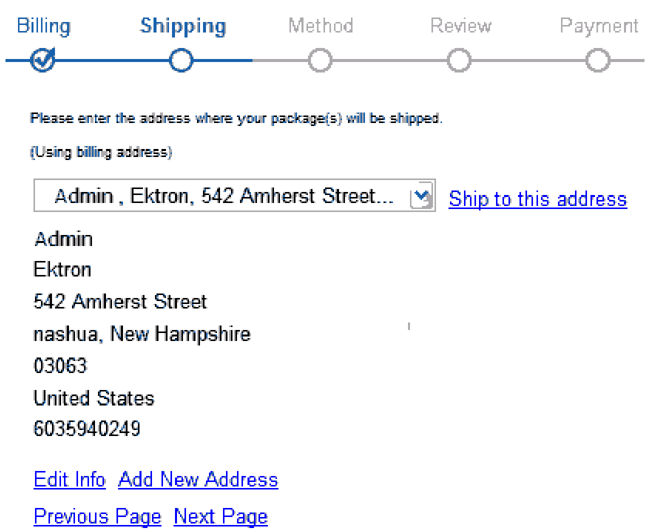
Note: If a site visitor chooses a country other than the United States, no field validation is applied to the postal code by default. To apply country-specific postal code validation, see this Ektron Knowledge Base article: http://dev.ektron.com/kb_article.aspx?id=26072.

- Phone
- E-mail Address (Only appears when a person creates a new account.)
- Password



Shipping Information

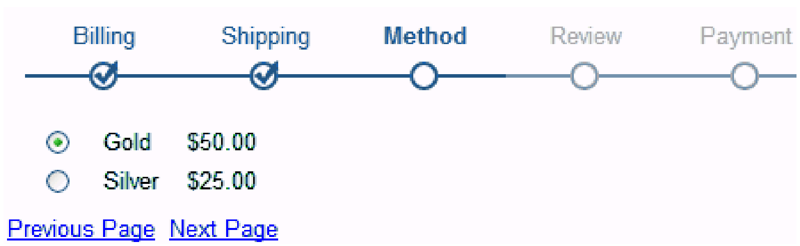
This page allows site visitors to add or edit shipping information. By default, it uses the billing address as the shipping address. From this screen, site visitors can add new addresses, proceed to the next step, or navigate to the previous page. When a site visitor adds a new address, it's stored with the account information in CMS400.NET.



Shipping Method

This page allows site visitors to select the type of shipping for their products. Shipping methods that appear here are defined in the **Workarea** > **Settings** > **Commerce** > **Shipping** >

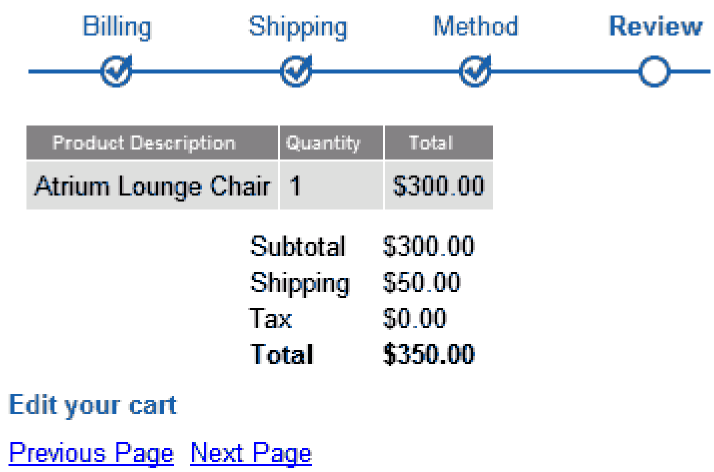
. For information on setting up shipping methods, see "Shipping Methods" on page 17-90.



Review Order

The Review Order page displays information about the products being purchased, their price, shipping charges, discounts, and taxes. At this point, if a site visitors wants to modify their cart, they click the **Edit your cart** link. For example, a site visitor wants to apply a coupon to his cart.

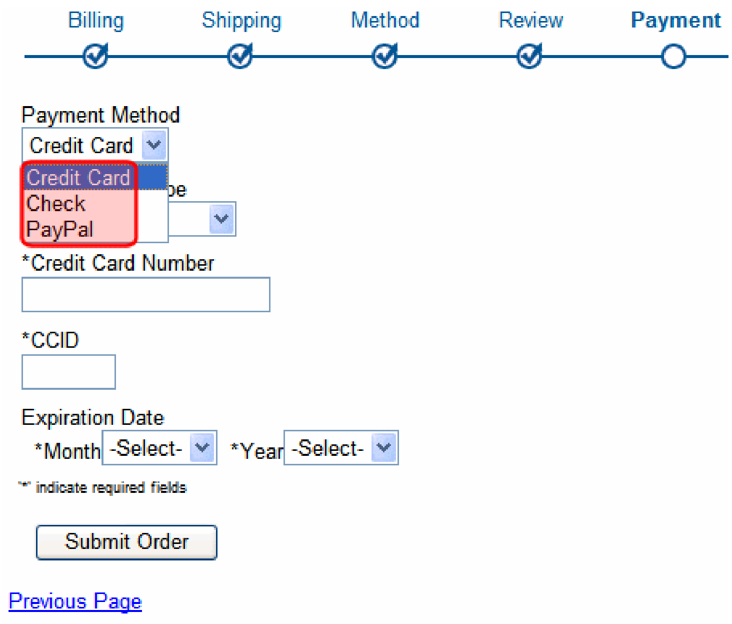
- For this link to work properly, you need to add the path of the template that contains the Cart server control to the Checkout server control’s `TemplateCart` property.



Submit Order

On the Submit Order page, a site visitor enter payment information. He can pay by check, credit card, or PayPal, depending on what has been set up in your CMS400.NET Workarea’s **eCommerce** > **Configuration** > **Payment Options** screen.

Once a site visitor enters the information, he clicks the **Submit** button. At that point, the charge is submitted to the payment gateway, and the order is posted in CMS400.NET. See Also: "Orders" on page 17-197

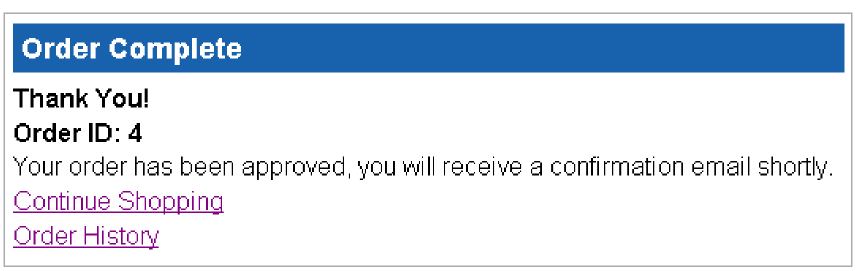


Order Complete

This page displays a Thank You note, the order ID, and links to continue shopping or view an order's history.

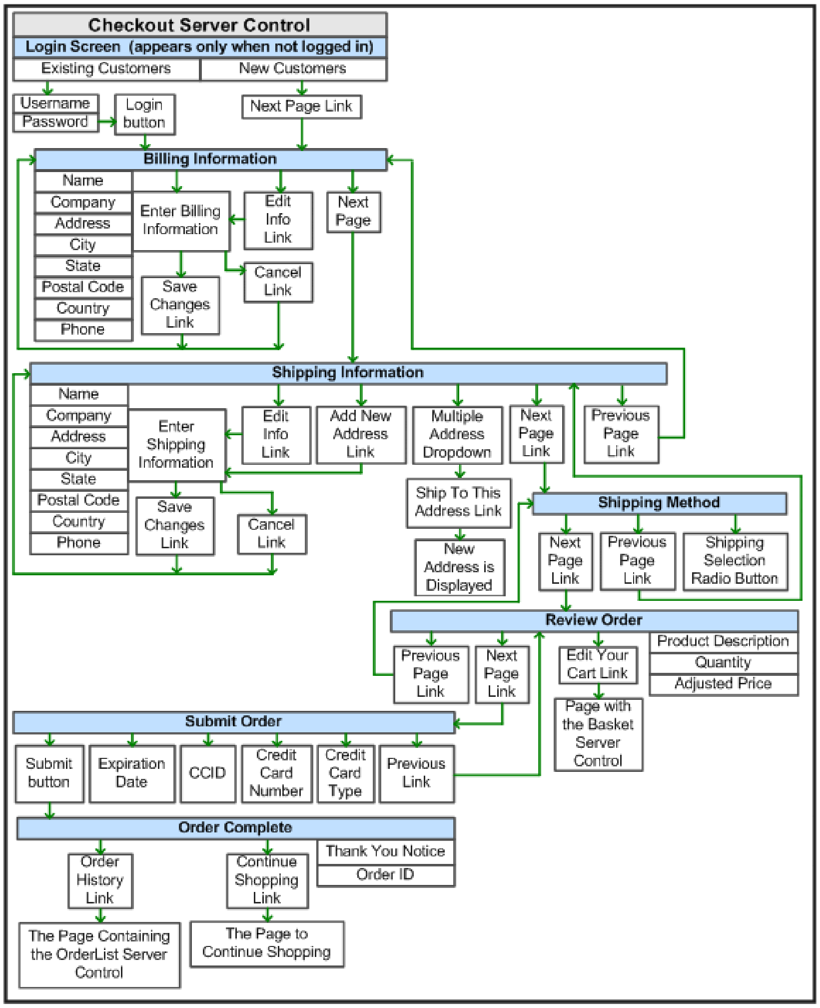
The **Continue Shopping** link appears when you add the path of a template that allows a site visitor to find products to the `TemplateShopping` property. For example, you might send them to a template containing a ProductSearch or ProductList server control.

The **Order History** link appears when you add the path of a template containing the OrderList server control to the `TemplateOrderHistory` property.



Flow of the Checkout Server Control

Below is a flow chart that represents the options & processes in the Checkout Server Control.



Checkout Server Control Properties

The following table explains the properties of the Checkout control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc.	String

Property	Description	Data Type
	See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set the `CacheInterval` property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-43	Double

Property	Description	Data Type

CurrentPhase
(Code Behind Only)
	Reports or selects the current page (or phase) of the checkout control. This allows you to customize the flow of the control. For example, if you only have one shipping option, you would skip the ShippingInfoEntry phase.
	For an example of working with the CurrentPhase property in code behind, download Ektron's Developer Sample Site and view these files.
	`[Site Root]/Developer/Commerce /CheckoutDemo_Advanced.aspx`
	`[Site Root]/Developer/Commerce /CheckoutDemo_Advanced.aspx.cs`
	Phases are listed below in the order which they happen within the control.
	Login - phase with option for existing users to log in. See Also: "Logging In or Setting Up an Account" on page 17-17.
	BillingInfo - phase for displaying a site visitor's billing information. See Also: "Billing Information" on page 17-18
	BillingInfoEntry - phase for entering a site visitor's billing information. See Also: "Billing Information" on page 17-18.
	ShippingInfo - phase that displays a site user's shipping information.
	ShippingInfoEntry - phase for entering a site visitor's shipping information. See Also: "Shipping Information" on page 17-19.
	ShippingMethodSelect - phase for selecting the method of shipping. See Also: "Shipping Method" on page 17-19.
	ReviewOrder - phase that displays the current order's details for review. See Also: "Review Order" on page 17-20.
	SubmitOrder - phase where site visitors add payment information. See Also: "Submit Order" on page 17-20.
	Complete - phase that displays completion message. See Also: "Order Complete" on page 17-21.
	Error_EmptyBasket - phase used when a cart has no items and the site visitor somehow enters the control.
	Error_UnhandledException - phase occurs when there's an error that the control cannot resolve.
		ControlPhase

CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-50	String

Property	Description	Data Type
DefaultCountryId	The ID of the default country that appears in the Billing Address and Shipping Address. Set this ID to the country from which the majority of your customers will be making purchases. If the site visitor is from a different country, he can change it when editing the Billing or Shipping Address. To find a country's numeric ID, sign into the Ektron CMS400.NET Workarea. Then go to **Settings > Commerce > Configuration > Countries**. The Numeric ID is in the left column of that screen.	Integer
DynamicPhaseParameter	The name of the parameter on the QueryString that identifies desired phase ID.	String
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `Checkout.xsl`. This file is located in `<SiteRoot>\Workarea\Xslt\Commerce \Checkout\Standard` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
FriendlyErrorMessage	The message that is shown to a site visitor when an unhandled error occurs. Details are sent to the event log. The default message is "*We're sorry, an error occurred while processing your request. Please try again later...*"	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
IsSSLRequired	When set to True, switches to an SSL encrypted URL. For the SSL encryption to work, you must have an SSL certificate installed for your site. Information on SSL can be found at the following Web sites. http://www.tech-faq.com/understanding-ssl.shtml http://www.verisign.com/ssl/ssl-information-center/how-ssl-security-works/index.html Installing and using an SSL is one of the most important things you can do to protect your customer's credit card data. **Note**: Ektron, Inc. is not associated with TechFAQ or VeriSign. However, both sites offer good explanations of Secure Sockets Layer.	Boolean

Property	Description	Data Type
Language	Set a language for viewing the checkout control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LoadingImage	The image to display while the control is fetching data. The default is `<siteroot>\Workarea\images \application\ajax-loader_circle_lg.gif`.	String
MarkupLanguage As of 7.6.1 this property does not work. It should work in a future release.	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page Right.	String
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String
SuppressWrapperTag	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateCart	The URL path of the template that contains the Cart server control. This path can be relative or absolute. When a path is entered, a link appears in the Review Order part of the process that allows a user to navigate to the template containing the Cart server control. See Also: "Review Order" on page 17-20 and "Cart Server Control" on page 17-3.	String
TemplateOrderHistory	The URL path of the template that contains the OrderList server control. This path can be relative or absolute. When a path is entered, a link appears at the end of checkout process that allows a user to navigate to the template containing the OrderList server control. See Also: "Order Complete" on page 17-21 and "OrderList Server Control" on page 17-205.	String
TemplateRecoverPassword	The URL path of the template that helps site visitors recover their password. This path can be relative or absolute. When a path is entered and a site visitor has not logged in, a link appears at the beginning of checkout process that allows him to navigate to a template containing information to recover his password. The Membership server control contains an option for recovering passwords. See Also: "Logging In or Setting Up	String

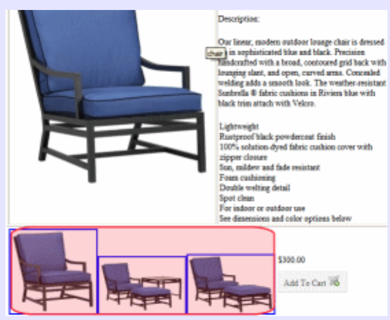
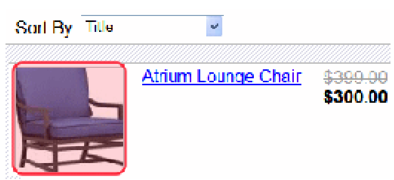
Property	Description	Data Type
	an Account" on page 17-17 and "Membership Server Control" on page 16-30	
TemplateShopping	The URL path of the template that allows the site visitor to continue shopping. When a path is entered, a link appears at the end of checkout process that allows a user to navigate to the template that would allow them to continue shopping; for example, the template containing a ProductList or ProductSearch server control. See Also: "Order Complete" on page 17-21, "Product List Server Control" on page 17-165 and "ProductSearch Server Control" on page 17-170	String

Access to eCommerce

Only members of the Administrators group or those assigned the eCommerce Admin role can access the eCommerce screens within the Ektron CMS400.NET Workarea. See Also: "Defining Roles" on page 15-40

Images in eCommerce

When using eCommerce, a site visitor sees images that represent products or services for sale. The following table lists each image that appears on an eCommerce Web site, and the source of each one.

Where Image Appears	Example	Image Location in Workarea
Product Server Control, main image	 **Image on Product control**	On the catalog entry's **Content** tab Note: The sample catalog entries are based on Product Types whose XML Smart Form includes an Image field. As a result, the product description, (which appears at the top of the Product Server control) includes an image. This is not required, merely a suggested implementation.
Product Server Control, thumbnails	 **Thumbnails on lower portion of Product control** Note: To control the thumbnail display, use the Xslt files generated by the Product, Product List, Product Search, and Recommendation server controls.	On the catalog entry's **Media** screen. If an image's **Gallery Display** field is set to **Yes**, its smallest thumbnail appears on the Product server control, below the content area. (This assumes you are using the control's default xslt.) When a site visitor clicks a thumbnail, the corresponding full image appears. Since the Media screen can have several images, several thumbnails can appear. They appear left to right reflecting their sequence (top to bottom) on the **Media** screen. See Also: "Determining Thumbnail Size" on page 17-148
Product List, Product Search, and Recommendation server controls	 **Image on Product List control**	On the catalog entry's **Media** tab, the image designated as **Product Icon** See Also: "Entering a Catalog Entry's Media" on page 17-146

Steps to Set Up a Basic eCommerce Web Site

This section describes how to set up a basic eCommerce Web site. This walk through explains everything you need to set in the web.config file and the Workarea. It also includes a list of templates needed and how to set up Ektron's eCommerce Server Controls on them.

Steps	Description
Step 1. In the Web site's web.config file, set the following keys:	<add key="ek_ecom_DefaultCurrencyId" value="840" /> ■ this key determines the base currency for your Web site. The default is 840 (the US Dollar). If needed, change this to the Numeric ISO code for the default currency. See Also: "The Default Currency" on page 17-55 **Warning! Important**: Do not change this once the site is live. <add key="ek_MeasurementSystem" value="English" /> ■ For each item sold on your Web site, you define a height, length, depth, and weight. If English, the units are inches and pounds. If Metric, the units are centimeters and kilograms. This information is used to calculate shipping costs. By default, this is set to English. Change to "Metric" to use the Metric system. See Also: "Packages" on page 17-87 **Warning! Important**: Do not change this once the site is live. <add key="ek_ecom_ComplianceMode" value="false" /> ■ set this key to "true" when you want your site to be Security Compliant. This means the Workarea will be encrypted in an SSL session and Logging is started. **More Information:** A list of currencies and their Numeric ISO code can be found in the **Workarea** > **Settings** > **Commerce** > **Configuration** > **Currencies** section. The ID is the Numeric ISO code.
Step 2. Decide whether you want to use CMS400.NET's inventory system or another inventory system.	If you are not using CMS400.NET's inventory system, create a custom inventory provider and add it to the web.config file's InventoryProvider. Ektron's Inventory Provider feature allows you to work with an existing inventory system. This is set in the web.config file. ■ Add the custom provider between the InventoryProvider's <providers> tags and change the default provider to the name of your custom inventory provider. For example: <inventoryProvider defaultProvider="MyCustomInventoryProvider">

Steps	Description
	More Information: "Customizing the Inventory Provider" on page 17-290
Step 3. Select a default Payment Gateway.	To use one of the payment gateways shipped with CMS400.NET, you can set it in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Configuration** > **Payment Gateway**. 2. Click a payment gateway's name. 3. Click the **Edit** button. 4. Add your User ID, Password and any needed Custom Values. 5. Click the **Default** check box to make that selection the default. 6. Click the **Save** button. If you are not using one of these gateways, create a custom payment provider and add it to the web.config file's EktronPaymentGateway. Add the custom provider between the EktronPaymentGateway's <providers> tags. Once added, the option should appear in the Workarea's Payment Gateway screen. If you want to override the Workarea settings, change the default provider in the web.config file from "Automatic" to the name of the desired payment gateway. For example: <EktronPaymentGateway defaultProvider="AuthorizeNet"> **More Information: "Payment Gateway" on page 17-69**
Step 3a (optional) Set up PayPal Support	See "PayPal Support" on page 17-61

Steps	Description
Step 4. Set up a shipping provider.	If you are not using the default flat rate shipping provider, open the shipment.config file and set the default provider in formation in: <shipmentProvider defaultProvider="FlatRateShipmentProvider"> to either "FedExShipmentProvider" or "UPSShipmentProvider". If you are using either of these shipping methods, make sure you fill in the following information in the <providers> tags. This information is provided by FedEx and UPS. (If you don't see these items, scroll the window to the right.) ■ key="" ■ password="" ■ accountNumber="" ■ meterNumber="" In addition to using these providers, you can add additional providers. **More Information: "Defining Shipping Providers" on page 17-90**
Step 5. Enable countries where your Web site will sell its products **Note**: The United States is enabled by default.	Enabling a country in CMS400.NET: ■ makes it available for site visitors to use as part of an address for shipping and billing purposes ■ makes it available when you add a warehouse ■ automatically enables its corresponding tax table in the Country Tax Table section of the Workarea Enable Countries in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Configuration** > **Countries**. 2. Click a country's name. 3. Click the **Edit** button. 4. Click the **Enabled** check box. 5. Click the **Save** button. **More Information: "Countries" on page 17-47**

Steps	Description
Step 6. Add and enable regions for each country your eCommerce site will service. **Note**: All states in the US are enabled by default.	Regions can represent states, provinces, territories, etc. and further define areas of a country. Adding and enabling regions: - makes it available for site visitors to use as part of an address for shipping and billing purposes - makes it available when you add a warehouse - automatically enables its corresponding tax table in the Regions Tax Table section of the Workarea Add Regions in the Workarea. – Prerequisite: The region's country is defined in the Countries screen. 1. Navigate to **Settings** > **Commerce** > **Configuration** > **Regions**. 2. Click **New** > **Region**. 3. Enter a Name. 4. Click the **Enabled** check box. 5. In the Code box, enter an abbreviation for this region. 6. Select this region's country from the pull down list. 7. Click the **Save** button. **More Information: "Regions" on page 17-50**
Step 7. Enable Currencies for your eCommerce site. **Note**: By default, U.S. dollar, Euro and Australian dollar are enabled.	If your Web site is selling products in another country and you want to display prices in that country's currency, enable it in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Configuration** > **Currencies**. 2. Click a currency. 3. Click the **Enable** button. 4. Set the Exchange Rate. **Note: Note**: The default currency set in the web.config file is the base reference currency when setting an exchange rate. 5. Click the **Save** button. **More Information:"Currencies" on page 17-53**

<table>
<tr><th>Steps</th><th>Description</th></tr>
<tr><td>Step 8.
Decide which credit cards your eCommerce site will accept.</td><td>Credit cards are used during the checkout process, by the Checkout server control, during the submit phase. During this phase, all enabled credit cards appear in a drop down which site visitors use to select their choice.
Add credit card types in the Workarea.
1. Navigate to Settings > Commerce > Configuration > Credit Card.
2. Click New > Credit Card Type.
3. Enter the credit card’s name; for example, Visa.
4. Check the Accepted check box.
5. Add an image.
6. Add a Regex Expression to validate the credit card number.
7. Click the Save button.
More Information: "Credit Card Types" on page 17-77
To learn about the Checkout server control, see "Checkout Server Control" on page 17-16.</td></tr>
<tr><td>Step 9.
Add or edit eCommerce notification messages.</td><td>email notifications are sent to your customers after their order has been received, cancelled, shipped or completed. Ektron provides four predefined messages, one for each event.
For messages to be sent, content notifications must be enabled and the customer must enter a valid email address.
Add or edit messages in the Workarea. To edit a message:
1. Navigate to Settings > Commerce > Configuration > Messages.
2. Click the title of the message.
3. Click the Edit button.
4. Change the properties and fields as necessary.
5. Change the text as needed.
More Information: "Messages" on page 17-81
To learn about content notifications, see ”Configuring E-Mail for Tasks and Content” on page 1-109.</td></tr>
</table>

Steps	Description
Step 10. Create Tax Classes. (Optional)	If you are collecting taxes for transactions on your eCommerce site, create a Tax Class for each taxable category of products. For example, if your eCommerce site sells alcohol and tobacco, set up a tax class for each type. Ektron provides four tax classes by default: - Alcohol - Goods - Services - Tobacco Tax classes are applied to Postal, Regional and Country Tax Tables. In those tables you define a separate rate for each Tax Class. Tax Classes are created in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Tax** > **Tax Classes**. 2. Click the **New** > **Tax Class**. 3. Enter a name; for example, Food. 4. Click the **Save** button. **More Information:** **"The Tax Class Screens" on page 17-97**

Steps	Description
Step 11. Set your tax rates in CMS400.NET Tax Tables	Once your Tax Classes are set up, you need to set a tax rate for each class in the Postal, Regional, or Country Tax Tables. - Postal Tax Tables - use when there is a city or county tax. If there are postal, regional and country taxes applied to a given area, roll them all into this table. - Regional Tax Tables - use when there is a state, provincial or territorial tax. If only regional and country taxes are applied to a given area, roll them into this table. - Country Tax Tables - use when there is country-wide tax. If only country level taxes are applied to a given area, use this table. CMS400.NET checks these tables in the following order: Postal, Regional, then Country. Once it finds a tax, it stops. Therefore, if a postal zone has several taxes (for example, a local tax and a regional tax), build the combined percentage into the postal code tax. So, assume New York City has a 4% tax, and New York state has a 3% tax. In this case, enter a combined total of 7% into all Postal Tax Tables within New York City. While you need to create each Postal Tax Table, Regional and Country Tax Tables are automatically generated when a country or region is added to CMS400.NET. However, there are no tax rates defined in these tables. Create Postal Tax Tables or edit Region and Country Tax Tables in the Workarea. To create a new Postal Tax Table: 1. Navigate to **Settings** > **Commerce** > **Tax** > **Postal Tax Tables**. 2. Click the **New** > **Postal Code**. 3. Enter a Postal Code. 4. Select the Country and Region. 5. Enter a tax rate for each Tax Class as needed. 6. Click the **Save** button. To edit a Region's or Country's Tax Table: 1. Navigate to **Settings** > **Commerce** > **Tax** > **Regional Tax Tables** or **Country Tax Tables**. 2. Click the **Id** or **Code** of the Region or Country. 3. Click the **Edit** button. 4. Change the information as needed. 5. Click the **Save** button. **More Information: "Postal Tax Tables" on page 17-99, "Regional Tax Tables" on page 17-101, "Country Tax Tables" on page 17-103**

Steps	Description
Step 12. Add and select shipping methods in the Workarea. **Note**: If you have not set up a shipping provider, see "Set up a shipping provider." on page 17-31.	Once you have a shipping provider set up (see "Set up a shipping provider." on page 17-31), define the shipping options from which your site visitors can select. For example, if you use UPS, define whether to allow Next Day, 2nd Day, 3rd Day, Ground, World Wide Standard, etc. Once a Shipping Method is enabled, it will appear in the Shipping Method phase of the Checkout server control. Shipping Methods are defined in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Shipping** > **Methods**. 2. Click **New** > **Shipping Method**. 3. Enter a Name. This name represents the option in the Shipping Method phase of the checkout server control. 4. Click the **Active** check box to enable this method. 5. Click the **View Options** link. 6. From the Provider Service drop down, select a shipping method. 7. Click the **Save** button. Repeat these steps until you've added all the necessary shipping methods. **More Information: "Shipping Methods" on page 17-90**
Step 13. Add a warehouse from which your products will be shipped.	This does not have to be the actual shipping address for the products. CMS400.NET uses this information to determine the "from" address when calculating shipping cost. Add warehouse information in the Workarea. 1. Navigate to **settings** > **Commerce** > **Shipping** > **Warehouses**. 2. Click **New** > **Warehouse**. 3. Complete the address information fields. **Note**: Only countries and regions that have been enabled for eCommerce appear in the drop down lists. 4. Click the **Default Warehouse** check box if you want this to be the default warehouse. Only the default warehouse is used in the checkout process. 5. Click the **Save** button. **More Information: "Warehouse" on page 17-85**

Steps	Description
Step 14. Define each package size your shipping department uses to ship your products.	Tangible products have size and weight dimensions. CMS400.NET's shipping calculator uses this information with the package size information to fit the order into the smallest-sized and fewest packages. It then passes packaging information (number, sizes and weight) to the shipping provider, which returns the order's shipping costs. Define package information in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Shipping** > **Packages**. 2. Click **New** > **Package**. 3. Enter a **Name**, **Length**, **Height**, **Width** and **Maximum Weight** a package can handle. 4. Click the **Save** button. Repeat these steps until you've added all the package sizes your company uses. **More Information: "Packages" on page 17-87**
Step 15a. Create Product Type definitions for each type of product you are selling. **Note**: The remaining steps in this example are based on selecting a Product for the Product Type Class.	Product types are applied to your catalog folders and allow you to control the way product information is added to a catalog. This concept is similar to the way Smart Form configurations are applied to content folders to control the way content blocks are created. You can apply multiple product types to a catalog. Define product types in the Workarea. 1. Navigate to **Settings** > **Commerce** > **Catalog** > **Product Types**. 2. Click **New** > **Product Type**. 3. Define the Product Type. 4. Click the **Save** button and move to the next step. **More Information: "Product Types" on page 17-106**
Step 15b. Create the content page.	After clicking the Save button from the previous step, a content editor appears and allows you to enter XML Smart Form information. This Smart Form is what a user fills out when creating a Catalog Entry (Product). The information added by a user appears on a product's details page on your Web site. Here are some fields you might want to create in your smart form. - Title - Description - Image Once you have the Smart Form complete, click the **Save** button. **More Information: "Product Types" on page 17-106, "Working with Smart Forms" on page 7-369**

Steps	Description
Step 16. Create a catalog and assign it a product type.	A catalog folder is a CMS400.NET folder designed to hold eCommerce entries (products). This is similar to the way content folders hold HTML or Smart Form content. By assigning a product type to the folder, you can control the way products are added to the catalog. Catalogs are created in the Workarea. 1. Click the **Content** folder bar to display the list of content folders. 2. Click **New** > **Catalog**. 3. Set the catalog's Properties, Metadata, Web Alerts and Breadcrumb information. (Similar to creating a Content Folder.) 4. On the Product Types Tab, select a Product Type from the drop down list. 5. Click the **Add** link. 6. Click the **Save** button. **More Information: "Creating a Catalog Folder" on page 17-126, "Assigning a Catalog Folder's Product Type" on page 17-127**

<table>
<tr><th>Steps</th><th>Description</th></tr>
<tr><td>Step 17.
Add Catalog Entries to a Catalog.</td><td>Catalog Entries are the products you are offering on your eCommerce Web site. For example, a catalog entry could be a CD, a subscription-based service, or a computer that a site visitor can customize and the price adjusts accordingly.
Create catalog entries in the Workarea.
1. Navigate to a catalog folder.
2. Click New and select a product type.
3. In the Title field, enter a name for the catalog entry.
4. Fill out the fields in the Smart Form as necessary.
5. Select the Summary tab and add a summary. (Optional)
6. Select the Properties tab and enter an SKU and the number of units that equal one purchase. Next, select a Tax Class. If the product is a tangible product, click the Expand link next to Dimensions, click the Tangible check box and enter the product’s physical dimensions. If you are using CMS400.NET as your inventory system, click the Expand link next to Inventory and enter the information.
7. Select the Pricing tab and enter the product’s list price and sales price. If you are offering a quantity discount, click the Add Pricing Tier button and add a quantity and a tier price. If you enabled multiple currencies, select a currency from the drop down and add pricing information as needed.
8. Select the Attributes tab and fill-out or change attributes as needed.
Note: if you did not define attributes in "Step 15a." on page 17-37, the Attributes tab does not appear.
9. Select the Media tab and click the Add Images button to associate images with the catalog entry.
10. The Items tab is used to create a complex product. This allows you to offer variants of a product at different price points. For this example, we will skip this tab. See Also: "Creating a Complex Product" on page 17-117.
11. Enter information as needed on these tabs: Metadata, Taxonomy and Schedule.
12. Click Action > Publish.
Continued on the next page.</td></tr>
<tr><td>Step 17.
Continued.</td><td>To add Cross Sell or Up Sell items associated with this catalog entry, click its Title and then click View > Cross Sell or Up Sell. These items appear in the Recommendation server control when it is associated with this catalog entry.
More Information: "Creating a Catalog Entry" on page 17-128</td></tr>
</table>

Steps	Description
Overview: Create Web site templates site visitors will use to interact with your eCommerce site.	Here is a list of templates needed to create a basic eCommerce site. ■ **Master page** - recommended, but not absolutely necessary. This template could contain any of the following: – CurrencySelect server control - allow site visitors to choose a currency. – View Cart link - links to the template containing the Cart server control. – View My Account / Orders link - links to the template containing the MyAccount and OrderList server control. – Login server control - allows site visitors and users to log in from any page. ■ **Landing page** - this page should have a way for site visitors to start the shopping process and could contain a ProductList, ProductSearch server control. ■ **Product Display page** - use the Product server control on a template to display the details of a catalog entry (product). If you are using the Cross Sell or Up Sell functionality, add a recommendation server control to this template. ■ **Product Search page** - use the ProductSearch server control on a template to allow site visitors to search for product. ■ **Cart page** - use the Cart server control on a template to allow a site visitor to work with the items they have selected to purchase. ■ **Checkout page** - use the Checkout server control on a template to facilitate the check out process. ■ **My Account / Order History page** - use a MyAccount server control and an OrderList server control to display a site visitor's account information and a list their order history. The steps below are an example of creating a Web site using Ektron's eCommerce Server Controls.

Steps	Description
Step 18. Create a Master page.	Create a master page and add the following items to a header area or left side column. - **CurrencySelect server control** - allows site visitors to select from available monetary types. This control displays currencies that have been enabled in the Workarea during "Step 7." on page 17-32.A **My Cart link** that leads to a template containing the Cart server control. - **My Account / Order History link** that leads to a template containing the MyAccount and OrderList server controls. - **Product Search link** - (optional) add a link that leads to a template containing a ProductSearch server control. - **Product Search server control** - (optional) allows a user to search for a product from anywhere on the site. Note: Adding this option is involves more than just dragging and dropping a server control to the header or the left side column. It includes some advanced customizations and coding that allows a search term to be passed from one form to another. Ektron's Developer Sample site shows an example of doing this with the WebSearch server control. - **Login server control** - (optional) this allows existing customers to login once they arrive at your site. If you only want site visitors logging in through this control, set the `OnlyAllowMemberLogin` property to True. **More Information:** "CurrencySelect Server Control" on page 17-59 "MyAccount Server Control" on page 17-213 "OrderList Server Control" on page 17-205 "ProductSearch Server Control" on page 17-170 "Login Server Control" on page 3-8

Steps	Description

Step 19.
Create a Landing page.
	This template should be the first page a site visitor sees when they arrive at your site. It should have a mechanism that lets site visitors start shopping. Make sure this page has one of the following:
	- **ProductList server control** - use this control to display products by Taxonomy, Catalog or ID.
	  - To display a single taxonomy, set the `SourceType` property to Taxonomy and enter a single Taxonomy ID in the `SourceId` property.
	  - To display multiple taxonomies, set the `SourceType` property to TaxonomyList and enter a comma separated list of Taxonomy IDs in the `IdList` property.
	  - To display a single catalog, set the `SourceType` property to Catalog and enter a single catalog ID in the `SourceId` property. If you want to display sub catalogs for a given ID, set the `Recursive` Property to True.
	  - To display multiple catalogs, set the `SourceType` property to CatalogList and enter a comma separated list of catalog IDs in the `IdList` property.
	  - To display products by their ID, set the `SourceType` property to IdList and enter a comma separated list of product IDs in the `IdList` property.
	  - Set the `TemplateProduct` property to the template containing the Product server control.
	- **ProductSearch server control** - this control provides the means for site visitors to search your Web site for products. If this control is not on your landing page or part of your master page, you should create a separate template containing this control.
	  - Set the `CatalogId` property to the ID of the catalog to search.
	  - Set the `TemplateCart` property to the template containing the Cart server control.
	  - Set the `TemplateProduct` property to the template containing the Product server control.
	More Information:
	"Product List Server Control" on page 17-165
	"ProductSearch Server Control" on page 17-170

Steps	Description
Step 20. Create a Product page	This is the template where a site visitor views a product's details. It contains a Product server control and optionally a Recommendation server control. ■ **Product server control** - this control displays a product's details. – Make sure the `DynamicParameter` property is set to the parameter name used to pass product IDs to the QueryString. – If you want a default product to display when no ID is passed, set the `DefaultProductID` property to the ID of a product. – Set the `TemplateCart` property to the template containing the Cart server control. ■ **Recommendation server control**- this control displays Cross Sell and Up Sell opportunities associated with a product. These are set in Workarea, under the View menu's Cross Sell and Up Sell selections for a catalog entry – Set the `RecommendationType` property to CrossSell or UpSell. – Make sure the `DynamicProductParameter` property is set to the parameter name used to pass product IDs to the QueryString. – If you want a product's default Cross Sell or Up Sell items to display when no ID is passed, set the `DefaultProductID` property to the ID of a product. – Set the `TemplateCart` property to the template containing the Cart server control. – Set the `TemplateProduct` property to the template containing the Product server control. **More Information:** "Product Server Control" on page 17-154 "Recommendation Server Control" on page 17-190

Steps	Description
Step 21. Create a Product Search page.	This page allows site visitors to search for products on your Web site. ■ **ProductSearch server control** - this control provides the means for site visitors to search your Web site for products. If this control is not on your landing page or part of your master page, you should create a separate template containing this control. – Set the `CatalogId` property to the ID of the catalog to search. – Set the `TemplateCart` property to the template containing the Cart server control. – Set the `TemplateProduct` property to the template containing the Product server control. **More Information:** "ProductSearch Server Control" on page 17-170
Step 22. Create a Cart page.	This template contains a Cart server control. ■ **Cart server control** - this control allows a site visitor to work with products they have selected to purchase. As a site visitor navigates around your site selecting products to purchase, they are added to a cart. – Set the `TemplateCheckout` property to the template containing the Checkout server control. – Set the `TemplateProduct` property to the template containing the Product server control. – Set the `TemplateShopping` property to the Landing page template or a template containing a ProductList or ProductSearch server control. – If you are using coupons, make sure the `EnableCoupons` property is set to True. **More Information:** "Cart Server Control" on page 17-3

Steps	Description
Step 23. Create a Checkout page	This template contains a Checkout server control. ■ **Checkout server control** - this control allows a site visitor to navigate through the checkout process. – Set the `DefaultCountryID` property to the country you want to be the default selection in the Billing and Shipping address sections. – Set the `TemplateCart` property to the template containing the Cart server control. – Set the `TemplateOrderHistory` property to the template containing the OrderList server control. – Set the `TemplateShopping` property to the landing page template or a template containing a ProductList or ProductSearch server control. – If you are using SSL Encryption, set the `IsSSLRequired` property to **True**. **Warning! Important:** Because Credit Card information is entered into the Checkout server control, Ektron strongly recommends using SSL Encryption for this page. **More Information:** "Checkout Server Control" on page 17-16

Steps	Description
Step 24. Create a My Account page.	This template contains a MyAccount and an OrderList server control. ■ **MyAccount server control** - this server control allows site visitors to view billing, shipping and alternative shipping information associated with their account. – Set the `DefaultCountryID` property to the country you want to be the default selection in the Billing and Shipping address sections. – (Optional) Set the `CustomPropertyID` property to the ID or list of comma separated IDs that represent custom properties associated with users. Custom Properties are set up in CMS400.NET's Workarea > Settings > Configuration > User Properties. ■ **OrderList server control** - this server control allows site visitors to view a list of their processed orders. – Make sure the `DynamicOrderParameter` is set to the parameter name used to pass order IDs to the QueryString. – Make sure the `DynamicProductParameter` is set to the parameter name used to pass product IDs to the QueryString. **More Information:** "MyAccount Server Control" on page 17-213 "OrderList Server Control" on page 17-205

eCommerce Configuration Screens

Countries

Use the Countries screen to modify existing country information or add new countries to eCommerce.

How Countries are Used

- **to define country tax tables**. For example, assume Canada has a national tax of 5% that applies to the sale of certain goods. National tax tables are defined in the Country Tax Tables screen.

- **to determine shipping costs**. In the Order checkout process, the purchaser selects a shipping address, which includes country. So, be sure to enable all countries from which site visitors can enter orders.

Countries are also part of the location on the Warehouse screen. An order's shipping cost is determined by the distance between the warehouse and the destination.

See Also:

- "Default Countries" on page 17-48
- "Creating a Country" on page 17-48
- "Editing a Country" on page 17-49
- "Deleting a Country" on page 17-50

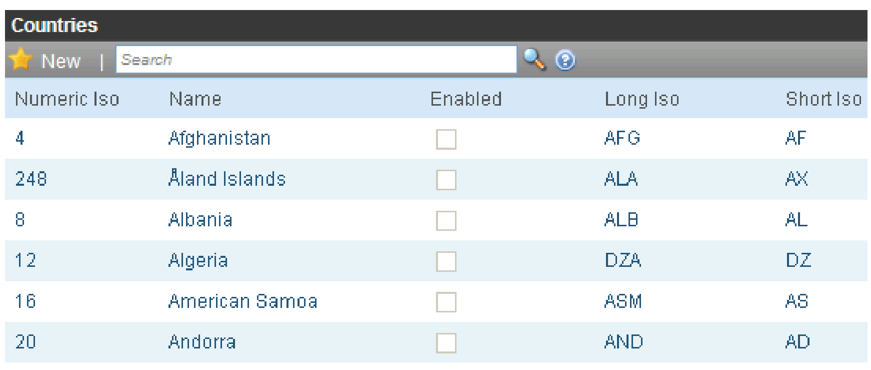
Default Countries

By default, Ektron CMS400.NET provides information for all countries on the ISO list of English country names and code elements (http://www.iso.org/iso/country_codes/iso_3166_code_lists/english_country_names_and_code_elements.htm).

The following is provided for each country.

- name
- numeric ISO code
- long alphabetical ISO code
- short alphabetical ISO code

The countries screen lets you enter new countries, as well as edit information for any provided countries.

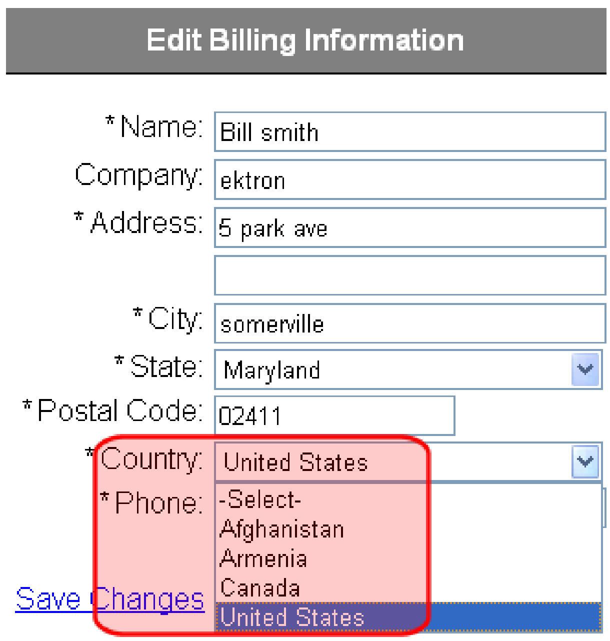


Creating a Country

Prerequisite: The new country's ISO codes

To add a new country, follow these steps. See Also: "Countries" on page 17-47

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Configuration** > **Countries**.
2. Click **New** > **Country**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the country's name.
Numeric ISO	Enter the country's ISO 3166-1 three digit numeric ISO code. See Also: http://en.wikipedia.org/wiki/ISO_3166-1_numeric
Enabled	Check this box if you want this country to be active. Only active countries can be selected on the Edit Billing Information screen, which appears during the Checkout procedure. 
Long ISO	Enter the country's ISO 3166-1 alpha-3, three letter country code. See Also: http://en.wikipedia.org/wiki/ISO_3166-1_alpha-3
Short ISO	Enter the country's ISO 3166-1 alpha-2, two letter country code. See Also: http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2

Editing a Country

Follow these steps to edit a country. See Also: "Countries" on page 17-47

1. Go to Ektron CMS400.NET **Workarea** > **Settings** > **Commerce** > **Configuration** > **Countries**.
2. Click the name of the country that you want to edit.
3. Click the Edit button ( ).

4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 17-48

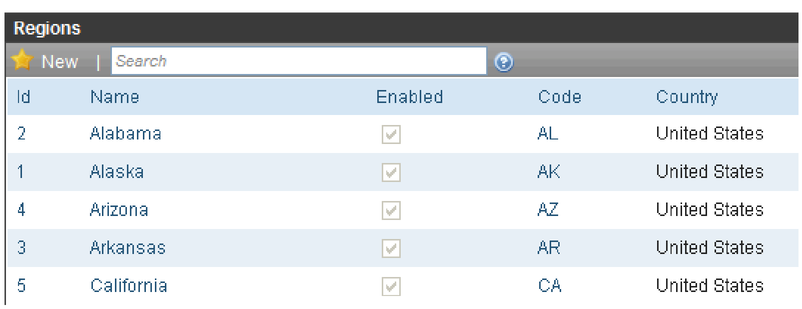
Deleting a Country

Follow these steps to delete a country. See Also: "Countries" on page 17-47

1. Go to Ektron CMS400.NET **Workarea > Settings > Commerce > Configuration > Countries**.
2. Click the name of the country that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The country is deleted.

Regions

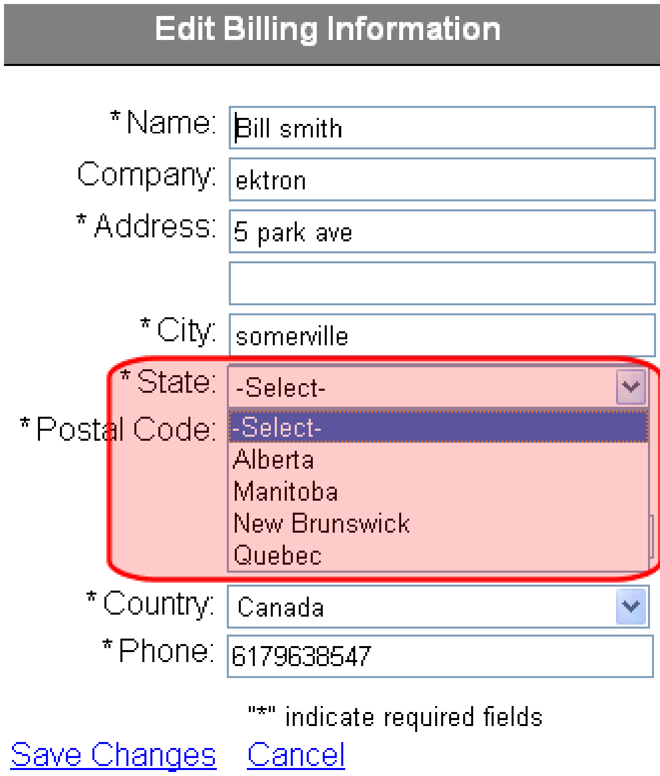
The Regions screen lets you define geographic regions within countries that your eCommerce site services. For example, in the United States of America, each state is a region.


Regions

New | Search

Id	Name	Enabled	Code	Country
2	Alabama	✓	AL	United States
1	Alaska	✓	AK	United States
4	Arizona	✓	AZ	United States
3	Arkansas	✓	AR	United States
5	California	✓	CA	United States

Regions are used in the same way that countries are used. See Also: "How Countries are Used" on page 17-47



Default Regions

By default, the Regions screen includes all 50 United States of America, the District of Columbia, and 9 Canadian Provinces.

See Also:

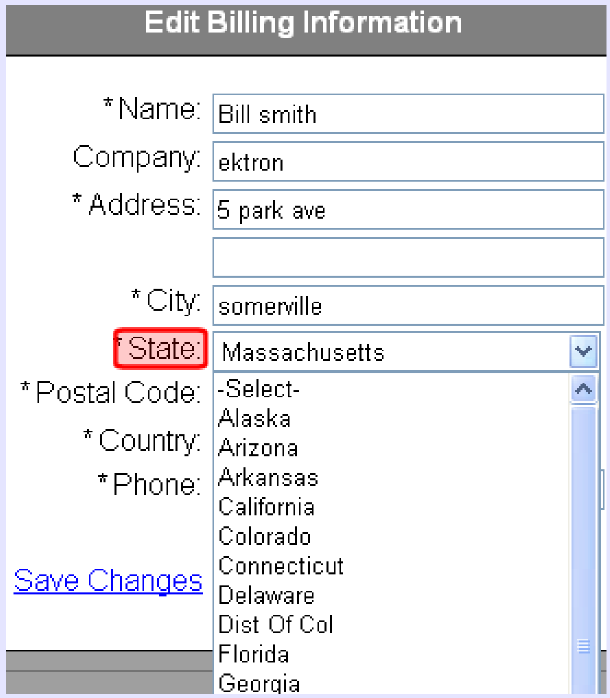
- "Creating a Region" on page 17-51
- "Editing a Region" on page 17-52
- "Deleting a Region" on page 17-53

Creating a Region

Prerequisite: The region's country is defined in the Countries screen

To add a new region, follow these steps. See Also: "Regions" on page 17-50

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Configuration > Regions**.
2. Click **New > Region**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the region's name.
Enabled	Check this box if you want this region to be active. Only active regions can be selected on the Edit Billing Information screen, which appears when site visitors enter billing information during the Checkout procedure. 
Code	Enter an abbreviation for this region.
Country	Select this region's country from the pull down list. If the country is not there, exit this screen, and create the country using the Countries screen.
Add another region to this country?	This field saves the effort of selecting a country when entering several regions for one country. To add more regions for this country, check this box and press the Save button (). When you do, the screen refreshes, and the most recently selected country appears as the default.

Editing a Region

Follow these steps to edit a region. See Also: "Regions" on page 17-50

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Configuration > Regions**.
2. Click the name of the region that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 17-51

Deleting a Region

Follow these steps to delete a region. See Also: "Regions" on page 17-50

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Configuration > Regions**.
2. Click the name of the region that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The region is deleted.

Currencies

eCommerce supports all currencies. However, site visitors can only choose enabled currencies. The Currency screen lets you enable and edit information for all installed currencies.


Currencies

Action | Search

	Id	Name	AlphaIsoCode	Enable
☐	12	Algerian dinar	DZD	☐
☐	32	Argentine peso	ARS	☐
☐	51	Armenian dram	AMD	☐
☐	36	Australian dollar	AUD	☑
☐	48	Bahraini dinar	BHD	☐
☐	764	Baht	THB	☐

See Also:

- "Installed Currencies" on page 17-54

- "The Default Currency" on page 17-55
- "How Currencies Are Used in the Currency Select Server Control " on page 17-56
- "How Exchange Rate Affects an Item's Price" on page 17-57
- "Updating the Exchange Rate" on page 17-57
- "Editing a Currency" on page 17-58
- "Deleting a Currency" on page 17-59
- "CurrencySelect Server Control" on page 17-59

Installed Currencies

By default, Ektron CMS400.NET provides all currencies on the ISO 4217 currency names and code elements list (http://www.iso.org/iso/support/faqs/faqs_widely_used_standards/widely_used_standards_other/currency_codes/currency_codes_list-1.htm).

The following information is provided for each installed currency.

- name
- enabled (yes or no)
- numeric ISO code
- alpha ISO code
- exchange rate

Enabled Currencies

When users are setting prices in the Ektron CMS400.NET Workarea or site visitors are shopping, they can only choose enabled currencies. When you install Ektron CMS400.NET, the following currencies are enabled.

- U.S. dollar (the *default currency*. See Also: "The Default Currency" on page 17-55)
- Euro
- Australian dollar

TIP!

Note: To see which currencies (other than the default) are enabled, click **Action > Edit Exchange Rates** from the Currencies screen. Only non-default, enabled currencies appear.

Warning! The Euro and Australian dollar are shipped with a default exchange rate. If you will support these currencies, you should update the rate to its current value before going live. See Also: "Updating the Exchange Rate" on page 17-57

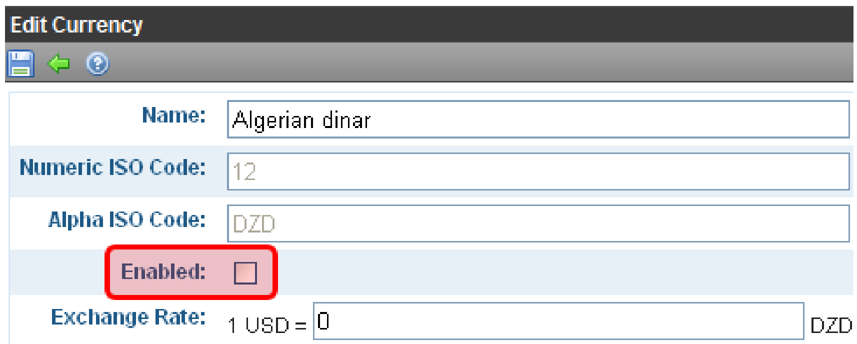
To enable any installed currency, follow these steps.

1. Click Ektron CMS400.NET Workarea > **Settings > Commerce> Configuration > Currencies**.
2. Click the currency you want to enable.

TIP!

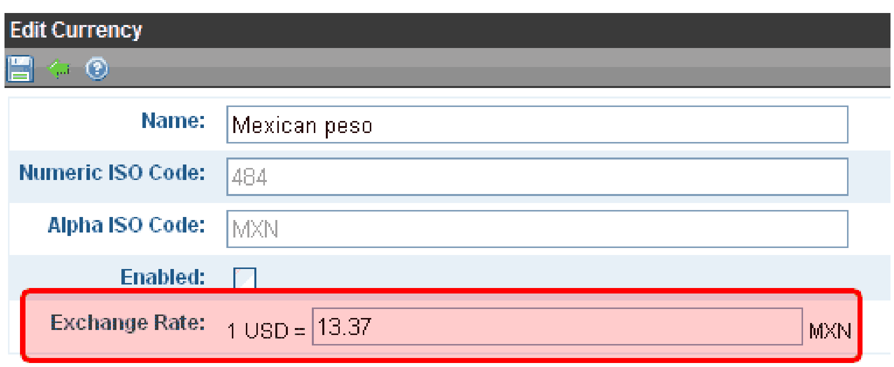
Note: Use the Search box to quickly find a currency.

3. The Edit Currency screen appears.
4. Check the **Enabled** check box.
5. Click Save .



The Default Currency

The default currency is the reference currency when setting the exchange rate on the Edit Currency screen. For example, if the default is US dollars, **USD** appears on the left of the exchange rate equation, as shown below.



The default currency is also used as the default choice in the Currency Selector server control, and on the **Pricing** tab of the View/Edit Catalog Entry screen (shown below).

See Also: "CurrencySelect Server Control" on page 17-59

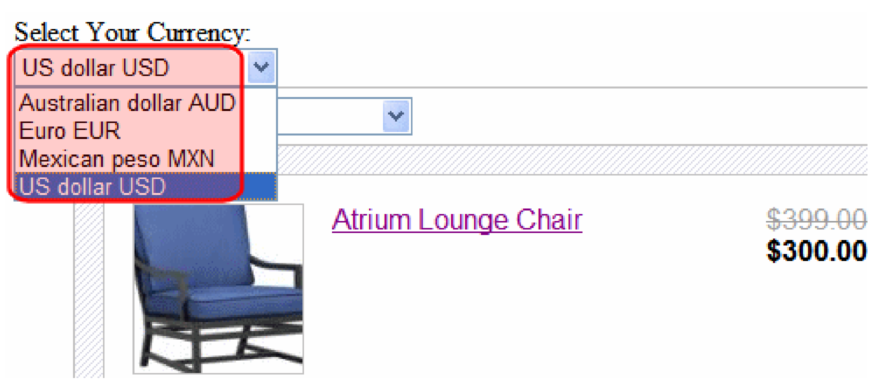
Viewing and Changing the Default Currency

When you install Ektron CMS400.NET, the default currency is the Numeric ISO code for U.S. dollars (Id 840). At that time, you can change this in the web.config file's `ek_ecom_DefaultCurrencyId` tag. However, once you set your default currency in web.config and begin to deploy eCommerce, do not change it.

Warning! After your eCommerce feature goes live, do *not* change the `ek_ecom_DefaultCurrencyId` value in web.config.

How Currencies Are Used in the Currency Select Server Control

If your developer places a Currency Select server control on a page, a site visitor can use it to select any enabled currency.

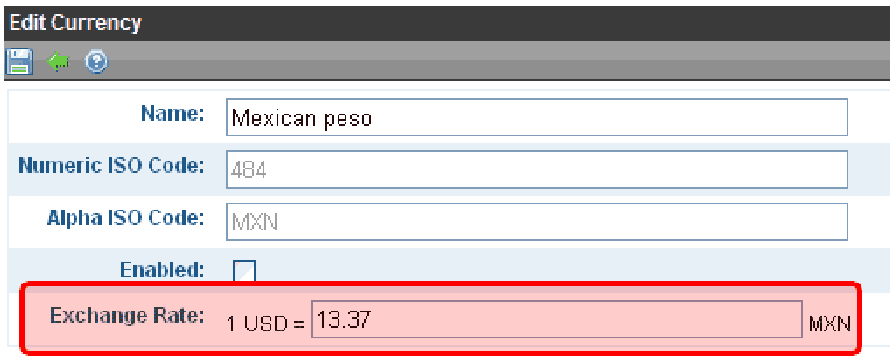


After a currency is selected, the prices on the page change to that currency. See Also: "How Exchange Rate Affects an Item's Price" on page 17-57

From that point on, the cart and order use the selected currency. See Also: "CurrencySelect Server Control" on page 17-59

How Exchange Rate Affects an Item's Price

The Edit Currency screen lets you define an exchange rate between the default and any other currency. See Also: "The Default Currency" on page 17-55; "Updating the Exchange Rate" on page 17-57



The exchange rate can dynamically adjust prices when the rate changes. See Also: "Alternate Currency Pricing" on page 17-141

Updating the Exchange Rate

Using the Ektron CMS400.NET API

The following Ektron API supports calling an exchange rate service to update rates automatically: `Ektron.Cms.Commerce.ExchangeRateApi`. For more information, see the Ektron CMS400.Net API documentation.

Using the Update Exchange Rates Screen

The Edit Exchange Rates screen lets you update the exchange rate for enabled currencies. See Also: "How Exchange Rate Affects an Item's Price" on page 17-57;"Currencies" on page 17-53

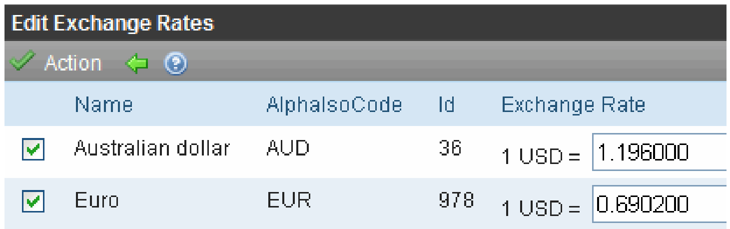
TIP!

Note: A good Web site for finding exchange rates is http://www.xe.com/ucc/.

To use the screen, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Settings** > **Commerce** > **Configuration** > **Currencies**.
2. Click **Action** > **Edit Exchange Rates**.

3. The Edit Exchange Rates screen appears, showing all enabled currencies and their exchange rates.



4. Update rates as needed.
5. Click **Action** > **Update**.

Editing a Currency

Follow these steps to edit a currency. See Also: "Currencies" on page 17-53

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Configuration** > **Currencies**.
2. Click the currency you want to edit.
3. You can only edit the **Name**, **Enabled**, and **Exchange Rate** fields. All fields are described below.

Field	Description
Name	Enter the currency's name.
Numeric ISO Code	The currency's ISO 4217 three-digit numeric ISO code appears. See Also: "Installed Currencies" on page 17-54
Alpha ISO Code	The country's ISO 4217 alphabetic, three-letter currency code appears. See Also: "Installed Currencies" on page 17-54
Enabled	Check this box to enable this currency. See Also: "Enabled Currencies " on page 17-54
Exchange Rate	Enter the exchange rate between this currency and the default one. See Also: "How Exchange Rate Affects an Item's Price" on page 17-57; "The Default Currency" on page 17-55

4. Click the Save button ().

Deleting a Currency

Follow these steps to delete a currency. See Also: "Currencies" on page 17-53

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Configuration > Currencies**.
2. Check the box next to the currency that you want to delete.
3. Click **Action > Delete Selected**.
4. A confirmation message appears. Click **OK**.
5. The currency is deleted.

CurrencySelect Server Control

Warning! In addition to reading this section on the CurrencySelect server controls, Ektron strongly recommends reading "Currencies" on page 17-53.

The Currency server control allows site visitors to select the monetary type they will use to make purchases. Once the site visitor selects his currency, all eCommerce server controls use it for that order. If a site visitor closes the browser, the currency will need to be selected the next time he visits the site.

For a currency to appear in the CurrencySelect server control, it must be enabled in the CMS400.NET **Workarea** > **Settings** > **Commerce** > **Currencies** screen. To enable a currency, click its name in the list and place a check in the enable checkbox. Next, click the Save button ( ).

CurrencySelect Server Control Properties

The following table explains the properties of the CurrencySelect control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set the `CacheInterval` property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-49	String
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `CurrencySelect.xsl`. This file is located in `<Site Root>\Workarea\Xslt\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the currency selection tool. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String

Property	Description	Data Type
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Payment Options

The Payment Options screen lets you determine which options are available for your customers to pay for their purchases.

- PayPal - See Also: "PayPal Support" on page 17-61
- a Payment Gateway, such as AuthorizeNet - See Also: "Payment Gateway" on page 17-69

Both options can be enabled, but only one gateway can be enabled at a time.

PayPal Support

"PayPal is an eCommerce business allowing payments and money transfers to be made through the Internet. PayPal serves as an electronic alternative to traditional paper methods such as checks and money orders.

A PayPal account can be funded with an electronic debit from a bank account or by a credit card. The recipient of a PayPal transfer can either request a check from PayPal, establish their own PayPal deposit account or request a transfer to their bank account. PayPal is an example of a payment intermediary service that facilitates worldwide e-commerce." `source: wikipedia`

See Also:

- "Using PayPal with Ektron CMS400.NET's eCommerce" on page 17-62
- "PayPal Documentation" on page 17-63
- "Enabling PayPal Support" on page 17-63
- "Customizing the PayPal Page" on page 17-68

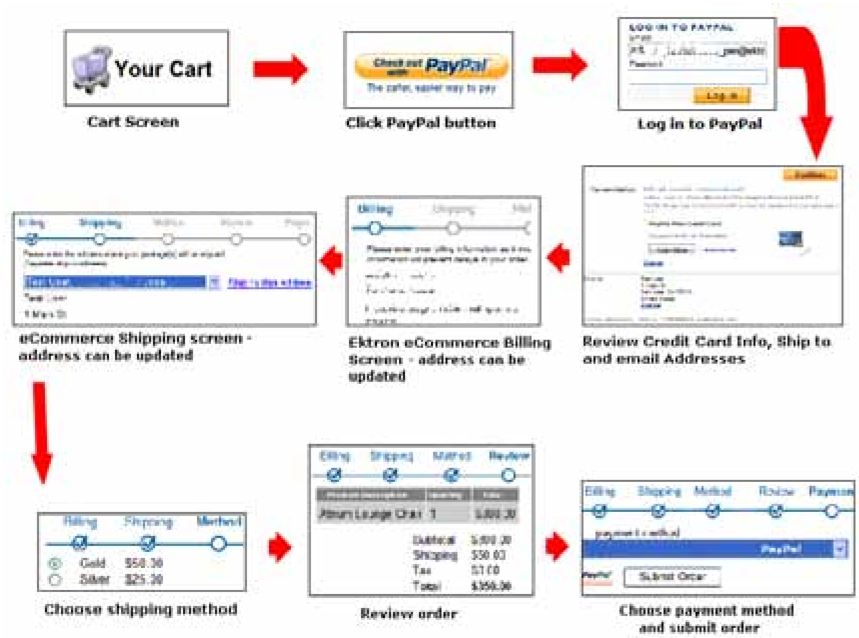
Using PayPal with Ektron CMS400.NET's eCommerce

Your customers can use PayPal to pay for purchases from either of two points in the checkout process

- the shopping cart screen
- the payment screen

If a site visitor accesses PayPal via the shopping cart screen, he follows these steps.

See Chart



Here is the sequence illustrated above.

1. From the Cart screen, a site visitor clicks the PayPal button.
2. He logs into his PayPal account.
3. Information from that account is used to populate the default shipping and billing addresses.
4. The site visitor can change addresses if needed.

Note: If the PayPal account address is used for the order, it is saved as part of the site visitor's Ektron CMS400.NET eCommerce account information.

5. Shipping costs are added.
6. The order is confirmed.

7. Site visitor checks out via PayPal.

Alternatively, the site visitor can use the standard eCommerce checkout process, select PayPal on the payment screen, and complete his order using the PayPal payment screen. That sequence is illustrated below.

PayPal Documentation

Use the following resources to familiarize yourself with integrating PayPal into your eCommerce site.

- PayPal Technical Documentation - https://cms.paypal.com/us/cgi-bin/?cmd=_render-content&content_ID=developer/library_documentation
- PayPal Express Checkout Integration Guide - https://cms.paypal.com/cms_content/ennuis/files/developer/PP_ExpressCheckout_IntegrationGuide.pdf
- Payflow ACH Payment Service Guide - https://cms.paypal.com/cms_content/US/en_US/files/developer/PP_ACHPayment_Guide.pdf

Warning! An important PayPal requirement is to place the Pay with PayPal option on both the shopping cart and payment screens.

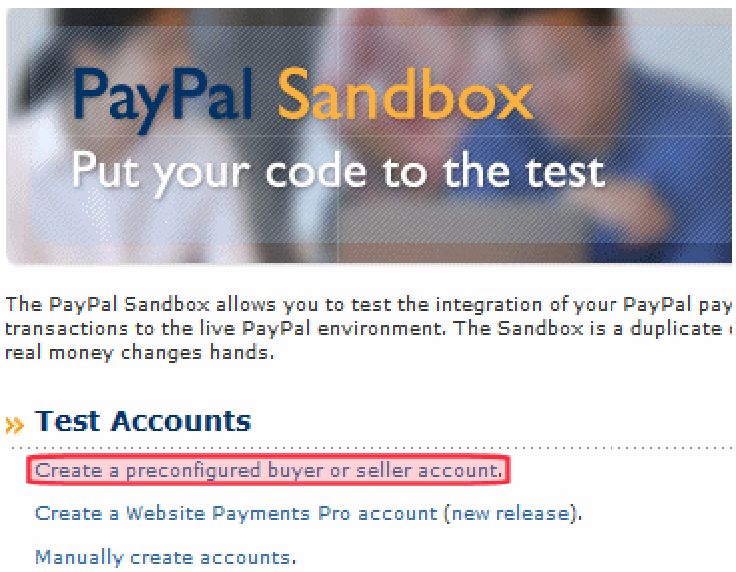
Enabling PayPal Support

To enable PayPal support in Ektron CMS400.NET, follow these steps.

- "Create a Sandbox Account" on page 17-64. This step includes updating Ektron CMS400.NET's web.config file.
- "Enable PayPal in the Ektron CMS400.NET Workarea" on page 17-68

Create a Sandbox Account

1. Sign on to http://www.sandbox.paypal.com.
2. Sign up for an account.
3. After a short while, you receive an email confirmation that directs you to another page.
4. Log in using the information you provided in Step 2.
5. Under **Test Accounts**, click **Create a preconfigured buyer or seller account**.



6. Create a buyer account. You will use this to test the customer experience.

TIP!

Note: Change the password to one you can easily remember.

7. Click **Home > Test Accounts > Create a preconfigured buyer or seller account**.
8. This time, click **Account Type Seller**.

9. Create a seller account. You will use this to test the merchant experience.

TIP!

Note: Change the default password to one that you can easily remember.

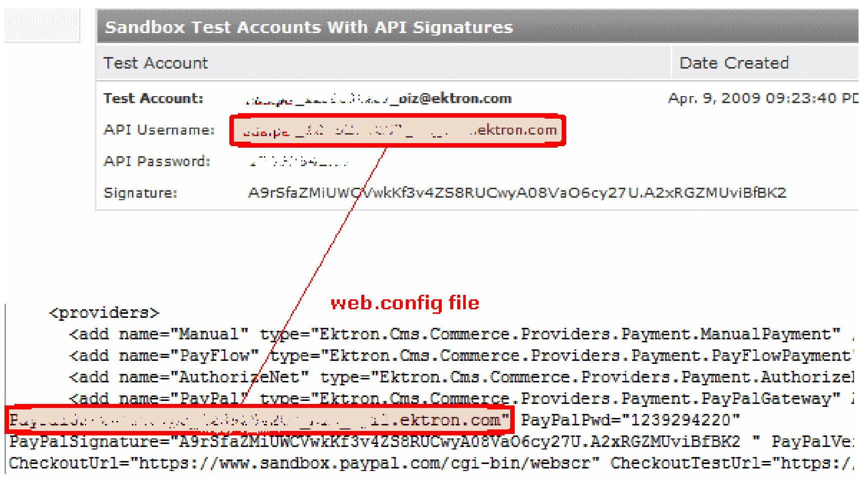
10. In the upper left corner of the screen, click **API Credentials**.

11. Open your *siteroot*/`web.config` file.
12. Copy the following values from the API Credentials screen into the web config's `providers/paypal` element. Save web.config.

PayPal Test Account Value	web.config PayPal Element
API Username	PayPalUser

PayPal Test Account Value	web.config PayPal Element
API Password	PayPalPwd
Signature	PayPalSignature

The following illustration shows the PayPal API Username copied into the web.config file's `PayPalUser` property.



If you want to encrypt these values, see "Encrypting PayPal Authentication Values" on page 17-66.

Encrypting PayPal Authentication Values

Follow these steps to encrypt the following values in the web.config file's `providers/paypal` element.

- PayPalUser
- PayPalPwd (password)
- PayPalSignature

1. Open the *site root*`/web.config` file.
2. Set the `AuthValuesEncrypted` element to `true`.

```
  <DocumentManagerData configSource="AssetManagement.config" />
  <EktronPaymentGateway defaultProvider="Automatic">
    <providers>
      <add name="Manual" type="Ektron.Cms.Commerce.Providers.Payment.ManualPayment" />
      <add name="PayFlow" type="Ektron.Cms.Commerce.Providers.Payment.PayFlowPayment" />
      <add name="AuthorizeNet" type="Ektron.Cms.Commerce.Providers.Payment.AuthorizeNetPayment" />
      <add name="PayPal" type="Ektron.Cms.Commerce.Providers.Payment.PayPalGateway"
AuthValuesEncrypted="false"
```

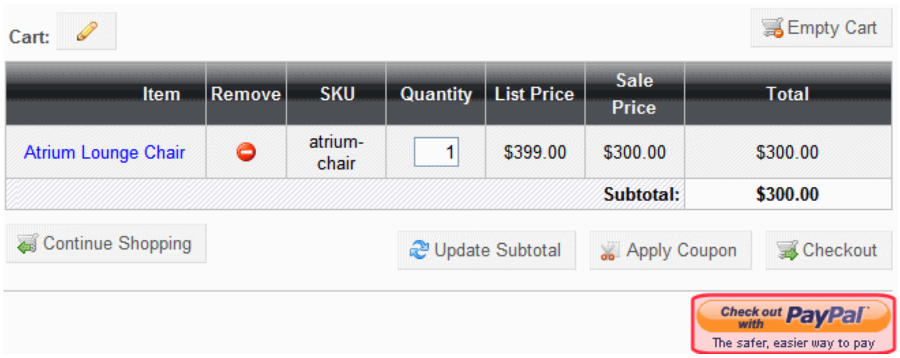
3. Save and close web.config.
4. Open C:\Program Files\Ektron\CMS400v8x\Utilities.
5. Run EncryptEmailPassword.exe.
6. The Encrypt Utility dialog appears.

7. Enter the PayPal user name into the **Text** field.
8. Click the **Encrypt** button.
9. The screen displays encrypted text in the **Encrypted** field.
10. Copy the encrypted text and paste it into the web.config file's `PayPalUser` element value.
11. Repeat Steps 7 through 10 for `PayPalPwd` and `PayPalSignature`.

Test the Sandbox Account

After creating a sandbox account, you should test it.

1. Sign into the **Developer Sample site** > **eCommerce** > **Cart**.
2. Click the PayPal button.



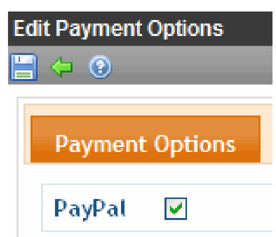
3. Enter the buyer account user name and password that you created in "Create a Sandbox Account" on page 17-64.
4. You proceed to the Ektron CMS400.NET Checkout screen.

After completing these steps, you have verified your PayPal buyer experience.

Enable PayPal in the Ektron CMS400.NET Workarea

To enable PayPal in the Ektron CMS400.NET Workarea, follow these steps.

1. Ektron CMS400.NET **Workarea** > **Settings** > **Commerce** > **Configuration** > **Payment Options**.
2. Click **Action** > **Edit Payment options**.
3. Check **PayPal**.



4. Click the Save button ( ).

Customizing the PayPal Page

If you are using Ektron CMS400.NET's sample site and PayPal is enabled, the login screen contains an Ektron logo for demonstration purposes.

You can replace the logo using the following property of the web config’s `providers/add name=”PayPal”` element.

```
<EktronPaymentGateway  defaultProvider="Automatic">
  <providers>
    <add name="Manual" type="Ektron.Cms.Commerce.Providers.Payment.ManualPaymen
    <add name="PayFlow" type="Ektron.Cms.Commerce.Providers.Payment.PayFlowPaym
    <add name="AuthorizeNet" type="Ektron.Cms.Commerce.Providers.Payment.Author
    <add name="PayPal" type="Ektron.Cms.Commerce.Providers.Payment.PayPalGatewa
PayPalUser="ada.pe_1239294207_biz_api1.ektron.com" PayPalPwd="1239294220"
PayPalSignature="A9rSfaZMiUWCVwkKf3v4ZS8RUCwyA08VaO6cy27U.A2xRGZMUviBfBK2" PayPal
CheckoutUrl="https://www.sandbox.paypal.com/cgi-bin/webscr" CheckoutTestUrl="http
NVPUrl="https://api-3t.sandbox.paypal.com/nvp" NVPTestUrl="https://api-3t.sandbox
apiparamHDRIMG="https://ektron.com/images/homepage-logo-small.jpg" />
  </providers>
</EktronPaymentGateway>
```

To change the logo, change the referenced image.

To learn how to customize other aspects of the page, see PayPal’s “Express Checkout Integration Guide” section “PayPal Page Style.” (https://cms.paypal.com/cms_content/en_US/files/developer/PP_ExpressCheckout_IntegrationGuide.pdf)

When setting values in the web.config’s `providers/add name=” PayPal”` element, prefix any variable with `apiparam`. For example, to set the header background color, enter `apiparamHDRBACKCOLOR=”FFF666”`.

Payment Gateway

A payment gateway is a “service that automates the payment transaction between a shopper and merchant. It is usually a third-party service that processes, verifies, and accepts or declines credit card transactions or checks on behalf of the merchant through secure Internet connections.” (source: webopedia)

Ektron CMS400.NET provides two standard payment gateways authorize.net and Payflow, along with manual. The manual gateway accepts all credit cards. In this case, the merchant emails the credit card information to the credit card company.

Note: For details on implementing a custom payment gateway provider, see "Customizing the Payment Gateway Provider" on page 17-273

Within Ektron CMS400.NET, a gateway can support credit cards, checks, or both, depending on how you implement it.

Ektron CMS400.NET lets you edit information on any provided gateway as well as create a new one.

See Also:

- "How a Payment Gateway Works" on page 17-70
- "The Default Gateway" on page 17-72
- "Adding a Payment Gateway" on page 17-72
- "Editing a Payment Gateway" on page 17-73
- "Deleting a Payment Gateway" on page 17-73
- "Check Support" on page 17-74
- "Credit Card Types" on page 17-77
- "PayPal Support" on page 17-61

How a Payment Gateway Works

Processing Credit Card Transactions

The following sequence explains how credit card transactions are typically processed. `(source: www.authorize.net)`

1. The payment gateway provider (PGP) receives secure transaction information and passes it via secure connection to the Merchant Bank's Processor.
2. The Merchant Bank's Processor submits the transaction to the Credit Card Interchange (a network of financial entities that manage credit card transactions).
3. The Credit Card Interchange sends the transaction to the customer's Credit Card Issuer.
4. The Credit Card Issuer approves or declines the transaction, based on the customer's available funds. It then passes the transaction results and, if approved, the appropriate funds back through the Credit Card Interchange.
5. The Credit Card Interchange relays the transaction results to the Merchant Bank's Processor.
6. The Merchant Bank's Processor relays the transaction results to PGP.

7. The PGP stores transaction results and sends them to the customer and/or the merchant. This communication process averages three seconds or less.
8. The Credit Card Interchange passes the transaction's funds from the Credit Card Issuer to the merchant's bank account.

Processing Check Transactions

The following sequence explains how a payment gateway processes checks. (source: www.authorize.net)

1. Customer authorizes merchant to charge his bank account for an amount.
2. Order and payment information is securely transmitted via the Internet to the payment gateway.
3. The transaction is accepted or rejected based on initial data validation and security criteria defined by the payment gateway.
4. If accepted, the transaction is sent to the ACH Network for settlement.
5. The ACH Network uses the transaction's bank account information to determine the bank that holds the customer's account (the RDFI).
6. The ACH Network instructs the RDFI to charge or refund the customer's account.
7. The RDFI transfers funds from the customer's account to the ACH Network. The RDFI also notifies the ACH Network of any returns (if funds could not be collected from the customer's bank account) or charge backs (if a customer disputes a purchase).
8. The ACH Network transfers funds for the transaction to the payment gateway's bank.
9. After a holding period, the payment gateway provider initiates a ACH transaction that deposits the funds into the merchant's bank account.

Establishing a Relationship with a Payment Gateway Provider

You need to set up an account with a third-party payment service before using a payment provider. This includes payment providers such as Authorize.NET and PayFlow, which are included with CMS400.NET's eCommerce Module.

To do this with Authorize.Net, go to http://www.authorize.net/solutions/merchantsolutions/onlinemerchantaccount/.

To set up an account with PayFlow, go to https://www.paypal.com/cgi-bin/webscr?cmd=_payflow-gateway-overview-outside.

Each payment gateway provider accepts configuration parameters. For example, Authorize.NET requires a username and password, while PayFlow requires a Username, password, vendor, and partner.

In addition, some payment gateways do not support subscription payments. This is something to consider if your site relies on subscriptions. See Also: "Creating a Subscription" on page 17-119

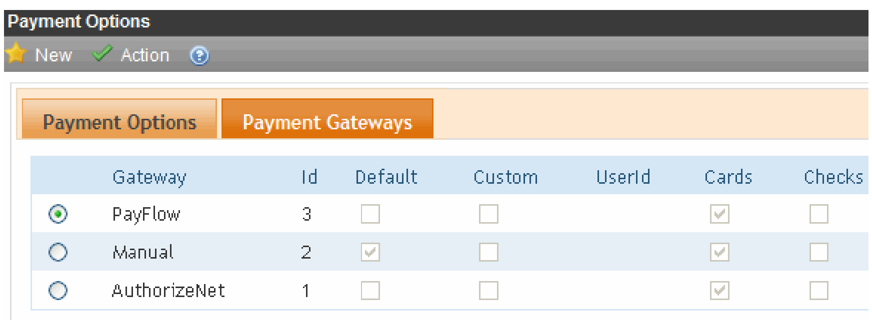
The Default Gateway

The eCommerce checkout process only uses the default gateway. Additional gateways are unused unless one is changed to be the default.

You cannot delete the default gateway. If you want to delete it, you must first make another gateway the default.

To change the default gateway, follow these steps.

1. Go to **Settings** > **Commerce** > **Configuration** > **Payment Options**.
2. The currently-defined default has a check in the **Default** column.
3. Click the radio button to the left of the gateway you want to make the default.



4. Click **Action** > **Mark as Default**.
5. A confirmation message appears. Click **OK**.

Adding a Payment Gateway

Note: To learn how to create a new payment gateway provider, see "Customizing the Payment Gateway Provider" on page 17-273.

To add a new payment gateway to Ektron CMS400.NET, follow these steps. See Also: "Payment Options" on page 17-61

1. In Ektron CMS400.NET, go to **Settings** > **Commerce** > **Configuration** > **Payment Options**.
2. Click **New** > **Payment Gateway**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the name of the gateway.
Default	Check this box if this is the default gateway. If you do, and another gateway is currently the default, it is replaced by this one. See Also: "The Default Gateway" on page 17-72
User ID	Enter your User ID. This ID will identify your account with this gateway provider.
Password	Enter the password for your account with this gateway provider.
Expand Custom Values	If this gateway provider needs additional fields of information, enter those values into the **Custom 1** and **Custom 2** fields.
Credit Cards	Check if this payment gateway accepts credit cards.
Checks	Check if this payment gateway accepts checks.

Editing a Payment Gateway

Follow these steps to edit a payment gateway. See Also: "Payment Options" on page 17-61

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Configuration > Payment Options**.
2. Click the payment gateway that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 17-72.
5. Click the Save button ( ).

Deleting a Payment Gateway

Follow these steps to delete a payment gateway.

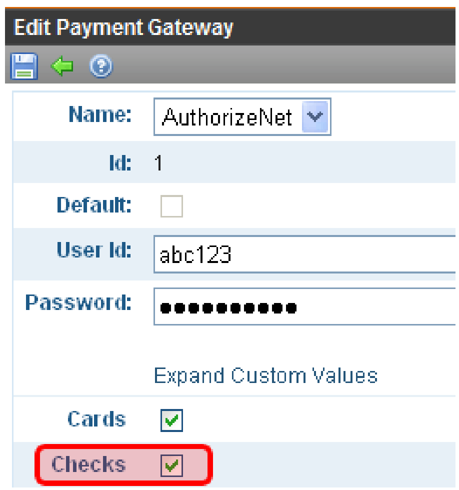
Note: The default gateway cannot be deleted. If you want to delete it, you must first make another gateway the default.

See Also: "Payment Options" on page 17-61

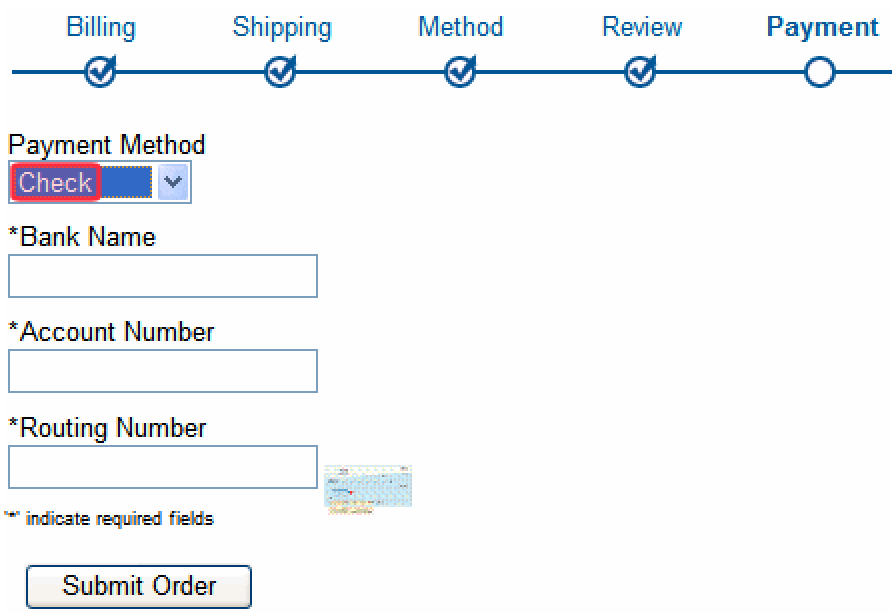
1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Configuration** > **Payment Options**.
2. Click the payment gateway that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The payment gateway is deleted.

Check Support

Payment gateways generally offer two payment mechanisms: credit cards and checks. You can enable or disable check support for a gateway via the **Settings** > **Commerce** > **Configuration** > **Payment options** > **Edit Payment Gateway screen** (shown below).



When checks are enabled for the default payment gateway, a site visitor can choose to pay by **Check** on the payment screen. If check support is not enabled, the **Payment Method** field does not appear.



Check Support Integration Documentation

Use the following resources to familiarize yourself with integrating checks into your eCommerce site.

- Authorize.Net

http://www.authorize.net/files/echecknetuserguide.pdf

- PayFlow

https://cms.paypal.com/cms_content/US/en_US/files/developer/PP_PayflowLink_Guide.pdf

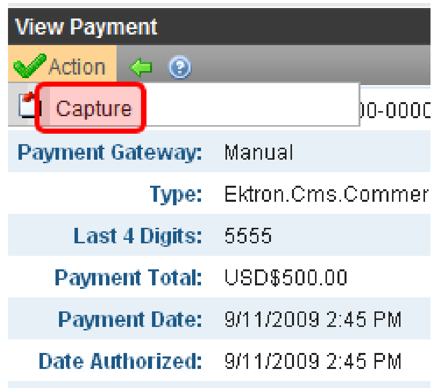
See the chapter "Integrating TeleCheck Transactions."

Effect of Check Payment on Order Processing

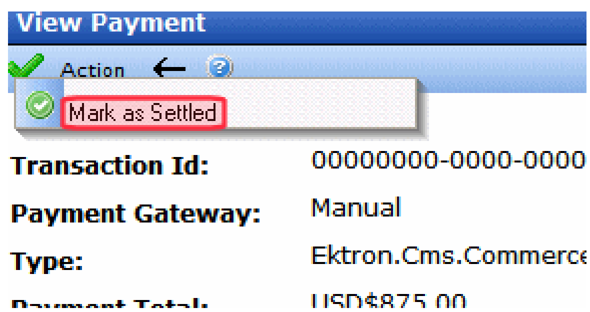
The following describes a typical sequence of events when processing a check for eCommerce payment.

However, Ektron CMS400.NET is very flexible and does not enforce this sequence. For example, you can enter a tracking number and mark an order shipped even though its payment has not been captured yet.

1. eCommerce user accesses the View Payment screen's **Capture** option, which submits a payment request to the customer's bank.

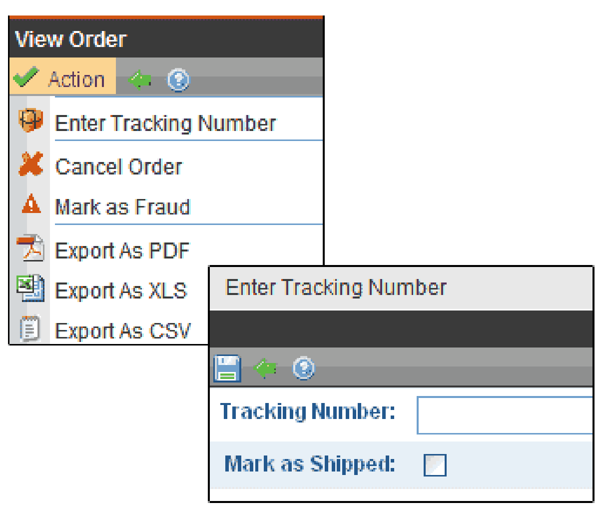


2. A few days later, the funds are transferred to the merchant's account.
3. The eCommerce user accesses the View Payment screen's **Mark as Settled** option to confirm that the funds have been received.



4. If the goods are *tangible*

   The eCommerce user ships the merchandise, using the View Payment screen's **Enter Tracking Number** option to insert the tracking number and confirm the shipment.



If the goods are *not* tangible

The workflow sends the customer an email with details about the purchase, such as how to download it.

Credit Card Types

Use this screen to enter all types of credit cards that your eCommerce system may use. By default, Ektron CMS400.NET's developer sample site provides the following card types.

- American Express
- Diners Club (not accepted by default)
- Discover
- MasterCard
- Visa

You can edit the information provided for these types or enter a new one.

Card Types

New

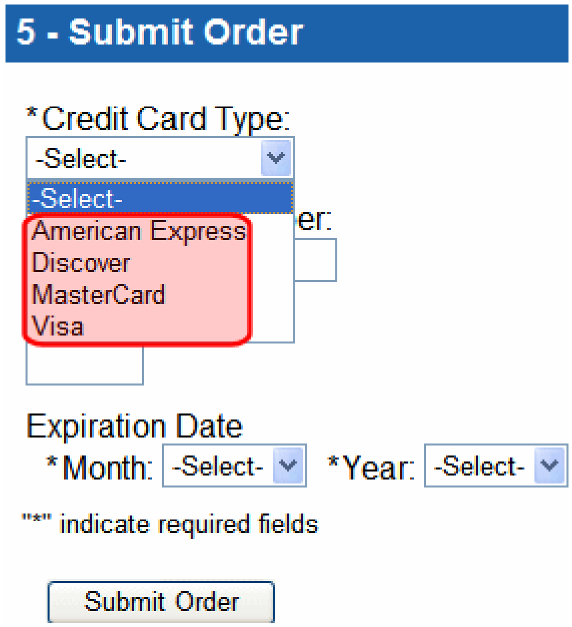
Id	Name	Accepted	Image
7	Solo	☑	
6	Maestro	☑	
5	American Express	☑	
4	Diners Club	☐	
3	Discover	☑	
2	MasterCard	☑	
1	Visa	☑	

See Also:

- "Where Credit Card Types are Used" on page 17-78
- "Creating a Credit Card Type" on page 17-78
- "Editing a Credit Card Type" on page 17-80
- "Deleting a Credit Card Type" on page 17-80

Where Credit Card Types are Used

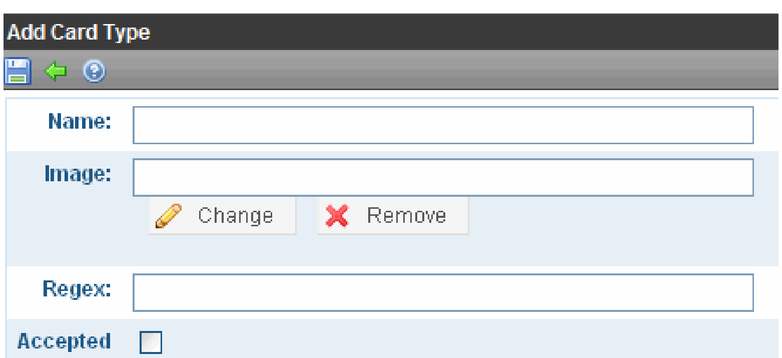
During the checkout process (managed by the Checkout server control), screen 5 (**Submit Order**) has a dropdown list of all enabled credit cards. See below.



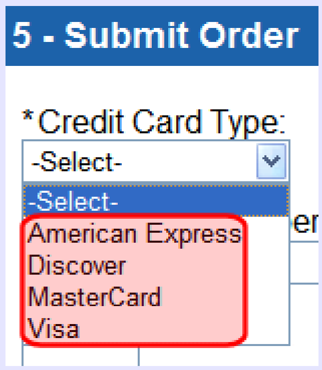
Creating a Credit Card Type

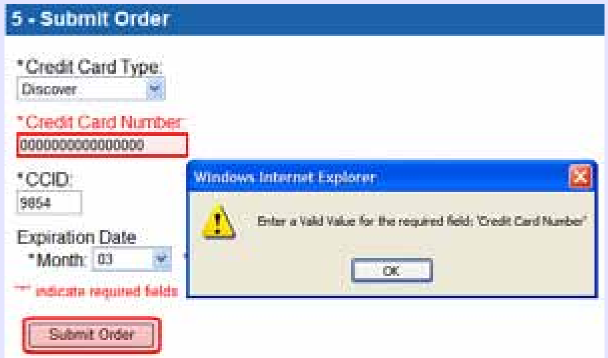
To create a new credit card within Ektron CMS400.NET, follow these steps.

1. In Ektron CMS400.NET, go to **Settings** > **Commerce** > **Configuration** > **Credit Card**.
2. Click **New** > **Credit Card** to see the Add Card Type screen.



3. Use the following table to complete the screen.

Field	Description
Name	Enter the credit card's name.
Accepted	Check this box if site visitors can use this card to make purchases on your Web site. Only Accepted cards appears in the Check out procedure > Submit Order screen's **Credit Card Type** dropdown, as shown below. 
Image	Use this field to specify an image for the credit card. The image does not appear on the standard checkout screen. But it is a field in the XML, so you can enable it using an XSLT. **Adding or Changing the Image** If you are entering a new credit card image or editing an existing one, follow these steps. **Prerequisite:** The image resides on your computer. 1. Click **Change**. 2. The Library Upload screen appears. 3. Click the Add button ( ). 4. Click Browse and navigate to the folder that contains the image. 5. Choose the image. 6. Assign a **Title**. 7. Click the Add Library button ( ). 8. The image appears on the screen.

Field	Description
Regex	A Regex expression is a simple way to validate a credit card account number. (See Also: http://regexlib.com/.) Validation occurs when a site visitor completes the Checkout procedure's Submit Order screen, as shown below.  Regex prevents the submission of invalid account numbers to a payment gateway, which may charge a fee for such failures. Ektron CMS400.NET provides as Regex expression for the credit cards supplied with medical sample site. You can modify them as needed. If you enter a new credit card, you can enter a Regex expression for it.

Editing a Credit Card Type

Follow these steps to edit a Credit Card Type. See Also: "Credit Card Types" on page 17-77

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Configuration** > **Credit Card**.
2. Click the Credit Card Type that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 17-79.
5. Click the Save button ( ).

Deleting a Credit Card Type

Follow these steps to delete a Credit Card Type. See Also: "Credit Card Types" on page 17-77

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Configuration** > **Credit Card**.
2. Click the Credit Card Type that you want to delete.
3. Click the Delete button ( ).

4. A confirmation message appears. Click **OK**.
5. The Credit Card Type is deleted.

Messages

Ektron’s eCommerce feature provides a messaging feature that can notify a purchaser when these events occur:

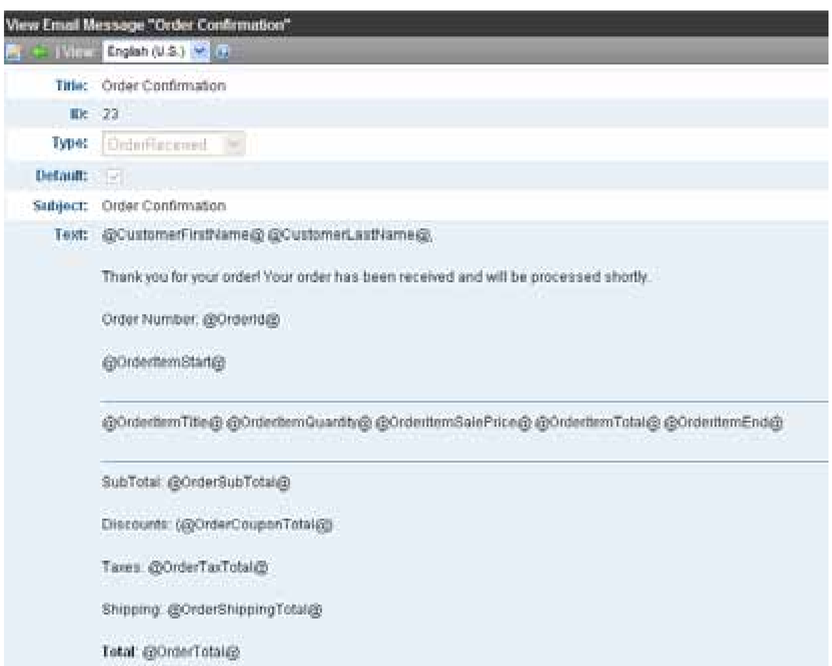
- Order is submitted
- Order is cancelled
- Order is shipped

Each message has a unique type that corresponds to an event. The message types are

- OrderReceived
- OrderCancelled
- Order Shipped

You can create any number of messages for each event, assigning one as the default. Only the default message is sent when the corresponding event occurs.

Here is a sample message as set up within Ektron CMS400.NET.



Here is the same message as delivered to a recipient's inbox.

From: admin@ektron.com [mailto:admin@ektron.com]
Sent: Monday, November 17, 2008 4:17 PM
To: Bob Smith
Subject: Order Confirmation

Application Administrator,

Thank you for your order! You order has been received and will be processed shortly.

Order Number: 10007

Atrium Lounge Chair and Ottoman 3 @ $400.00 each for a total of $1,200.00

Atrium Table 2 @ $150.00 each for a total of $300.00

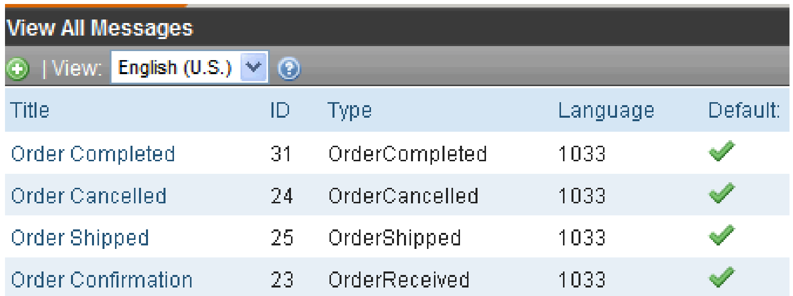
SubTotal: $1,500.00
Discounts: ($0.00)
Taxes: $0.00
Shipping: $250.00
Total: $1,750.00

See Also:

- "How Messages are Created and Generated" on page 17-82
- "Creating or Editing an eCommerce Message" on page 17-83

How Messages are Created and Generated

Ektron CMS400.NET provides sample text for each type of message. To view and edit a message, go to Ektron CMS400.NET **Workarea** > **Settings** > **Commerce** > **Configuration** > **Messages**.



View All Messages

Title	ID	Type	Language	Default
Order Completed	31	OrderCompleted	1033	✓
Order Cancelled	24	OrderCancelled	1033	✓
Order Shipped	25	OrderShipped	1033	✓
Order Confirmation	23	OrderReceived	1033	✓

The Message Type determines the event that causes a message to be sent. For example, the *Orderreceived* message is sent to a purchaser when he submits an order.

If regular content notification emails are being generated, the site visitor provided a valid email address, and a message has been defined for the event, emails are sent as eCommerce events occur. No additional set up is required.

Note: eCommerce messages are distributed in the same way that content notification emails are. For information on setting this up, see "Configuring E-Mail for Tasks and Content" on page 1-109.

Creating or Editing an eCommerce Message

1. Go to **Workarea** > **Settings** > **Commerce** > **Configuration** > **Messages**.
2. If a message of the type you want to create already exists, select it. Otherwise, click the Add Message button ( ).
3. Assign a Title, Subject (for the email subject line), Message Type, and message text.

Message Variables

eCommerce message text can use the following variables to retrieve order information from the database into the message text.

Variable	Description
@CustomerFirstName@	Customer's first name
@CustomerLastName@	Customer's last name
@OrderId@	The order's ID number
@OrderSubTotal@	The order's subtotal, that is the amount of all ordered items prior to shipping costs, taxes, and coupon discounts

Variable	Description
@OrderTotal@	The order's final cost (which includes taxes, shipping, and coupon discounts)
@OrderShippingTotal@	The order's shipping cost
@OrderCouponTotal@	The order's coupon discounts
@OrderTaxTotal@	The order's tax amount
@OrderItemTitle@	The title of any item on the order
@OrderItemSalePrice@	The sale price of any item on the order
@OrderItemQuantity@	The quantity of any item on the order
@OrderItemTotal@	The total cost of one item. For example, if `orderItemSalePrice` = $10 and `orderItemQuantity` = 2, `orderItemTotal` = $20.

@OrderItemStart@ and @OrderItemEnd@	Use the start and end markers to show information for all ordered items.
	The markers show no information by themselves. Instead, they repeat the variables between them for every item on the order.
	So, for example, assume an order has 10 items, and your message looks like this:
	`@OrderItemStart@`
	`@OrderItemTitle@`
	`@OrderItemQuantity@`
	`@OrderItemSalePrice@`
	`@OrderItemTotal@`
	`@OrderItemEnd@`
	The message prints the title, quantity, sale price, and total for each item on the order.

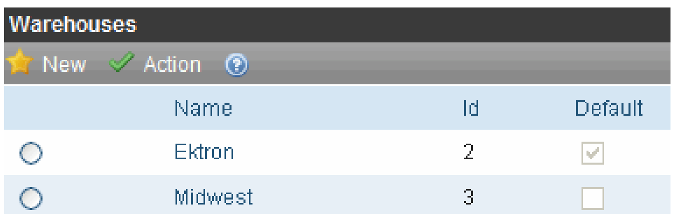
@TrackingUrl@	The link to a Web page that tracks your package. It is usually a combination of the shipper's URL and the tracking number.

eCommerce Shipping Screens

- "Warehouse" on page 17-85
- "Packages" on page 17-87
- "Shipping Methods" on page 17-90

Warehouse

Use the Warehouses screen to enter information about warehouses that stock your catalog entries. eCommerce uses this location to determine the “from” address when calculating shipping costs.



Only the default warehouse is used by the checkout process. Additional warehouses are unused until they are made the default. See Also: "Changing the Default Warehouse" on page 17-86

Prerequisite: Regions and countries must be set up. See Also: "Regions" on page 17-50

See Also:

- "Creating a Warehouse" on page 17-85
- "Changing the Default Warehouse" on page 17-86
- "Editing a Warehouse" on page 17-87
- "Deleting a Warehouse" on page 17-87

Creating a Warehouse

To create a new warehouse within Ektron CMS400.NET, follow these steps. See Also: "Warehouse" on page 17-85

1. In Ektron CMS400.NET, go to **Settings** > **Commerce** > **Shipping** > **Warehouses**.

2. Click **New** > **Warehouse**.
3. Use the following table to complete the screen.

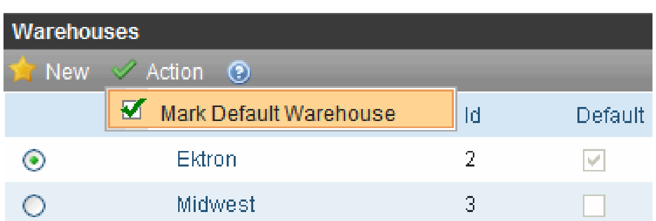
Field	Description
Name	Enter the warehouse's name.
Street1, Street2	Enter the warehouse's street address.
City	Enter the warehouse's city.
Postal Code	Enter the warehouse's postal code.
Country	Select the warehouse's country from the pull-down list.
State/Province	Select the warehouse's state or province from the pull-down list.
Default Warehouse	This box indicates if this is the default warehouse. If you want to make this warehouse the default, use the Mark as Default toolbar button (Only the default warehouse is used by the checkout process. Additional warehouses are unused until they are made the default.

4. Click the Save button ( ).

Changing the Default Warehouse

To change the default warehouse, follow these steps.

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Warehouses**.
2. Click the radio button next to the warehouse that you want to make the default.
3. Click **Action** > **Mark Default Warehouse**.



Note: You can also specify a warehouse as the default via the Edit Warehouse screen's **Mark Default Warehouse** toolbar button .

4. A confirmation dialog appears. Click **OK**.

Editing a Warehouse

Follow these steps to edit a warehouse. See Also: "Warehouse" on page 17-85

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Shipping > Warehouses**.
2. Click the warehouse that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 17-86.
5. Click the Save button ( ).

Deleting a Warehouse

Follow these steps to delete a warehouse. See Also: "Warehouse" on page 17-85

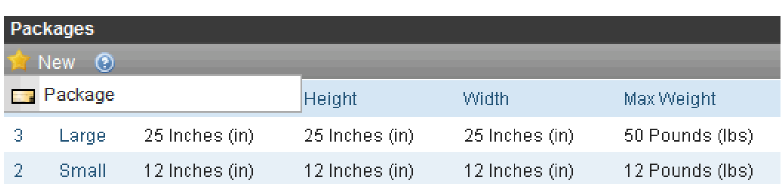
Note: You cannot delete the default warehouse. However, you can designate another warehouse as the default, then delete the one that was the default. See Also: "Changing the Default Warehouse" on page 17-86

1. Go to Ektron CMS400.NET Workarea > **Settings > Commerce > Shipping > Warehouse**.
2. Click the warehouse that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The warehouse is deleted.

Packages

The Packages screen lets you define standard sizes of packaging. Use it to define every package size that your shipping department uses to ship your products.

If you use a provider such as UPS® or FedEx®, it is likely they provide boxes.



How Packaging Information Is Used

Each item in an order has size and weight dimensions. The shipping calculator uses this information to fit the order into the smallest-sized and fewest packages. It then passes packaging information (number, sizes and weight) to the shipping provider, which returns the order's shipping costs.

If a catalog entry's dimensions exceed all box sizes, eCommerce passes that product's dimensions to the shipping provider.

Note: Some shipping providers, FedEx and UPS for example, have limits on the size & weight of packages they are willing to ship. If the size or weight exceeds their limits, shipping rates may not be returned when a site visitor is going through the checkout process. If shipping rates are not returned during checkout, an Application error is logged in the Event Viewer. This prevents a site visitor from continuing the checkout process.

See Also:

- "Size and Weight Units of Measure" on page 17-88
- "Creating a New Package" on page 17-88
- "Editing a Package" on page 17-89
- "Deleting a Package" on page 17-89

Size and Weight Units of Measure

Packages use size and weight measurements. By default, Ektron CMS400.NET uses English units of measure (inches and pounds). At the beginning of your eCommerce implementation, you can change to metric units of measure by updating the web.config file's `ek_measurementsystem` tag value to `metric`.

Warning! After your eCommerce feature goes live, do *not* change the `ek_measurementsystem` value in web.config.

Creating a New Package

To create a new package, follow these steps. See Also: "Packages" on page 17-87

1. Go to **Settings** > **Commerce** > **Shipping** > **Packages**.
2. Click **New** > **Package**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter a text description of this package size.
Length	Enter the package's length in the units of measure that appear to the right (inches or centimeters). See Also: "Size and Weight Units of Measure" on page 17-88
Height	Enter the package's height in the units of measure that appear to the right (inches or centimeters).
Width	Enter the package's width in the units of measure that appear to the right (inches or centimeters).
Max Weight	Enter the package's weight in the units of measure that appear to the right (pounds or kilograms).

4. Click the Save button ().

Editing a Package

Follow these steps to edit a package. See Also: "Packages" on page 17-87

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Packages**.
2. Click the package that you want to edit.
3. Click the Edit button ().
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 17-88.
5. Click the Save button ().

Deleting a Package

Follow these steps to delete a package. See Also: "Packages" on page 17-87

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Packages**.
2. Click the package that you want to delete.
3. Click the Delete button ().
4. A confirmation message appears. Click **OK**.
5. The package is deleted.

Shipping Methods

Use the Shipping Methods to define all choices your site visitors will have for delivering their purchases.


Shipping Methods

New Action

Id	Name	Order	Service
4	Gold	1	FlatRate_Gold
5	Silver	1	FlatRate_Silver

Prerequisites:

- Default warehouse with an address
- A default shipping provider is defined in the *siteroot*\shipment.config file

See Also:

- "Defining Shipping Providers" on page 17-90
- "Defining a Custom Shipping Provider" on page 17-91
- "Defining the Default Shipping Provider" on page 17-91
- "Adding a Shipping Method" on page 17-92
- "Editing a Shipping Method" on page 17-93
- "Deleting a Shipping Method" on page 17-93
- "Changing the Order of the Shipping Method" on page 17-93

Defining Shipping Providers

When you install Ektron CMS400.NET, several providers exist in the *siteroot*\shipment.config file:

- FedExShipmentProvider
- FlatRateShipmentProvider
- UPSShipmentProvider

However, the FedEx and UPS information is for testing purposes only. In order to use FedEx, UPS or another shipping provider, obtain the following information from them.

- service URL
- key
- password
- account number
- meter number
- transactionId

Note: The above list can vary slightly for each provider.

Then, enter that information into `shipment.config`, following the format of providers already in the file.

The `shipment.config` file also contains `name` and `type` properties for each provider (shown in red below).

name="FedExShipmentProvider" type="Ektron.Cms.Commerce.Shipment.Services.FedEx-ShipmentProvider, Ektron.Cms.Commerce"

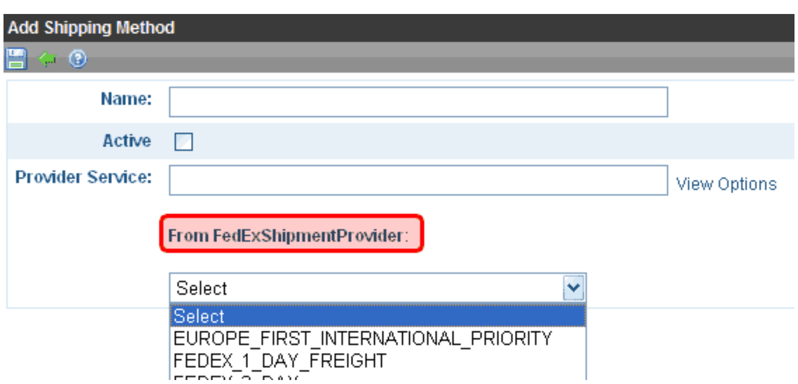
The red text that you insert (above) is not important, but the two strings must match.

Defining a Custom Shipping Provider

See "Customizing the Shipment Provider" on page 17-281.

Defining the Default Shipping Provider

While you can define any number of shipping providers in the shipment.config file, only one can be active. The active provider appears on the **Settings** > **Commerce** > **Shipping** > **Methods** > **New** > **Shipping Method** screen when you click **View Options**.



Specify the default (active) shipping provider via the `defaultprovider` property (highlighted in red below) in *siteroot*\shipment.config.

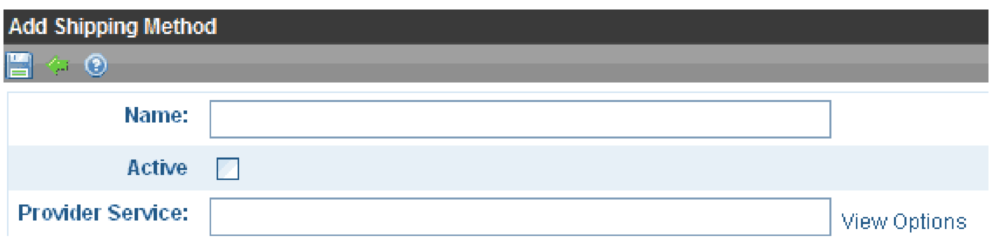
```
<?xml version="1.0" encoding="utf-8" ?>
<shipmentProvider defaultProvider="FedExShipmentProvider">
<providers>
<add name="FedExShipmentProvider" .
.
.</shipmentProvider>
```

Adding a Shipping Method

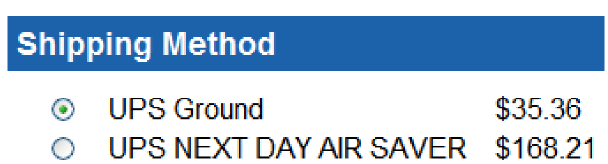
Use the Add Shipping Method screens to select shipping methods you will support. When a site visitor submits an order, these shipping choices appear on the Shipping screen. See Also: "Shipping Methods" on page 17-90

To add shipping methods, follow these steps.

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Methods**.
2. Click **New** > **Shipping Method**.
3. The Add Shipping Method screen appears.



4. Use the following table to complete the screen.

Field	Description
Name	Enter the name of the shipping method. Site visitors select a shipping method for their order using this name (see example below).  Tip! First click **View Options** and select a shipping method. Then enter its

Field	Description
	name here.
Active	Check this box if you want site visitors to be able to select this shipping method.
Provider Service	As explained in "Defining the Default Shipping Provider" on page 17-91, a default shipping provider is defined in your site's shipment.config file. To view all methods offered by that provider, click **View Options**. Then, select from the dropdown list that appears.

Editing a Shipping Method

See Also: "Shipping Methods" on page 17-90

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Methods**.
2. Click the Shipping Method that you want to edit.
3. The View Shipping Method screen appears.
4. Click the Edit button ( ).
5. See "Use the following table to complete the screen." on page 17-92.

Deleting a Shipping Method

See Also: "Shipping Methods" on page 17-90

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Methods**.
2. Click the Shipping Method that you want to edit.
3. The View Shipping Method screen appears.
4. Click the Delete button ( ).

Changing the Order of the Shipping Method

Each shipping method you define has an **Order** field. This determines the sequence in which shipping methods appear on the Shipping Rates screen when a site visitor is submitting an order.

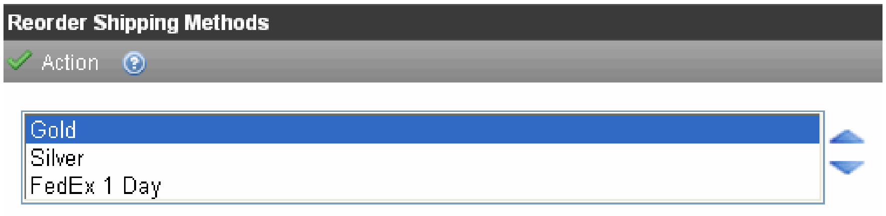
The shipping method with **1** in the **Order** field appears at the top of the list.

By default, every shipping method's order is set to **1**. To set a sequence for shipping methods, follow these steps

See Also: "Shipping Methods" on page 17-90

1. Go to Ektron CMS400.NET Workarea > **Settings** > **Commerce** > **Shipping** > **Methods**.

2. Click **Action** > **Reorder**.
3. Use the selection bar and arrows to arrange methods in the desired sequence.



4. Click **Action** > **Save**.

eCommerce Tax Screens

eCommerce provides a set of tax screens in the Ektron CMS400.NET Workarea that lets you

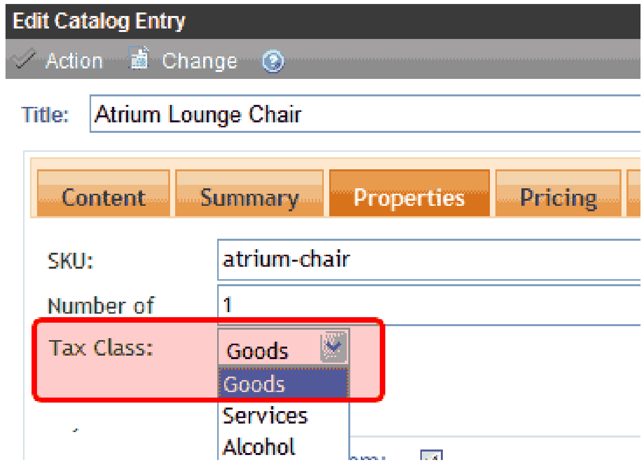
- set up tax classes (for example, goods, services, tobacco)
- define tax rates for these geographic entities (from most to least specific)
  - postal code
  - region
  - country

See Also:

- "How an Order's Tax Amount is Calculated" on page 17-95
- "The Tax Class Screens" on page 17-97
- "Postal Tax Tables" on page 17-99
- "Regional Tax Tables" on page 17-101
- "Country Tax Tables" on page 17-103

How an Order's Tax Amount is Calculated

During checkout, Ektron CMS400.NET tries to find a tax rate for each catalog entry's Tax Class (shown below) and the shipping address's postal code.



The following table describes what happens next.

Ektron CMS400.NET checks for this tax	If it finds a tax rate for geographic entity	If it does *not* find a tax rate for geographic entity
1. Postal code	It adds that amount and stops. For example ▪ an item costs $100.00 ▪ the *postal code* tax rate = 5% ▪ the adjusted cost is $105.00	It checks the customer's address for a regional tax code.
2. Region	It adds that amount and stops. For example ▪ an item costs $100.00 ▪ the *regional* tax rate = 7% ▪ the adjusted cost is $107.00	It checks the customer's address for a country tax code.
3. Country	It adds that amount. For example ▪ an item costs $100.00 ▪ the *country* tax rate =	No tax is added to the order.

Ektron CMS400.NET checks for this tax	If it finds a tax rate for geographic entity	If it does *not* find a tax rate for geographic entity
	10% ▪ the adjusted cost is $110.00	

TIP!

Note: If a postal zone has several taxes (for example, a local tax and a regional tax), build the combined percentage into the postal code tax. So, assume New York City has a 4% tax, and New York state has a 3% tax. In this case, enter a combined total of 7% into all postal zones within New York City. See Also: "The Tax Class Screens" on page 17-97

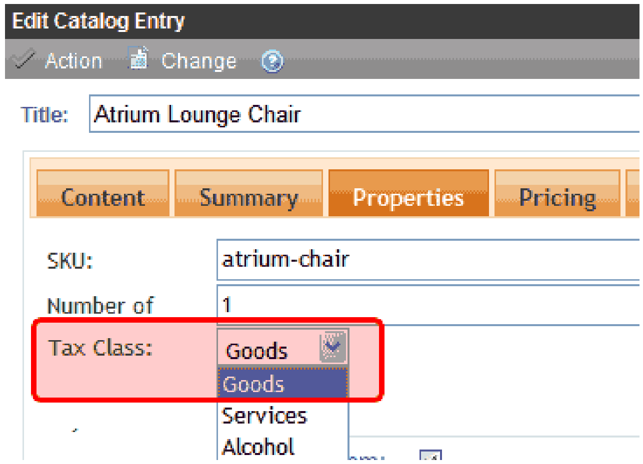
The Tax Class Screens

Use the Tax Class screen to define all classes of catalog entries that can be taxed. When you install eCommerce, the following tax classes are installed.

- alcohol
- goods
- service
- tobacco

You can modify or delete these, and add new classes at any time.

You assign a tax class to a catalog entry via its **Properties** tab's **Tax Class** field (shown below).



See Also:

- "How an Order's Tax Amount is Calculated" on page 17-95
- "eCommerce Tax Screens" on page 17-95
- "Creating a New Tax Class" on page 17-98
- "Editing a Tax Class" on page 17-99
- "Deleting a Tax Class" on page 17-99

Creating a New Tax Class

To create a new tax class, follow these steps. See Also: "The Tax Class Screens" on page 17-97

1. Go to **Settings** > **Commerce** > **Tax** > **Classes**.

2. Click **New** > **Tax Class**.
3. Enter the name of the tax class.
4. Press the Save button ( ).

Editing a Tax Class

To edit a tax class, follow these steps. See Also: "The Tax Class Screens" on page 17-97

1. Go to **Settings** > **Commerce** > **Tax** > **Classes**.
2. Click the Tax Class that you want to edit.
3. Click the Edit button ().
4. Edit the name of the tax class.
5. Press the Save button ().

Deleting a Tax Class

Warning! If a tax class has been assigned to a catalog entry that appears on any order, the Delete button does not appear.

To delete a tax class, follow these steps.

1. Go to **Settings** > **Commerce** > **Tax** > **Classes**.
2. Click the Tax Class that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The Tax Class is deleted.

Postal Tax Tables

Use postal code tax tables to identify local areas (cities, counties, etc.) that apply taxes to eCommerce catalog entries. The areas are identified by their postal code. For example, London, England taxes alcohol delivered to addresses within it.

You only need to create a postal tax table if the area that applies the tax is smaller than a country's geographical *regions* (states, provinces, etc.). If an entire region applies a tax, use a regional tax table.

See Also:

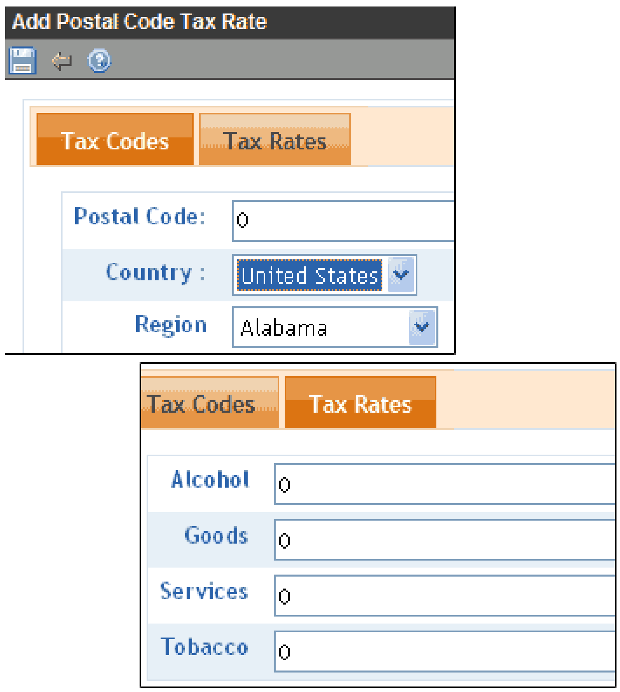
- "How an Order's Tax Amount is Calculated" on page 17-95
- "eCommerce Tax Screens" on page 17-95
- "Creating a New Postal Code Tax Table" on page 17-100
- "Editing a Postal Code Tax Table" on page 17-101
- "Deleting a Postal Code Tax Table" on page 17-101

Creating a New Postal Code Tax Table

Prerequisite: The postal code's country and region are defined in the Regions and Countries screens

To create a new postal code tax table, follow these steps. See Also: "Postal Tax Tables" on page 17-99

1. Go to **Settings** > **Commerce** > **Tax** > **Postal Tax Tables**.
2. Click **New** > **Postal Code**.



3. Use the following table to complete the screens.

Field	Description
Postal Code	Enter the postal code for which you want to enter a tax rate. If this is for a US state, the code must consist of five or nine digits.
Country	Enter the country in which the postal code resides.
Region	Enter the geographic region (for example, state or province) in which the postal code resides.

Field	Description
Tax Rates: Alcohol Goods Services Tobacco Note: Your list may vary.	For any tax class, enter a tax rate as a whole number. For example, if the tax is 7%, enter **7**. See Also: "The Tax Class Screens" on page 17-97

4. Press the Save button ( ).

Editing a Postal Code Tax Table

To edit a postal code tax table, follow these steps. See Also: "Postal Tax Tables" on page 17-99

1. Go to **Settings** > **Commerce** > **Tax** > **Postal Tax Tables**.
2. Click the ID of the tax table that you want to edit.
3. Click the Edit button ( ).
4. Edit the fields as needed. See "Use the following table to complete the screens." on page 17-100
5. Press the Save button ( ).

Deleting a Postal Code Tax Table

To delete a postal code tax table, follow these steps.

1. Go to **Settings** > **Commerce** > **Tax** > **Postal Tax Tables**.
2. Click the ID of the tax table that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The postal code tax table is deleted.

Regional Tax Tables

Use regional tax tables to identify regions (states, provinces, etc.) that apply taxes to eCommerce catalog entries. For example, within the United States of America, the state of New Jersey applies a 5% tax on goods purchased on the internet and shipped to it.

You only need to define a regional tax table if the area that applies the tax is smaller than a country. If an entire country applies a tax, use a country tax table.

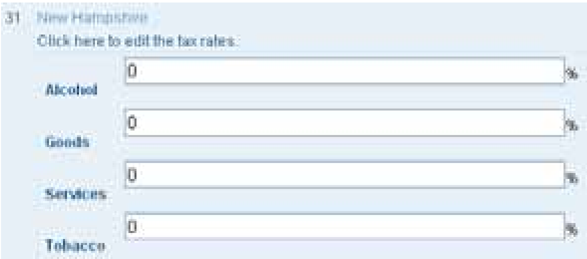
See Also:

- "Regional Tax Tables" on page 17-101
- "eCommerce Tax Screens" on page 17-95
- "Editing a Regional Tax Table" on page 17-102
- "Deleting a Regional Tax Table" on page 17-103

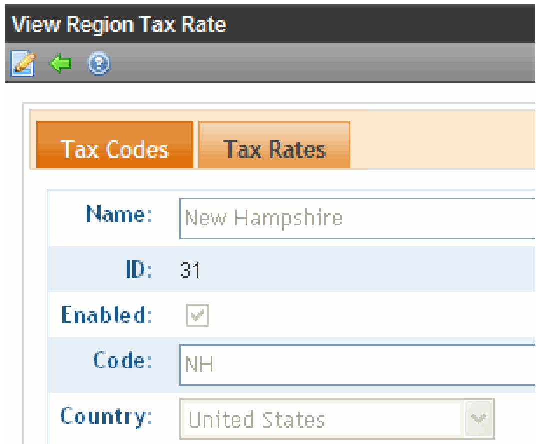
Editing a Regional Tax Table

A regional tax table is automatically created for every existing region. By default, all tax rates are zero (0). To change any tax rate, follow these steps. See Also: "Regional Tax Tables" on page 17-101

1. Go to **Settings** > **Commerce** > **Tax** > **Regional Tax Tables**.
2. Click on the name of the region for which you want to set tax rates.
3. The View Region Tax Rate screen appears.



4. Click the link that says “Click here to edit the tax rates”.



5. Click the Edit button ( ).
6. Use the following table to complete the screen.

Field	Description
Name	Select the region for which you want to enter a tax rate.
Tax Rates: Alcohol Goods Services Tobacco Note: Your list may vary.	For any tax class, enter a tax rate. See Also: "Regional Tax Tables" on page 17-101

7. Press the Save button ( ).

Deleting a Regional Tax Table

To delete a regional tax table, follow these steps.

1. Go to **Settings> Commerce > Tax > Regional Tax Tables**.
2. Click the ID of the tax table that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The regional tax table is deleted.

Country Tax Tables

Use country tax tables to identify nations that apply taxes to eCommerce catalog entries. For example, Ethiopia applies a 5% tax on goods purchased on the internet and shipped to it.

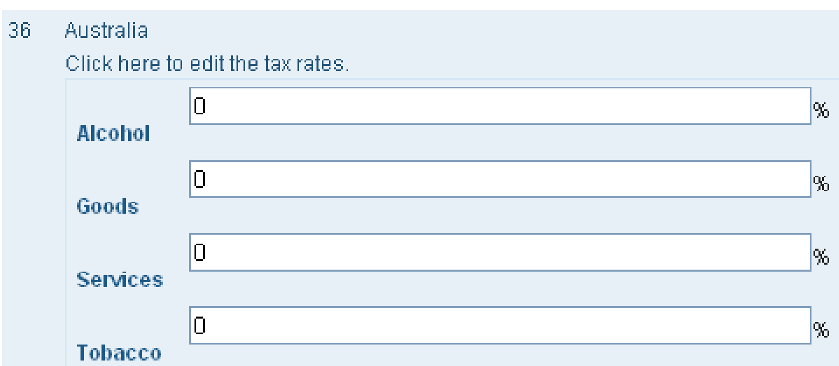
See Also:

- "How an Order's Tax Amount is Calculated" on page 17-95
- "eCommerce Tax Screens" on page 17-95
- "Editing a Country Tax Table" on page 17-104
- "Deleting a Country Tax Table" on page 17-105

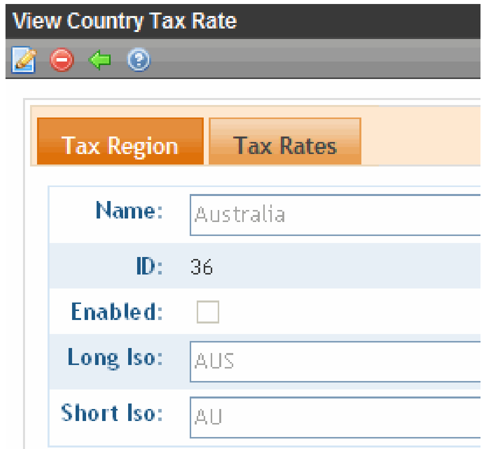
Editing a Country Tax Table

A country tax table is automatically created for every existing country. By default, all tax rates are zero (0). To change any country tax rate, follow these steps. See Also: "Country Tax Tables" on page 17-103

1. Go to **Workarea** > **Settings** > **Commerce** > **Tax** > **Country Tax Tables**.
2. Select the country for which you want to edit a tax table.
3. The View Country Tax Rate screen appears.



4. Click the link that says "Click here to edit the tax rates".
5. Click the Edit button ( ).



6. Use the following table to complete the screen.

Field	Description
Name	Select the country for which you want to enter a tax rate.
Tax Rates: Alcohol Goods Services Tobacco Note: Your list may vary.	For any tax class, enter a tax rate. See Also: "The Tax Class Screens" on page 17-97

7. Press the Save button ( ).

Deleting a Country Tax Table

To delete a country tax table, follow these steps.

1. Go to **Workarea > Settings > Commerce> Tax > Country Tax Tables**.
2. Click the ID of the tax table that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The country tax table is deleted.

eCommerce Products

As mentioned in "Steps to Set Up a Basic eCommerce Web Site" on page 17-29, you typically set up configuration screens before you build eCommerce products. Next, you build the products in the sequence listed below

1. "Product Types" on page 17-106
2. "Creating a Catalog Folder" on page 17-126
3. "Creating a Catalog Entry" on page 17-128

See Also:

- "eCommerce Analytics" on page 17-188
- "eCommerce Recommendations" on page 17-188

Product Types

Create a separate *product type* definition for each category of catalog entries that you sell. For example, you might have a product type for movies, another for books, a third for electronics, etc.

When thinking about creating new product types, the most significant differences are the **Class** field (described below) and the content page, which defines the XML Smart Form for products you will create of a Product Type.

See Also:

- "Product Classes" on page 17-106
- "How Product Types Affect the Creation of Catalog Entries" on page 17-107
- "Creating a Product Type Step 1: Properties, Attributes & Media Defaults" on page 17-108
- "Creating a Product Type Step 2: Creating the Content Page" on page 17-124
- "Deleting a Product Type" on page 17-126

Product Classes

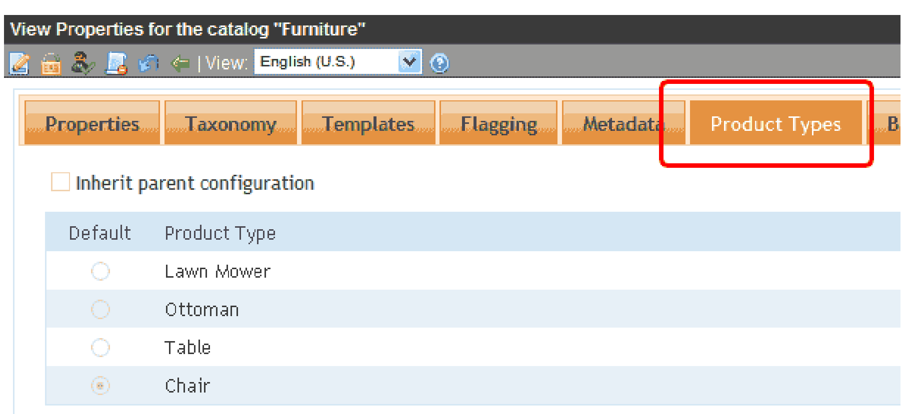
A catalog entry's product class affects site visitors' purchasing options. Classes are explained below.

Class	Description	Example
Kit	Let a site visitor select from any number of free-text options. Options can increase or decrease the overall price. See Also: "Creating a Kit" on page 17-113	A computer whose price changes as a site visitor selects RAM, hard drive, monitor, etc.
Bundle	A catalog entry consisting of several other catalog entries bundled together. Its pricing, shipping, images, etc. are independent of the individual items. See Also: "Creating a Bundle" on page 17-116	A living room set: couch, end tables and lamps. Instead of buying each item separately, the site visitor buys all for a "package" price.
Product	Simple or complex catalog entries. A complex product is a "wrapper" that provides links to related simple products. Each simple product has its own SKU, price, inventory data, etc. See Also: "Creating a Complex Product" on page 17-117	A movie in three formats and prices: - VHS ($12.95) - DVD ($14.95) - Blu-ray ($17.95)
Subscription	A catalog entry which can provide access to designated site pages, and may billed on a recurring basis. See Also: "Creating a Subscription" on page 17-119	Web site content that is only available to subscribed members

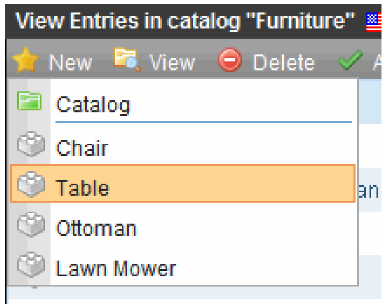
How Product Types Affect the Creation of Catalog Entries

Catalog folders generally contain the same kind of catalog entries, such as DVDs or digital cameras. Some information applied to a catalog folder is inherited by all entries in the folder.

After you create product types, apply appropriate ones to catalog folders using the Catalog Properties screen's **Product Types** tab (shown below).



Then, when creating a new catalog entry, you first navigate to a catalog folder. Next, click **New** and choose a product type assigned to the folder (shown below).



A product type determines the following aspects of the catalog entries based on it.

Catalog entry property	For more information, see
Product class	"Product Classes" on page 17-106
Content page	"Creating a Product Type Step 2: Creating the Content Page" on page 17-124
Attributes	"Attributes Tab" on page 17-110
Media defaults (that is, size of thumbnail images added to a catalog entry)	"Media Defaults Tab" on page 17-113

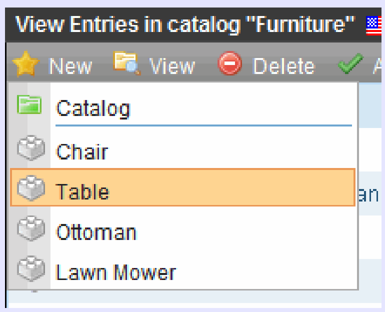
There are two steps to creating a product type.

- "Creating a Product Type Step 1: Properties, Attributes & Media Defaults" on page 17-108
- "Creating a Product Type Step 2: Creating the Content Page" on page 17-124

See Also: "Deleting a Product Type" on page 17-126

Creating a Product Type Step 1: Properties, Attributes & Media Defaults

To create a product type, go **Workarea** > **Settings** > **Commerce** > **Catalog** > **Product Types** > **New** > **Product Type**. Use the following table to complete the Add Product Type screens.

Tab/Field	Description
Properties Tab	
Title	Give the product type a unique title. The title identifies this entry on the View Product Types screen.  Also, when creating a new catalog entry, users must pick a product type from the catalog's **New** menu (shown below). 
Description	Enter a description for the product type.
Class	Enter a class for the product type. See Also: "Product Classes" on page 17-106

Tab/Field	Description

Attributes Tab

Define additional information about catalog entries based on this product type. By default, Attributes appear on the Product server control (illustrated below).

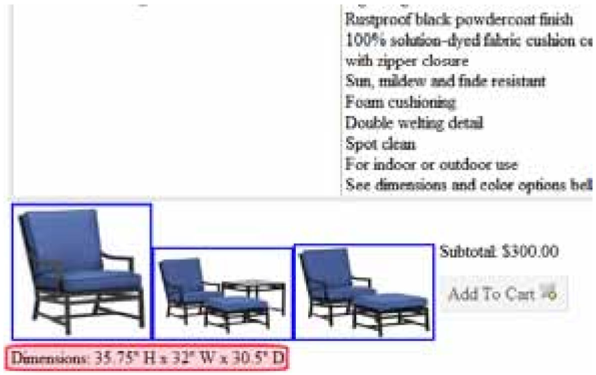
As another example, if the Product Type is for movies, attributes might be **Actors**, **Running Time**, **Rating**, **Year Released**, etc.

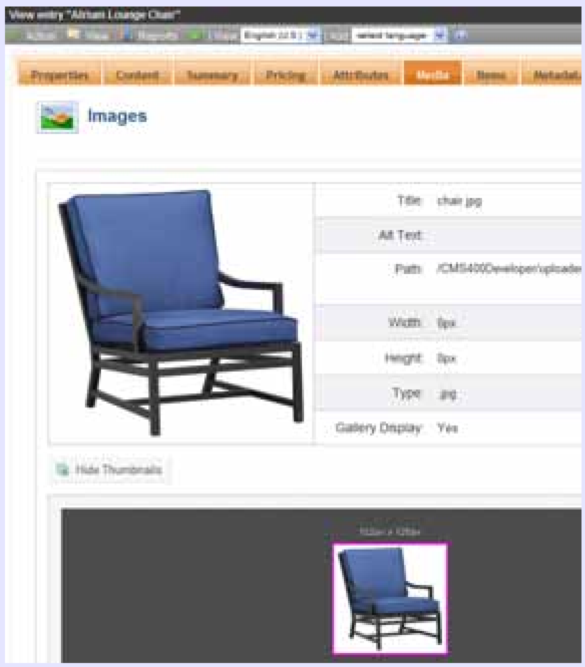
Follow these steps to define a Product Type's attributes.

1. Click the Product Type **Attributes** tab.
2. Click the **Add Attribute** button.
3. Assign a name to the attribute, such as **color**.
4. Choose from these data types.
   - text
   - date
   - number
   - boolean (yes or no)
5. Click OK.

(continued on next page)

Tab/Field	Description
Attributes Tab ***(continued)***	For example, you want an attribute that describes a chair's dimensions. You create a text-based attribute for the Product Type you will use to add chairs to a catalog.  Then, whenever you add a new chair to the catalog, you enter its dimensions into the **Attributes** tab's **Dimensions** field. 

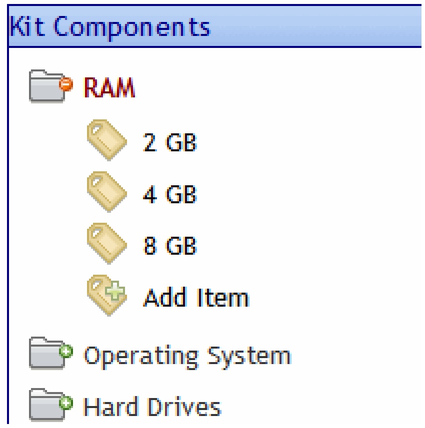
Tab/Field	Description
Attributes Tab *(continued)*	When a site visitor views the chair's product page, he sees the attribute text below the thumbnails.  **Attribute Statuses** Note: You can delete an attribute only if it is *not* applied to a catalog entry. If you try to delete an attribute applied to a catalog entry, it is marked "Inactive." Inactive attributes can no longer be assigned. - Active - Attribute can be assigned to catalog entries - Inactive - Attribute already assigned to one or more catalog entries, but can no longer be assigned. To make an attribute inactive, click the corresponding Mark for Delete button ( ). - Not Published - Attribute has been created but Product Type not saved yet - ~~Active - Marked for delete. Attribute will be deleted when Product Type is saved.~~

Tab/Field	Description
Media Defaults Tab	If desired, enter sizes of thumbnail images. If you do, thumbnails are automatically generated for images (added on the **Media** tab) applied to catalog entries based on this product type. To add a new thumbnail size, click **Add Thumbnail**. To remove one, click the corresponding **Remove** button ( ). To edit a thumbnail, click the corresponding **Edit** button ( ). After making the edit, click the Save button ( ). **Viewing a Catalog Entry's Thumbnails** You can see a catalog entry's thumbnails by clicking its **Media** tab, then **View Thumbnails**.  See Also: "Product Server Control, thumbnails" on page 17-28

Creating a Kit

A kit is a type of catalog entry that allows a site visitor to select from free-text options, which can affect the item's price. The options can also be placed into logical groups.

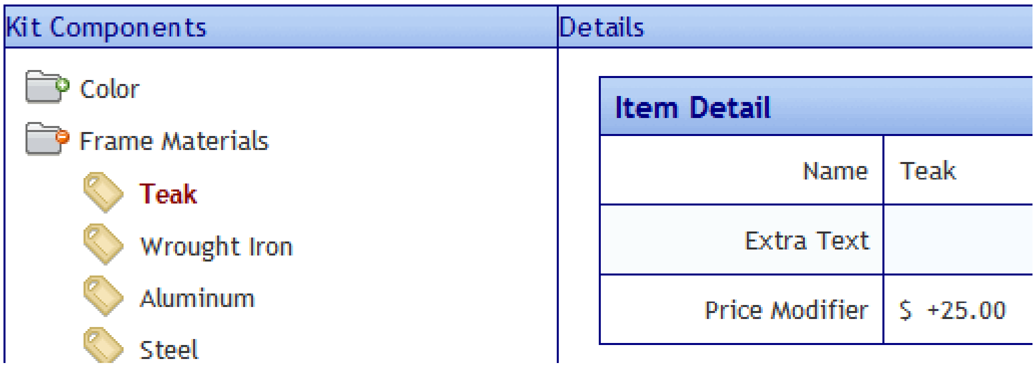
For example, if a catalog entry is a laptop computer, one group may let you enter options for RAM, another for operating system version, and a third could present hard drive options. This is illustrated below.



There is no limit to the number of groups you can add, nor the number of options in a group. All groups and options are simple text, created on a kit's **Items** tab as needed, and can accommodate a price modifier. The example below shows how to set up chair color combinations.

In this example, the options do *not* affect the price. Here is how the options appear on a product page.

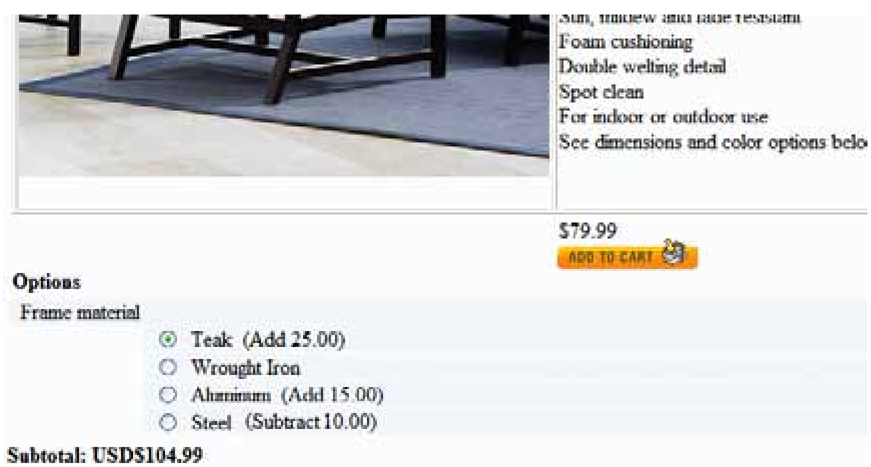
Consider another example in which the price does change. In this case, use the Item screen's **Price Modifier** field to adjust price based on the chair frame. As shown below, if the chair frame is teak, the sale price increases by $25.00.



Other chair materials might adjust the price as shown below.

Frame material	Price Modifier
Wrought Iron	$0.00
Aluminum	+$15.00
Steel	-$10.00

Note how the **Price Modifier** can either increase or decrease the sale price. Here are these options on the product page.



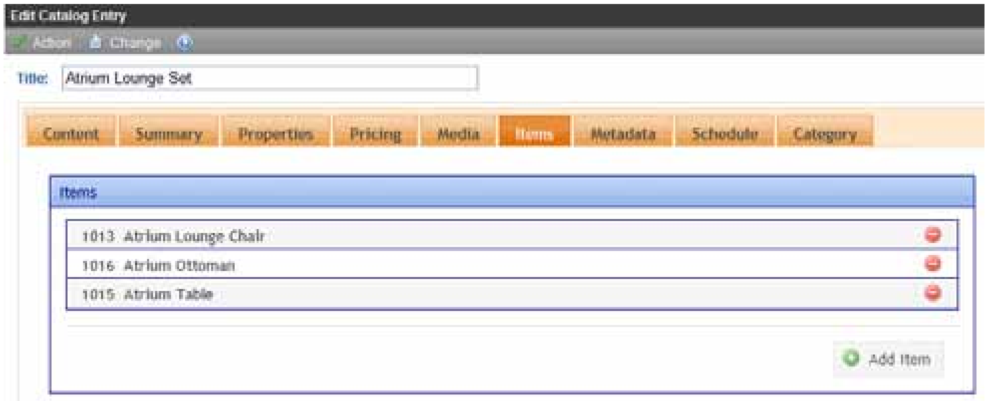
The chair's base price is $79.99, and the teak frame increases it to $104.99.

Creating a Bundle

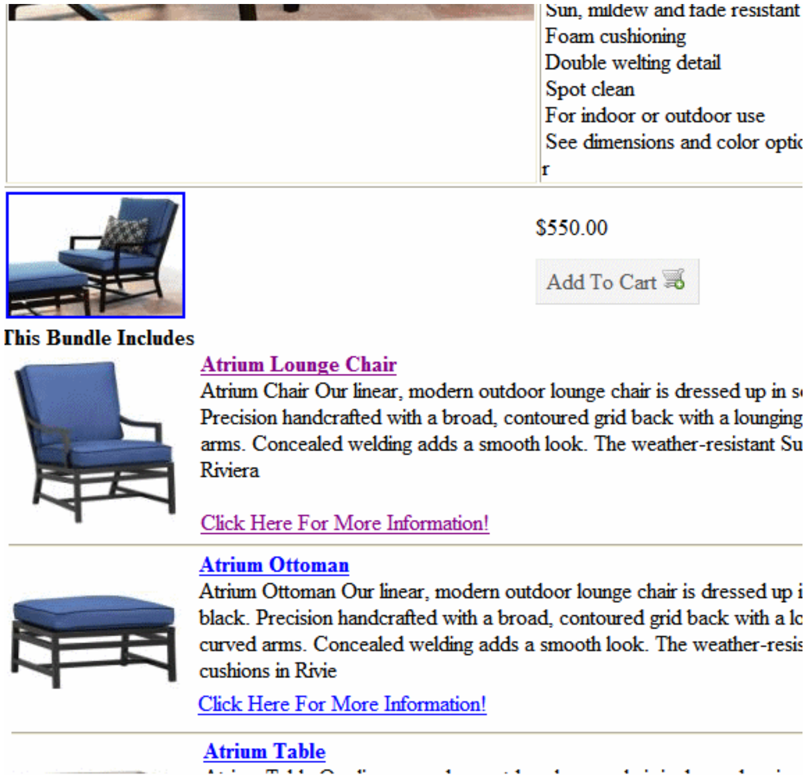
A bundle consists of several simple products. You would use it to combine several existing products into one "umbrella" catalog entry. That entry captures pricing, SKU number, shipping, and inventory information for the bundle. The information for the individual entries that make up the bundle are not affected when one is ordered.

As an example of a bundle using furniture, assume your eCommerce site sells a chair, a table, and an ottoman separately. You also sell them together as a set.

Use a bundle to define the set, add pictures, pricing, etc. On the bundle's **Items** tab, you select the individual catalog entries that make up the bundle, as shown below.



Here is how this bundle looks on a product page.



Creating a Complex Product

A Complex Product is similar to a bundle in that one catalog entry serves as an “umbrella” for other entries. However, unlike a bundle, a site visitor must select one of the catalog entries. So, the price is that of the selected entry, not the umbrella item.

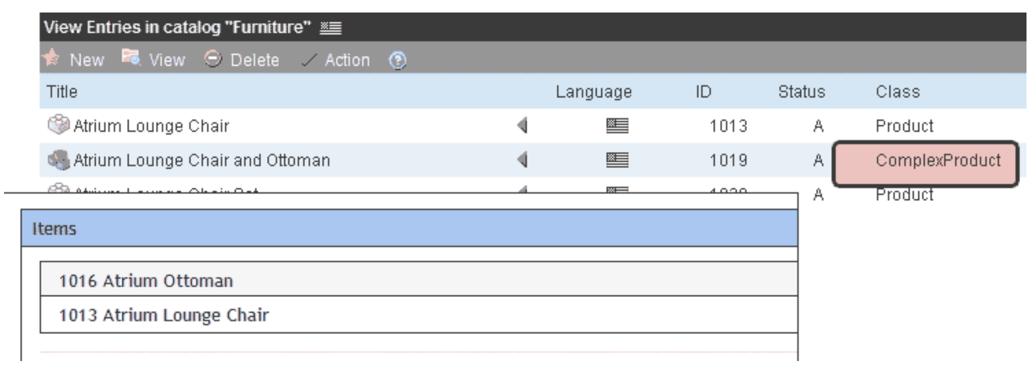
The advantage of a Complex Product is its ability to consolidate several related items under one title, yet allow site visitors to choose the item they want. Because each item under the umbrella is its own catalog entry, it is priced and tracked separately.

For example, a site sells movies in three formats: VHS, DVD, and Blu-ray. Each is priced differently. To accommodate this, create catalog entries for the movie in each format, assigning images, SKU number, pricing, dimensions, etc. Then, create a Complex Product, make its title the title of the movie, and use the **Items** tab to select the catalog entries of the individual formats.

The Product List or Product Search control displays the Complex Product, which is the movie title. When a site visitor selects that, he sees the product page, which lists the format and price of each assigned catalog entry. He can only choose one. See example below.

Steps in Creating a Complex Product

Unlike the Kit or Bundle, a complex product does not have its own product class. Instead, you create a catalog entry whose product class is **product**, then assign other catalog entries to it via the **Items** tab. As soon as you assign one catalog entry via the **Items** tab, the original catalog entry is converted to a Complex Product.



Note that the price of the “umbrella” product appears on the Product List and Product Search server controls. This can be misleading, since the price of individual items within the complex product can vary.

Note: You cannot apply tier pricing to a complex product. See Also: "Tier Pricing" on page 17-142

Creating a Subscription

A subscription is a good or service which

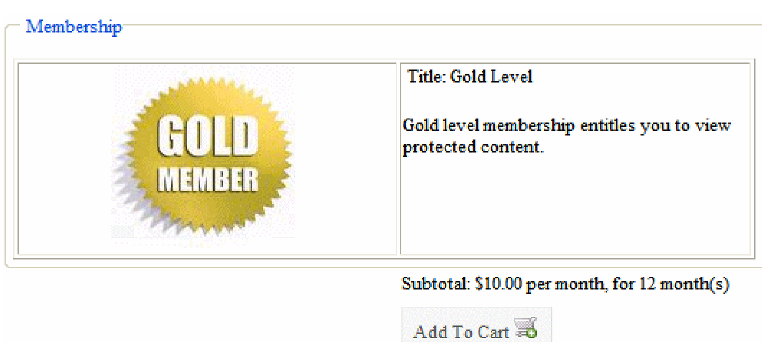
- can be billed on a one-time or a recurring basis
- places users who purchase it into a designated membership group, letting you grant them access to private content

Examples include

- content only available to members who purchase a subscription
- a gym membership
- a book club, in which a customer makes the same payment and receives a different book each month
- anti-virus software that expires after 12 months
- a 3-year maintenance contract on a digital television, payable yearly

If you use the recurring billing feature, the bill can be generated for any number of months or years, but no other time increments. Each payment must be the same for the subscription’s term. The term begins when a customer submits the order.

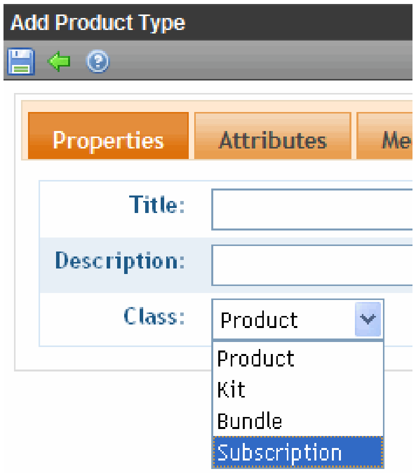
Below is an example of a subscription-based product.



Note: Site visitors cannot apply a cart-level coupon to a subscription-based catalog entry. See Also: "Creating a Coupon" on page 17-225

Creating a Subscription Based Catalog Entry

Creating a subscription is the similar to creating a regular catalog entry. The table below lists everything you need to do, highlighting tasks that are unique to subscriptions.

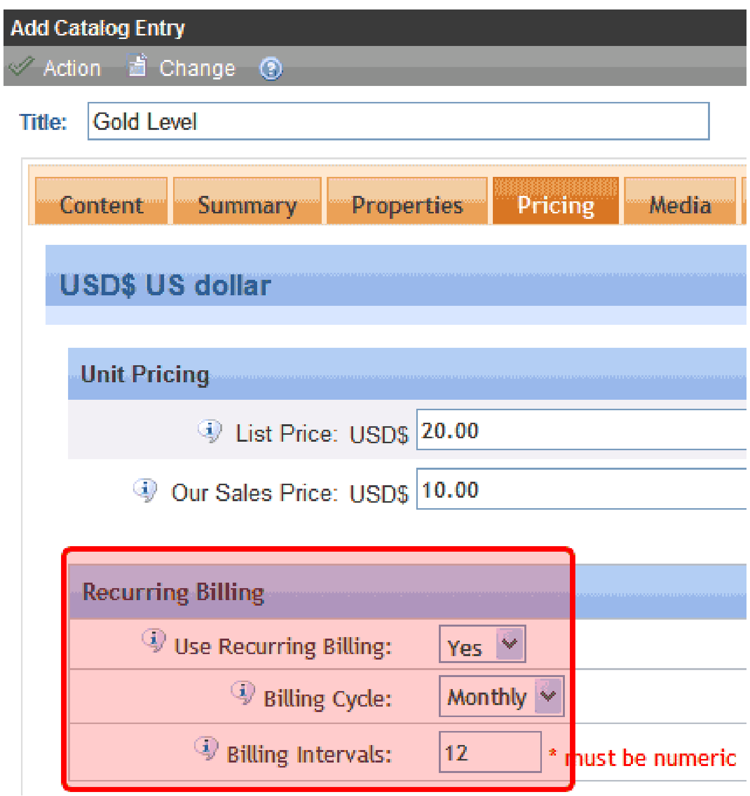
Step	For more information, see
1. Create a subscription-based Product Type. On the Product Type screen's **Product Class** dropdown, select **Subscription** (illustrated below).  	"Product Types" on page 17-106
2. Assign the Product Type to a catalog folder.	- "How Product Types Affect the Creation of Catalog Entries" on page 17-107 - "Creating a Catalog Folder" on page 17-126
3. In that folder, create a catalog entry for each subscription.	"Creating a Catalog Entry" on page 17-128
4. On the **Pricing** tab, enter the cost. If using recurring billing, enter the term of the subscription. If this product does not use recurring billing, click **No** at the **Use Recurring Billing** dropdown.	- To learn about the **Unit Pricing** fields, see "Entering a Catalog Entry's Price Information" on page 17-140 Note: Subscription-based products do not support tier pricing. See Also: "Tier Pricing" on page 17-142

Step	For more information, see
	To learn about **Recurring Billing** fields, see "Entering Recurring Billing Information" on page 17-121
5. On the **Items** tab, assign membership and CMS user groups.	"Assigning Membership and User Group to a Subscription-Based Catalog Entry" on page 17-123
6. If a subscription provides access to Ektron CMS400.NET content, use its folder Permission Table to grant permission to the membership and CMS user groups you defined in Step 5.	"Subscriptions that Involve Ektron CMS400.NET Content" on page 17-123

Entering Recurring Billing Information

Warning! Due to differences in the way payment gateways work, Ektron recommends testing recurring payments with your gateway before processing live transactions.

The **Pricing** tab's **Recurring Billing** area of a subscription-based catalog entry (highlighted below) lets you determine if a subscription is billed on a one-time or a recurring basis. If recurring, it helps you define the terms.

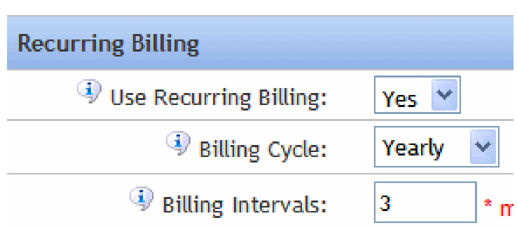


To set up recurring billing (that is, a series of scheduled payments), click **Yes** at the **Use Recurring Billing** dropdown. The recurring billing term begins when a customer submits an order, and is based on a number of months or years. You use the **Billing Cycle** dropdown to choose a time interval.

Next, enter a number of **Billing Intervals** for which a customer is charged. For example, if a customer should be charged once a month for 12 months, complete the screen as shown above. If a customer purchases the item on June 1, 2008, his credit card will be billed on these dates.

- June 1, 2008 (purchase date)
- July 1, 2008
- August 1, 2008
- September 1, 2008
- October 1, 2008
- November 1, 2008
- December 1, 2008
- January 1, 2009
- February 1, 2009
- March 1, 2009
- April 1, 2009
- May 1, 2009

As another example, if a customer should be charged once a year for 3 years, complete the screen as shown below.



If a customer purchases the item on June 1, 2008, his credit card will be charged on the following dates.

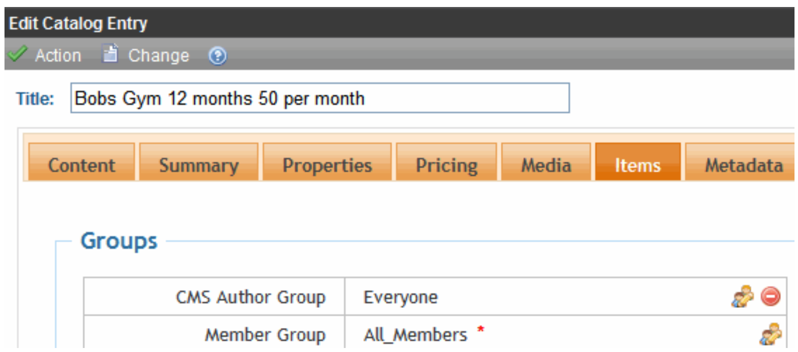
- June 1, 2008 (purchase date)
- June 1, 2009
- June 1, 2010

Assigning Membership and User Group to a Subscription-Based Catalog Entry

You *must* assign a membership user group to a subscription-based catalog entry. Optionally, you *can* assign an Ektron CMS400.NET user group. You assign groups via the subscription's **Items** tab.

See Also: "Membership User Groups" on page 16-18; "Managing User Groups" on page 15-36

So, as part of setting up a subscription, you must either create new membership and (possibly user) groups, or use existing groups.



All users (identified by their email address) who purchase the product are automatically added to one of the groups.

- Ektron CMS400.NET users are added to the group defined in the **CMS Author Group** field
- Non-Ektron CMS400.NET users are added to the membership group defined at the **Member Group** field

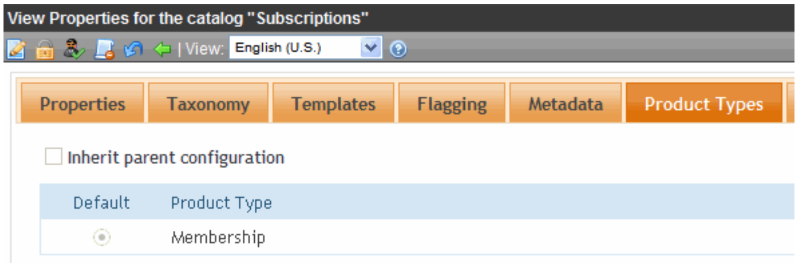
Note: Ektron CMS400.NET checks a user's email address to determine if he is a CMS or a membership user.

Subscriptions that do not Involve Ektron CMS400.NET Content

If a subscription does not involve access to Ektron CMS400.NET content, the membership group provides a list of customers who purchased the subscription. You can use the list to manage the accounts, notify them when the subscription is about to expire, etc.

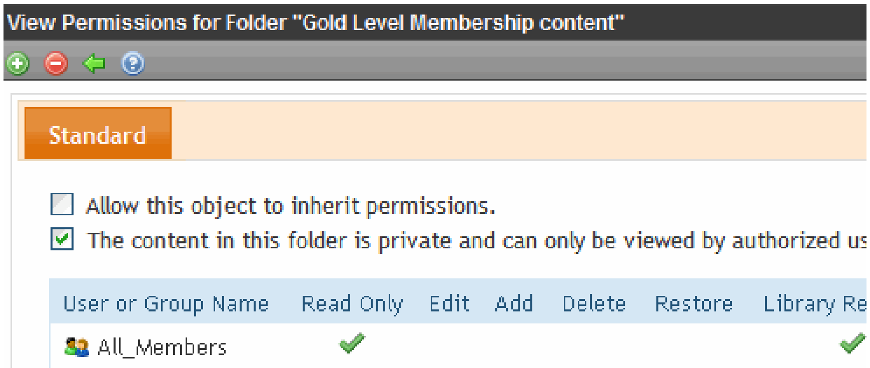
Subscriptions that Involve Ektron CMS400.NET Content

If a subscription involves access to Ektron CMS400.NET content, create a folder and enable one or more subscription-based product types on its Product Type screen (illustrated below).



Place the subscription products in that folder. Site visitors shop for and purchase this content on your Web site as they do all products, via eCommerce server controls.

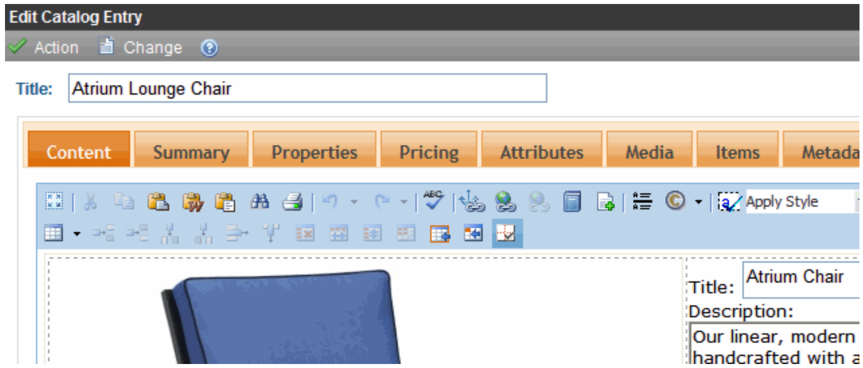
Then, create a regular content folder in which to create the confidential content. Next, use the content folder's permission table to grant the subscription user groups access to that folder (illustrated below).



See Also: "Folder Permissions" on page 5-56 and "Assigning Permissions for Memberships" on page 16-22

Creating a Product Type Step 2: Creating the Content Page

After you complete and save the Add Product Type screen, a new screen allows you to enter XML Smart Form information. On this screen, you set up fields to collect information for the *content page* of catalog entries based on this product type. See example below.



The content page appears on the Product server control, describing this catalog entry to site visitors. See example below.

The process of creating a product type content page is the same as creating an XML Smart Form, described in ”Before You Manage Smart Forms” on page 7-373.

Editing a Product Type

1. In the Ektron CMS400.NET Workarea, **go to Settings** > **Commerce** > **Catalog** > **Product Types**.
2. Click the product type that you want to edit.
3. See "A product type determines the following aspects of the catalog entries based on it." on page 17-108.

Note: You cannot edit a Product Type’s Class.

Deleting a Product Type

Prerequisite: The product type is not assigned to any catalog entries

1. In the Ektron CMS400.NET Workarea, go to **Settings** > **Commerce** > **Catalog** > **Product Types**.
2. Click a product type you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears.
5. Click **OK**.

TIP!

Note: Although you cannot delete a product type that is being used, you can prevent users from creating new catalog entries based on it. To do this, go to each applicable folder's Catalog Properties > Product Types screen and remove that product type.

Creating a Catalog Folder

Prerequisite: One or more product types (See Also: "Product Types" on page 17-106)

A catalog folder is a special kind of Ektron CMS400.NET folder designed to hold eCommerce entries. Its unique icon ( ) distinguishes it from other folder types. If you are familiar with content folders, much of that information applies to catalog folders. See Also: "Managing Folders" on page 5-1

Catalog folders have several tabs/screens, as shown below.

These screens are the same as regular content folders.

- **Properties** - see "Fields on the Folder Properties Screen" on page 5-15
- **Web Alerts - see "Web Alert Feature" on page 20-1**
- **Metadata** - see "Assigning Metadata to a Folder" on page 7-203
- **Breadcrumb** - see "Breadcrumbs" on page 9-358

The unique screen is **Product Types**. See Also: "Assigning a Catalog Folder's Product Type" on page 17-127

Like content folders, the following catalog folder information can be inherited from its parent or uniquely set for each catalog. You can only make changes after creating the catalog.

- Permissions - see "Setting Permissions for a Content Folder" on page 5-63
- Approvals - "Creating an Approval Chain for a Content Folder" on page 5-38
- Purge History - "Purge History" on page 5-24
- Restore Web Alert Inheritance - "Inheriting Content-Level Web Alert Information from Its Folder" on page 20-34

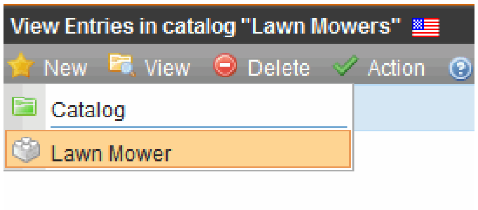
See Also: "Deleting a Catalog Folder" on page 17-128

Assigning a Catalog Folder's Product Type

A catalog folder's **Product Types** screen lets you identify product types upon which catalog entries can be based. See Also: "Product Types" on page 17-106 and "How Product Types Affect the Creation of Catalog Entries" on page 17-107

For example, you created a lawn mower Product Type, and want only lawn mowers to be entered in a catalog folder. In this case, open a catalog folder's **Product Types** tab, break inheritance if necessary, and select Lawn Mower as the catalog's only product type.

Then, when a Ektron CMS400.NET user creates an entry in this catalog, he must use the Lawn Mower product type.



Deleting a Catalog Folder

Prerequisite: No catalog entries in the folder have been placed on an order

To delete a catalog folder, follow these steps.

1. Navigate to the folder that you want to delete.
2. Click **Delete** > **This Catalog**.
3. A confirmation message appears.
4. Click **OK**.

Creating a Catalog Entry

Prerequisite: One or more catalog folders (See Also: "Creating a Catalog Folder" on page 17-126)

A *Catalog entry* is the eCommerce term that describes a product sold on your Web site. It is similar to content in the rest of Ektron CMS400.NET, so those concepts apply to catalog entries.

Catalog entries are built from Ektron CMS400.NET XML Smart Forms, so use the same content and folder structure as other Smart Forms. See Also: ”Working with Smart Forms” on page 7-369

Catalog entries share the following features with regular content.

- content status
- approvals and permissions
- metadata
- schedule
- history and the ability to restore previous versions
- search
- taxonomies to categorize products

Catalog entries also have unique information, such as

- Tax Class - determines which taxes apply to item
- Physical dimensions - used to calculate shipping costs
- Inventory tracking
- Pricing - can be fixed or variable for any currency
  - *tier pricing*, that is, price adjusts when quantity reaches new plateau. For example, 1-9 items cost $500 each. But if 10 are sold, the price drops to $450 each.
- Images (full sized and thumbnail) to display the product on your Web Site

Because there is so much information to provide about managing catalog entries, this section takes two approaches

- "Catalog Entry Screens and Menu Options" on page 17-129 describes all accessible options (tables, menus, etc.) from the catalog entry screen
- "Catalog Entry Tasks" on page 17-130 describes how to do things with catalog entries: create them, delete them, etc.

Catalog Entry Screens and Menu Options

- "Content View Menu Options" on page 17-151

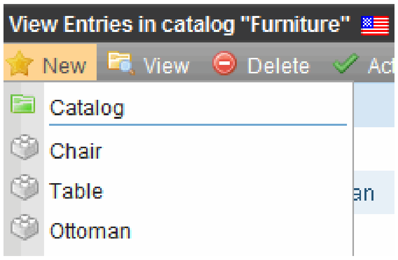
Catalog Entry Tasks

- "Creating/Updating Content" on page 17-130
- "Deleting a Catalog Entry" on page 17-131
- "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 17-188
- View and restore a previous version of a catalog entry - Navigate to catalog folder > select catalog entry > **View Menu** > **Content History option**. See Also: "Content History" on page 17-152
- Edit permissions for a catalog entry - To enable this, break permission inheritance. Then, assign permissions to selected users. See Also: "Setting Permissions for Content" on page 5-68
- Edit inherited approval chain - First break permission inheritance, and assign permission to users who need to be in the approval chain. Then, update the catalog entry's approval chain. See Also: "Editing an Approval Chain For Content" on page 5-43
- Make a catalog entry private, so that the Web site search does not find it - See "Private Content" on page 7-237
- Archive a catalog entry - See "Archived" on page 17-138
- "Displaying Catalog Entries on your Web Site" on page 17-154

Creating/Updating Content

Follow these steps to create a new catalog entry or update an existing one.

1. Navigate to a catalog folder in which you want to create or update a catalog entry. See Also: "Creating a Catalog Folder" on page 17-126
2. Click **New** then select a product type on which to base the entry. See Also: "Product Types" on page 17-106



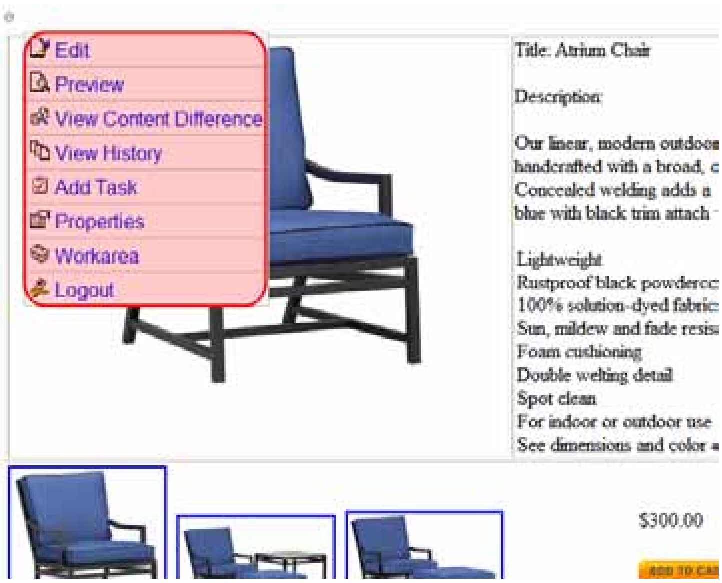
3. Complete the screens as needed. The required fields are:

- content **Title**
- **Properties** tab > **SKU Number**
- any fields on the content screen that your Ektron CMS400.NET administrator has designated as required

For information on the catalog entry screens, see "Tabs on the Catalog Entry Screen" on page 17-132

4. Check in or submit/publish the content. See "Action Menu" on page 17-153.

Note: After signing in to your Web site, you can also update a catalog entry's information from there.



Note:

Note: See Also: "The Web Site Content Menu" on page 7-2

Deleting a Catalog Entry

Prerequisites:

- Catalog entry is not on an order, or checked out.
- You have delete permission for this catalog folder. See Also: "Folder Permissions" on page 5-56

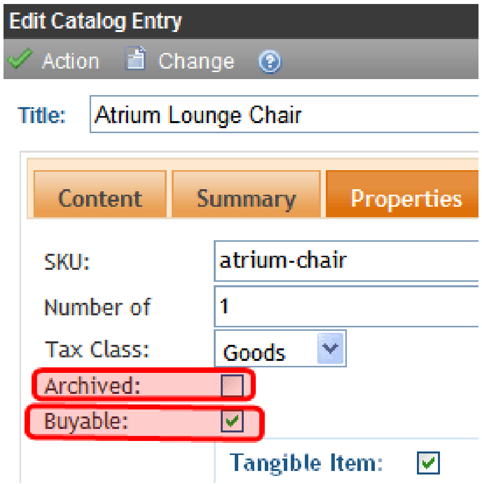
EKTRON BEST PRACTICE

Note: Do not delete catalog entries. For example, if you delete an entry from your staging site, then run an eSync, that entry is removed from all active carts on your live site.
Instead of deleting entries, Ektron recommends archiving them using the **Properties** tab's **Archived** checkbox (shown below).

TIP!

Note: If you want to prevent site visitors from purchasing an item, but you cannot delete it because it has been placed on existing orders, you have two options.

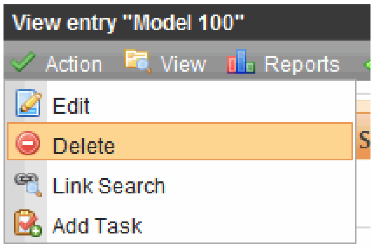
Note: * Uncheck its **Buyable** checkbox, located on the Properties screen (circled below). If you do, the product still appears on your Web site, but the **Add to Cart** button does not appear next to it.



Note: * Archive it, using the **Archived** check box on the Properties screen (circled above). In this case, the product does not appear on your Web site. See Also: "Archived" on page 17-138

Follow these steps to delete a catalog entry.

1. Navigate to the catalog folder that contains the entry.
2. Click the entry.
3. Click **Action** > **Delete**.

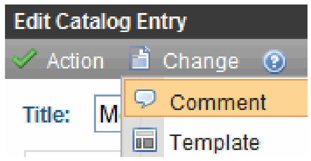
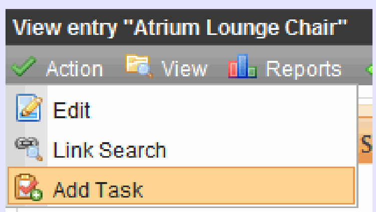


4. A warning message appears. Click **OK**.
5. The catalog entry is deleted.

Tabs on the Catalog Entry Screen

Tab	Description	For more information, see
Content	The entry's content page.	"Entering a Catalog Entry's Content" on page 17-136
Summary	The content summary, by default the first 40 characters of the content text.	"Auto Generating Summaries" on page 7-14 and "Working with Content Summary" on page 7-170
Properties	eCommerce information about the catalog entry: - SKU number - Number of Units - Tax Class - Archived - Buyable - Dimensions - Inventory	"Entering a Catalog Entry's Properties" on page 17-137
Pricing	- Lets you define list and sales price - For each enabled currency, you can set a fixed price or have it float with exchange rate - Allows tier pricing - For subscription products, you enter recurring billing interval and term	"Entering a Catalog Entry's Price Information" on page 17-140
Attributes	Additional information to help describe a catalog entry	"Entering a Catalog Entry's Attributes" on page 17-144
Media	Lets you add images that appear on several eCommerce server controls	"Entering a Catalog Entry's Media" on page 17-146
Items	Catalog entries that you are adding to this "umbrella" item. - If you add catalog entries to a simple product, it becomes a complex product. - For bundles, add catalog entries that make up a	"Entering a Catalog Entry's Items" on page 17-149 "Creating a Complex Product" on page 17-117 "Creating a Bundle" on

Tab	Description	For more information, see
	bundle. For kits, enter groups and their options. For subscription products, define membership and Ektron CMS400.NET user groups to which users are assigned when they purchase the subscription.	page 17-116 "Creating a Kit" on page 17-113 "Creating a Subscription" on page 17-119
Metadata	Enter meta tags, title tags, etc. Note: When viewing the metadata screen in view mode only, you see the catalog entry's **Product Icon**. The product icon is set on the **media** tab. See Also: "Product List, Product Search, and Recommendation server controls" on page 17-28	"Working with Metadata" on page 7-176
Alias	Note: This tab only appears if Aliasing is enabled. View and edit the catalog entry's primary manual alias View all automatic aliases assigned to this catalog entry	"Adding a Manual Alias via the Alias Tab" on page 10-43 "URL Aliasing" on page 10-1
Schedule	Lets you control when a version of a catalog entry becomes visible on the Web site. Similarly, you can remove a catalog entry on a predetermined date and time. Note: The **Archive and remain on the site** option is not available with catalog entries.	"Scheduling Content to Begin and End" on page 7-242

Tab	Description	For more information, see
Comment	View comments on changes made when editing a catalog entry. Note: To view and edit catalog entry comments, open the editor and choose **Change > Comment**.  The comment also appears on the View Content and Content History screens. Use it to help distinguish one version from another.	
Tasks	View tasks assigned to this catalog entry. Note: To add a task from the View Entry screen, click **Action > Add Task**. 	”Managing Tasks” on page 11-1
Category	Add a taxonomy category to the catalog entry. A list of available taxonomies and whether one is required are defined on the Catalog properties screen. Note: This tab only appears if at least one taxonomy is assigned to the catalog folder.	”Taxonomy” on page 9-253; ”Assigning a Taxonomy or Category to Content via the Edit Content Screen” on page 9-274 ”Fields on the Folder Properties Screen” on page 5-15

Menu Options on the Catalog Entry Screen

Menu Option	Description
Action Menu	
Save	Saves the catalog entry without leaving the editor. It is a good idea to save your work frequently.
Check in	Save and check-in the document. This action returns the changed content to the database and exits the editor. It does not submit the content into the approval chain. Rather, it allows you and other users to continue changing it.
Submit/Publish	**Submit** the content into the approval chain. This action also returns the new or updated content to the database and exits the editor. **Publish** the content to the Web site. Note: Only the last approver in the approval chain sees this button. If no approval chain is assigned to the content's folder, every authorized user sees this button. See Also: "Approval Chains" on page 5-33 This action also returns the changed content to the database and exits the editor.
Undo checkout	Exit screen and do not save changes made since you began editing this catalog entry.
Change Menu	
Comment	Enter comments on changes made when editing a catalog entry. The comment also appears on the View Content and Content History screens. Use it to help distinguish one version from another.
Template	A folder's default template is automatically applied to all content in the folder. However, you can change a content item's template to any of those assigned to the folder. See Also: "Creating/Updating Templates" on page 7-228

Entering a Catalog Entry's Content

The **Content** tab displays the content page of this catalog entry's product type. See Also: "Creating a Product Type Step 2: Creating the Content Page" on page 17-124

Because the format is customized for your system, this documentation cannot explain how to respond to the fields.

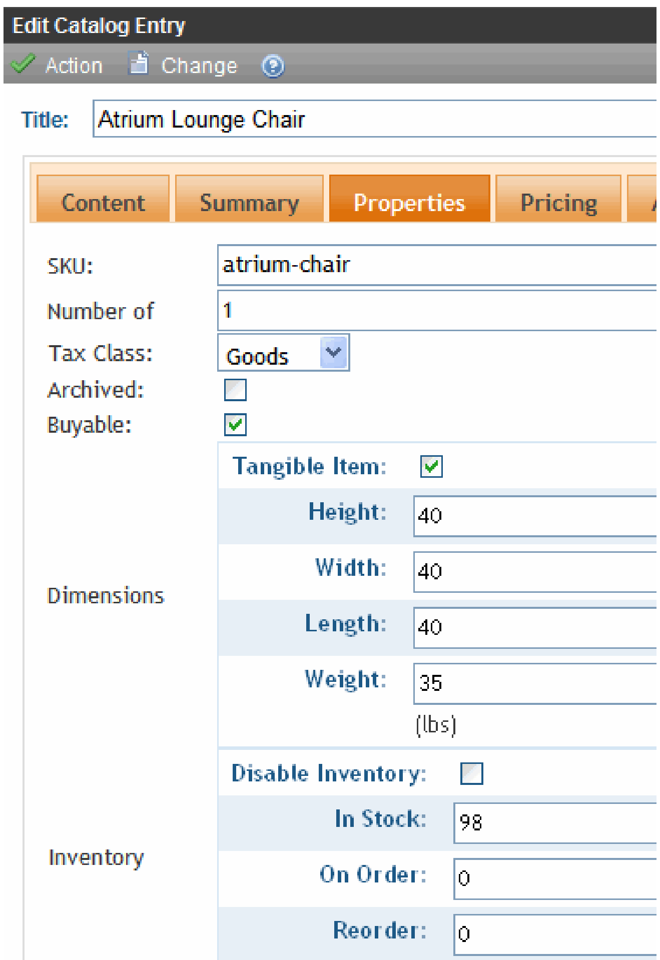
To learn about working with the editor, see "Ektron CMS400.NET Editors" on page 7-21

Entering a Catalog Entry's Summary

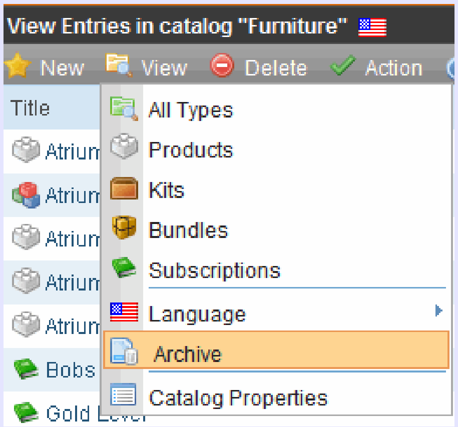
See "Auto Generating Summaries" on page 7-14 and "Working with Content Summary" on page 7-170.

Entering a Catalog Entry's Properties

The Properties screen collects eCommerce-specific information about your catalog entries.



Use the following table to complete the Properties screen.

Property	Description
SKU	Enter a unique SKU code for this catalog entry. This is a required field that does not accept a value of zero (0) or a space character.
Number of Units	If this item has a quantity other than one (1) for internal record-keeping purposes only, enter that number. For example, a 12 pack of soda. Set **Quantity** is 12 to represent the number of units. But a site visitor still orders 1 of the item. The quantity is not used when this item is ordered, nor does it affect inventory levels. It is used for clerical purposes only.
Tax Class	Select the catalog entry's Tax Class. See Also: "The Tax Class Screens" on page 17-97
Archived	Check this box if you want to *archive* this catalog entry. Once archived, site visitors can no longer see nor order it. Also, Ektron CMS400.NET users cannot view an archived catalog entry in its catalog folder via the View Folders screen. To view it, open its catalog folder then select **View > Archive**.  To make the entry available again on your Web site, open its archive folder, edit the entry by unchecking the **Archived** check box, and publish it. Note: A catalog entry can also be set to Archived status if it reaches its expiration date and its **Schedule** tab > **Action on End Date** field is set to **Archive and remove from site (expire)**.**See Also:** "Setting Archive Options" on page 7-247
Buyable	To let site visitors add this catalog entry to a shopping cart, check this box. Otherwise, uncheck it.

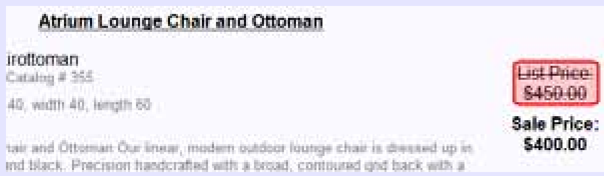
Property	Description
	If a product is *not* buyable, it can still be seen by site visitors, but its product page does not display an **Add to Cart** button. Tip! To remove a catalog entry from your site, use the **Archive** field.
Dimensions - Used to calculate packaging containers and shipping costs. See Also: "Packages" on page 17-87	
Tangible Item	Check this box if the item is *tangible*, that is, it has dimensions, weight, and will be shipped to a customer. Examples of non-tangible items are services, warranties, and downloadable software. If a catalog entry is tangible, you must enter its height, width, length, and weight.
Height	Enter the catalog entry's height. The units of measure are specified in the web.config file's `ek_measurementsystem` property. Required if **Tangible Item** is checked.
Width	Enter the catalog entry's width. Required if **Tangible Item** is checked.
Length	Enter the catalog entry's length. Required if **Tangible Item** is checked.
Weight	Enter the catalog entry's weight. Required if **Tangible Item** is checked.
Inventory - eCommerce's inventory system is a provider model, allowing you to connect with third-party inventory systems.	
Disable Inventory	Check this box if you do not want to track inventory activity for this catalog entry. As examples, it is a service contract or a subscription to confidential content on your site.
In Stock	Enter the number of items on hand for this catalog entry. This number is automatically adjusted when an order containing this entry is submitted. For example, there are 100 items in stock. When an order for 10 is submitted, the **In Stock** value changes to 90. If the amount placed on an order exceeds the **In Stock** amount, the site visitor see this message "The item ... is not available for purchase. Please remove from cart before submitting order."
On Order	The number of items that have been ordered but not yet delivered appears.
Reorder	Enter the **In Stock** quantity at which you need to reorder this item. When the **In Stock** quantity reaches this level, an event is triggered which can be used by an external inventory system to generate a new order.

Entering a Catalog Entry's Price Information

Use the Pricing screen to enter price information for catalog entries.

Use the following table to complete the Pricing screen.

Field	Description
Currency selector	Use this dropdown to select a currency for the prices. See Also: "Alternate Currency Pricing" on page 17-141  Only enabled currencies appear. See Also: "Enabled Currencies" on page 17-54

Field	Description
List price	Enter the catalog entry’s list, or manufacturer’s suggested retail, price. The list price appears on most eCommerce controls (see examples below) but is *not* used in any calculations. **Cart server control**  **Product Search server control** 
Our Sales Price	Enter the catalog entry’s sale price. This price is used to calculate line item totals, coupon discounts, shipping costs, etc. The sales price appears on most eCommerce controls. See examples above.
Add Pricing Tier button	"Tier Pricing" on page 17-142
Recurring Billing (appears only for subscription-based products)	"Creating a Subscription" on page 17-119

Alternate Currency Pricing

By default, the Pricing screen converts prices to every enabled currency (see screen below), using the exchange rate. Site visitors who select a non-default currency see these prices. See Also: "Updating the Exchange Rate" on page 17-57

The **Float** checkbox (checked by default) indicates that prices change as the exchange rate changes.

If you do not want to float a catalog entry's price, but instead fix it for a currency, select the currency, uncheck **Float**, edit the price, and publish. From then on, if a site visitor selects that currency and catalog entry, the price set on this screen is used. The exchange rate is ignored.

For example, a television costs 700 Euros, regardless of its cost in US dollars or the exchange rate. To incorporate this, do *not* check the **Float** checkbox.

When you first select **EUR** on the **Pricing** screen, the default currency's prices are converted using the exchange rate. For example, the television's sale price is $1000 US dollars, and today's exchange rate is .7811. When you select **Eur** from the **Pricing** screen's currency selector, the television's cost is set at 781.10 Euros. You change the price to 700.00 Euros.

From that point on, the Euro price only changes if an authorized user accesses this screen and changes it manually.

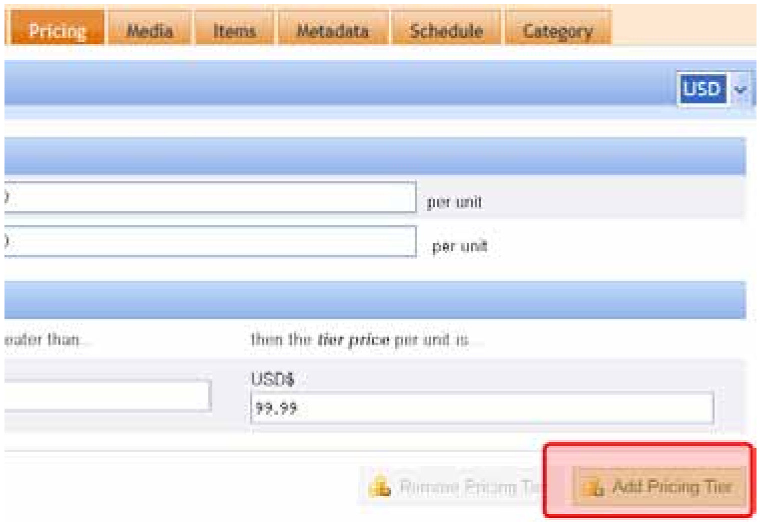
Tier Pricing

eCommerce supports *tier pricing*, that is, a pricing schedule that adjusts according to order quantity. Typically, the price is reduced as more items are ordered. For example, if a visitor orders 1-5, items are $10.00 each; 6-10, $9.00 each; 11 or more, $8.50 each.

Note: Tier pricing is not supported for subscription products, nor for complex products. See Also: "Creating a Subscription" on page 17-119, "Creating a Complex Product" on page 17-117

To set up tier pricing, follow these steps.

1. In the Workarea, open the catalog folder containing the entry to which you want to apply tier pricing.
2. Edit the catalog entry.
3. Click the **Pricing** tab
4. Click the **Add Pricing Tier button** (shown below).



5. The following screen section appears.

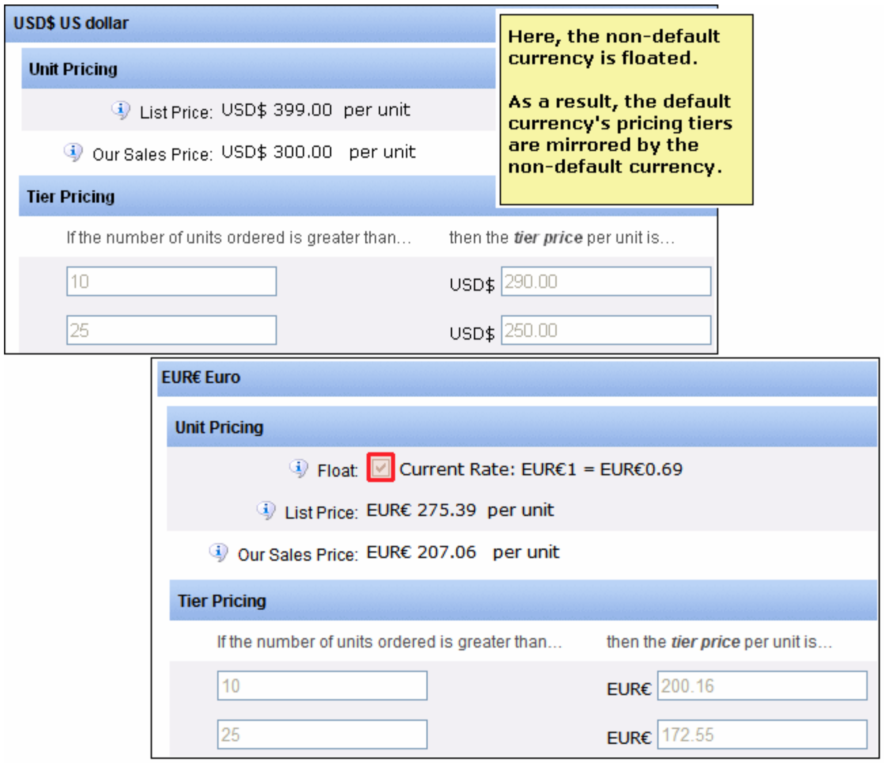
6. In the left column, enter the quantity of items above which the tier price is used.
7. In the right column, enter the price to be used when an order quantity *exceeds* the number in the left column.
8. Enter as many tiers as necessary.

Note: To remove a tier, check the box to its left, then click the **Remove Pricing Tier** button.

Tier Pricing and Non-Default Currencies: When Floated

If a non-default currency is *floated*, then that currency's pricing tiers mirror the default currency's pricing tier values. The amounts are adjusted by the exchange rate.

These values appear on pricing screen in view-only mode and cannot be changed. This is illustrated below.



If pricing tiers are set up for the default currency and the user unchecks the **Float** box, he is notified that the pricing tiers can now be edited. Next, Tier Pricing fields are loaded with the existing values but the user can change values, remove existing tiers, and add new ones.

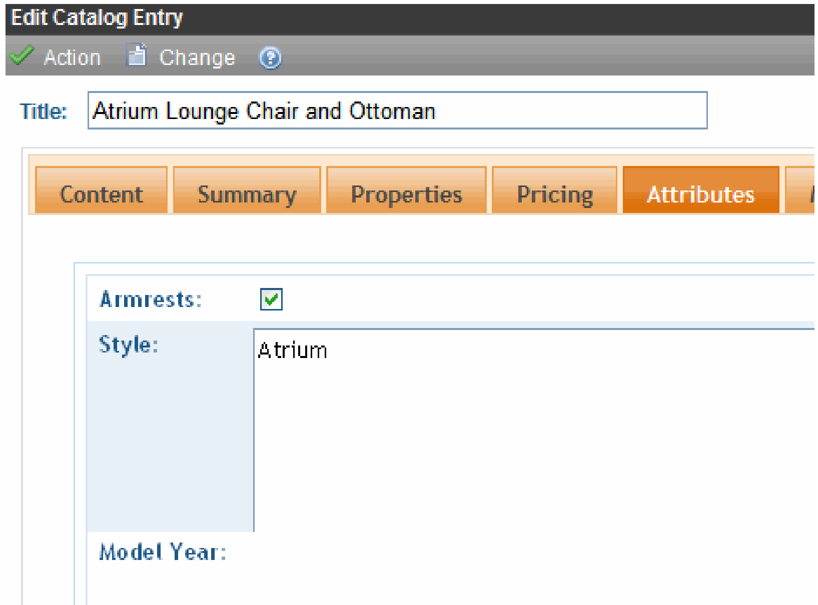
Tier Pricing and Non-Default Currencies: When Not Floated

If a non-default currency is *not floated*, its pricing tiers are independent of the default currency's. That is, they do not exist initially regardless of whether they exist for the default currency. If the user clicks **Add Pricing Tier**, **Tier Pricing** fields appear and let the user enter number of units and corresponding tier price per unit.

If pricing tiers are set up for a non-default currency and the user checks the **Float** box, the pricing tiers are changed to mirror those of the default currency. If the default currency has no pricing tiers, then that currency has none. You cannot independently edit a non-default currency's pricing tiers if **Float** is checked.

Entering a Catalog Entry's Attributes

Attributes are additional pieces of information that help describe a catalog entry. To illustrate the concept, the following attributes are applied to furniture in Ektron CMS400.NET's sample site.



In the Workarea, you select a catalog entry then click the **Attributes** tab to enter or modify attribute values. In the above example, you could change model year to **2009**, or style to **Woodland**. You cannot however change fields, field names, or data types.

Note: If no attributes are assigned to the product type on which a catalog entry is based, you will not see an **Attributes** tab when working with that catalog entry.

On your Web site, a catalog entry's Attribute field names and values appear by default on the Product server control, as shown below.

Origin of Attributes

Attribute fields, data types, and default values are created as part of a Product Type. See Also: "Attributes" on page 17-133

When you create a catalog entry, you base it on a product type. The product type's **Attribute** information is imported to the catalog entry.

What Happens to a Catalog Entry's Attributes When Moved

Like metadata that follows Ektron CMS400.NET content, if a catalog entry is moved to another folder, its attributes stay with it.

Entering a Catalog Entry's Media

Use the **Media** tab to add product images that appear on the following server controls.

- Product (the smallest thumbnail may appear)
- Product List

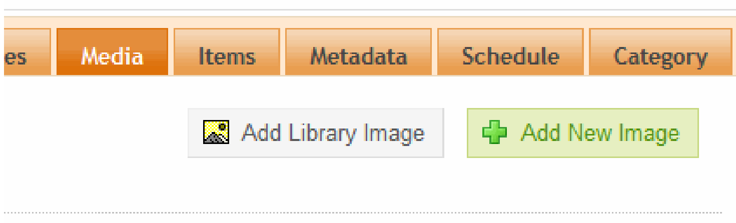
- Product Search
- Recommendation

See Also: "Images in eCommerce" on page 17-27

Adding a New Image

Follow these steps to add a new image. See Also: http://www.w3schools.com/tags/tag_IMG.asp

1. Click the **Media** tab.
2. Click **Add New Image** .



3. Enter an image **Title**. This is a required field.
4. Enter the image's **Alt text**. This is a required field.
5. Click the **Browse** button and navigate to the image you want to add.
6. Click the **Upload** button.
7. The image is uploaded to the *siteroot*/uploadedimages folder.

Note: When an image is uploaded to the **Media** tab, the original image and any thumbnails associated with it are added to the Library. For example, if you add an image named "TestImage" (actual file name: "case.jpg") with a 150px and 50px thumbnails, you see the following entries in your library (*File Name - Path*):
TestImage - /~siteroot~/uploadedImages/case.jpg
case[filename]150 - /~siteroot~/uploadedImages/case[filename]150.jpg
case[filename]50 - /~siteroot~/uploadedImages/case[filename]50.jpg

8. The image appears on the screen, below any existing images.
9. Determine if you want the image's smallest thumbnail to appear on the product server control by selecting **Yes** or **No** next to **Gallery Display**. (See example below). See Also: "Product Server Control, thumbnails" on page 17-28
10. If you want to designate the image as the *product icon*, click **Set as Product Icon**. See Also: "Product List, Product Search, and Recommendation server controls" on page 17-28

To learn about the image thumbnails, see "Determining Thumbnail Size" on page 17-148.

Editing an Existing Image

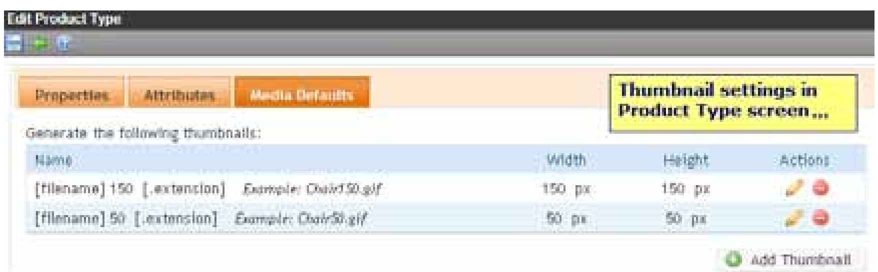
Note: You cannot change an existing image. If you need to do this, delete the image you do not want, then add the correct one. You can only edit the **Title** and **Alt Text**.

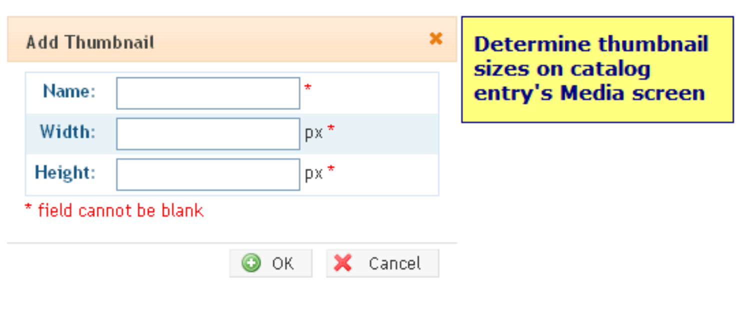
1. Click the **Media** tab.
2. Move the cursor to the field that you want to edit.
3. Click the pencil icon to the right of the field (shown below).

4. Update the text as needed.
5. Click the OK button ().

Determining Thumbnail Size

When you create a catalog entry, you base it on a Product Type. The selected product type's **Media Defaults** information determines the sizes of thumbnails created for each image assigned to the **Media** tab. See Also: "Media" on page 17-133





- If the image is *less than* both thumbnail dimensions (height and width), it appears full size.

- If the image is *greater than* the thumbnail's dimensions, the image is reduced proportionately, scaling its dimensions to the thumbnail size.

The Default Image

If you do not assign an image to a catalog entry, but one is assigned to appear on a server control, the following default image is used.

If you want to change the default image, edit the following file:

site root`/WorkArea/images/application/Commerce/productImageBackground.gif`

Entering a Catalog Entry's Items

Use the **Items** tab to add additional information to the current entry. It is used in these situations.

- to select the catalog entries that make a product into a complex product. See Also: "Creating a Complex Product" on page 17-117
- to select the catalog entries that make up a bundle. See Also: "Creating a Bundle" on page 17-116

See Also: "Product Classes" on page 17-106

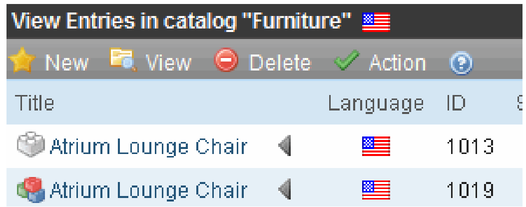
- to select the groups and their options that make up kits. See Also: "Creating a Kit" on page 17-113

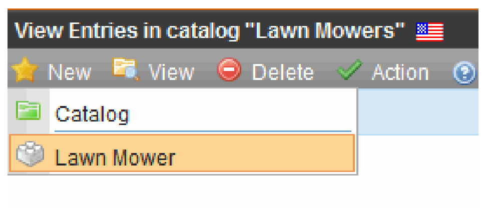
Note: You can only choose a catalog entry whose language matches the language of the original item.

- to select a subscription-based catalog entry's user groups. See Also: "Assigning Membership and User Group to a Subscription-Based Catalog Entry" on page 17-123

Folder View Menu options

The following menu options are available when you open a catalog folder.



Menu option	Description
New Menu	
Catalog	Create a new catalog folder underneath the current one. See Also: "Creating a Catalog Folder" on page 17-126
product types assigned to folder	Create a new catalog entry based on one of the displayed product types. Your product types may not match the ones shown below.  Product types are assigned to a catalog's via the **Product Types** screen. See Also: "Product Types" on page 17-106
View Menu	
All types, products, kits, bundles	Lets you change the display of catalog entries. You can see all entries in folder, or only those of a selected product class. See Also: "Product Classes" on page 17-106
Language	Limits display of catalog entries to one language. Also determines the language of any new catalog entries you create in this folder.
Archive	Displays archived catalog entries. See Also: "Archived" on page 17-138
Catalog Properties	Lets you view and edit catalog folder information. See Also: "Creating a Catalog Folder" on page 17-126

Menu option	Description
Delete Menu Note - You cannot delete a catalog entry that has been placed on any order. The order's status is irrelevant.	Lets you delete a catalog folder or a catalog entry within it. See Also: "Deleting a Catalog Entry" on page 17-131, "Deleting a Catalog Folder" on page 17-128
Catalog	"Deleting Folders" on page 5-23
Entries	See ■ "Deleting a Catalog Entry" on page 17-131 ■ "Deleting Several Content Items in a Folder" on page 7-158
Action Menu	
Move entry	"Viewing and Restoring Previous Content" on page 7-140 Note: You can only move catalog entries -- you cannot copy them.
Search	"The Search Published Tab" on page 9-109

Content View Menu Options

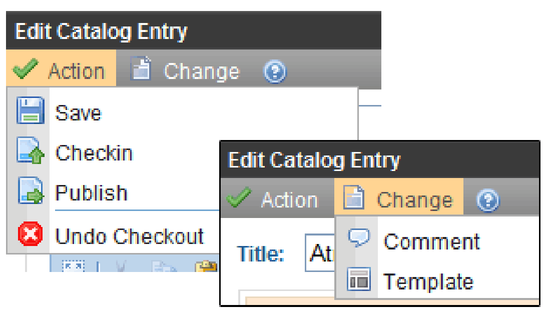
The following menu options are available when you are viewing a catalog entry.

Menu option	Description
Action Menu	
Edit	Edit the catalog entry. See Also: "Tabs on the Catalog Entry Screen" on page 17-132
Delete	See ■ "Deleting a Catalog Entry" on page 17-131 ■ "Deleting Content" on page 7-157
Link Search	Locates all content that includes a Quicklink to the displayed catalog entry. This feature is useful before deleting a catalog entry, because it informs you of every entry that will include a "dead" link if you delete that entry. You should then edit those catalog entries and remove or change the obsolete Quicklinks.
Add Task	"Managing Tasks" on page 11-1
View Menu	
Content History	Lists every version of the content available in Ektron CMS400.NET. After viewing the View Content History window, you can click any version to see its detail. See Also: "Viewing and Restoring Previous Content" on page 7-140
View Approvals	Access the catalog folder's approval chain. See Also: "Approval Chains" on page 5-33
View Permissions	Access the catalog folder's permissions table. See Also: "Folder Permissions" on page 5-56
Cross Sell	Lets you assign cross sell items to this catalog entry. See Also: "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 17-188
Up Sell	Lets you assign up sell items to this catalog entry. See Also: "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 17-188
View Properties	Lets you ■ view the – catalog entry's **product type** See Also: "Product Types" on page 17-106

Menu option	Description
	– Flagging Definitions assigned to the catalog entry's folder See Also: "Flagging" on page 16-236 ■ view and edit the **Content Searchable** setting - The search only considers content if this field is checked. By default, this field is checked when an entry is created.
Reports Menu	
Content Statistics	"Content Rating" on page 7-991
Analytics	Provides a visual display of order information for a selected catalog entry. See Also: "eCommerce Analytics" on page 17-188

Editor View Menu Options

The following options are available when you are editing a catalog entry's content.



Menu Option	Description
Action Menu	
Save	Save the content without leaving the editor. It is a good idea to save your work frequently.
Check in	Save and check-in the document. This action returns the changed content to the database and exits the editor. It does not submit the content into the

Menu Option	Description
	approval chain. Rather, it allows you and other users to continue changing it.
Submit or Publish	**Submit** the content into the approval chain. This action also returns the new or updated content to the database and exits the editor. **Publish** the content to the Web site. Note: Only the last approver in the approval chain sees this button. If no approval chain is assigned to the content's folder, every authorized user sees this button. See Also: "Approval Chains" on page 5-33 This action also returns the changed content to the database and exits the editor.
Undo Checkout	Close the editor without saving changes.
Change Menu	
Comment	Briefly describe the content, or comment on changes made when editing content. The history comment appears on the View Content and Content History screens.
Template	Lets you specify one or more templates for catalog entries in this folder. These entries use the specified template when appearing on your Web site. See Also: "Assigning Templates to Content" on page 7-235

Displaying Catalog Entries on your Web Site

The eCommerce Module provides three server controls for displaying catalog entries on your Web site.

- "Product Server Control" on page 17-154
- "Product List Server Control" on page 17-165
- "ProductSearch Server Control" on page 17-170

Product Server Control

The Product server control allows site visitors to view the details of a product and add it to their cart. To display a product on a Web page, drag and drop a Product server control on a template and enter a product ID in the DefaultProductID property. You could also dynamically pass a product's ID to the control by setting `DynamicProductParameter` property to the QueryString parameter used for product IDs.

This control handles each class of product Ektron provides. This means the Product server control displays Products, Kits, Bundles or Subscriptions without having to make any adjustments to the control.

See Also:

- "Displaying a Product" on page 17-155
- "Displaying a Bundled Product" on page 17-157
- "Displaying a Complex Product" on page 17-158
- "Displaying a Kit" on page 17-159
- "Product Server Control Properties" on page 17-160

Site visitors typically reach this server control when they click a product from either the ProductSearch or ProductList server control. When site visitors clicks a product, title or image in either of these controls, they are forwarded to the Product server control.

In addition, site visitors can reach this control from the Cart server control. In that control, site visitors click a product's title and are taken to the Product server control.

Once a site visitor has viewed the product and decided to purchase it, they click the **Add to Cart** button displayed in the control.

Displaying a Product

A *product* is an item that has no kit, bundle or subscription information associated with it.

When displaying a simple product, the Product server control displays the following information:

Area	Where information comes from
Title (This field is optional.)	The **Title** field in the product's Smart Form. A content editor enters this information when creating a product in the Workarea. This area does not use the title of the product in CMS400.NET's Workarea.
Description (This field is optional.)	The Description field in the product's Smart form. A content editor enters this information when creating a product in the Workarea.
Image Gallery	The Media tab when creating or editing a product. The Gallery Display property for each image on the Media tab must be set to Yes. In the Image Gallery, images are displayed at their smallest size. Once a site visitor clicks an image, the full size version is displayed. Below is an example of a product's image gallery.  See Also: "Entering a Catalog Entry's Media" on page 17-146
Price	The Pricing tab when creating or editing a product. This is the price defined in the **Our Sales Price** area. This is not the list price. See Also: "Entering a Catalog Entry's Price Information" on page 17-140
Add to Cart button	This button appears in the server control when - a path to the Cart server control is defined in the `TemplateProduct` property - the product is buyable. When a product is not buyable, information about the product is displayed, but site visitors cannot add it to their cart. This property is set in the Workarea when creating or editing a product. - the `ShowAddToCart` property is set to True When site visitors click this button, the product is added to their cart and they are sent to a template containing the Cart server control. You can hide this button by setting the `ShowAddToCart` property to false. This allows you to show details of a product, but not offer it for sale. For example, you have a product that is no longer for sale, but you want to allow people who purchased the product to view its details. Also, by using code behind to dynamically set the property, you could create code that looks at your inventory system and hides the button depending on whether a product is in stock. See Also: "Using the Add to Cart Button with Aliasing" on page 17-157

Using the Add to Cart Button with Aliasing

When a product has an alias path associated with it, you need to do the following:

- Make sure the `TemplateCart` property's path is relative to the site root. For example:
- `TemplateCart="Developer/Commerce/CartDemo.aspx"`
- Add the following to the code behind page. This example is in C#:

```
protected void Page_Init(object sender, EventArgs e)

{

Utilities.RegisterBaseUrl(this.Page);

}
```

Displaying a Bundled Product

A bundled product is made up of multiple products that have been grouped together for sale as one product.

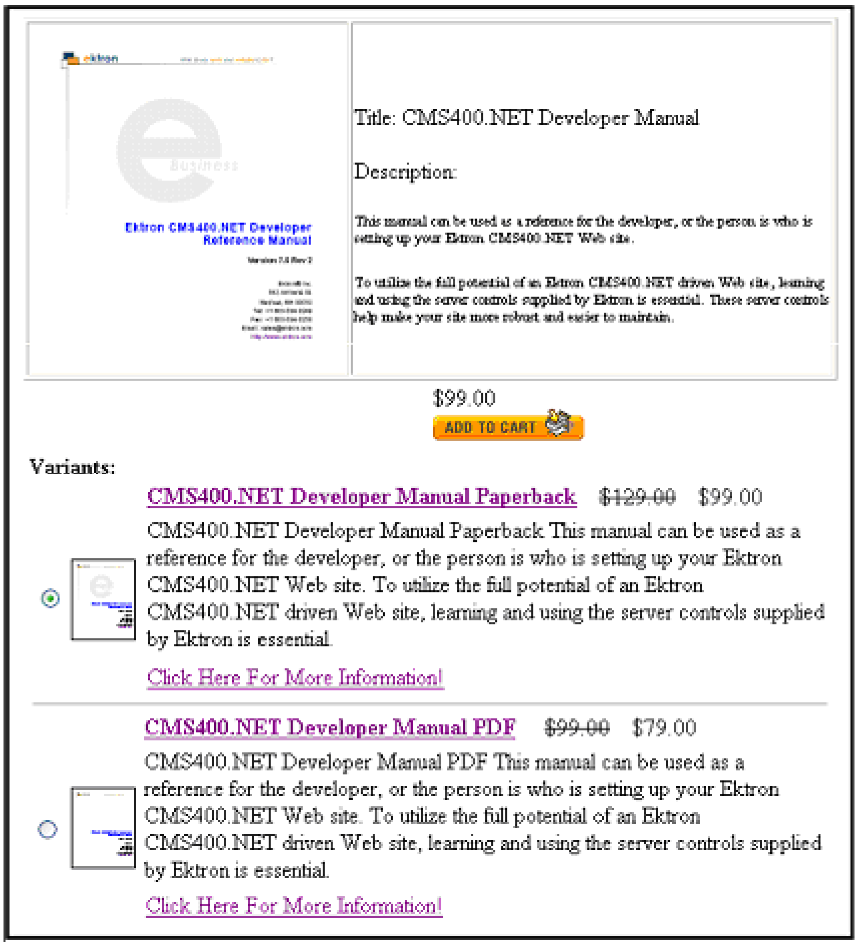
See Also: "Creating a Bundle" on page 17-116

When displaying a bundled product, the Product server control displays all information displayed in a Product as well as the following information.

Area	Where the information comes from:
This Bundle Includes:	Products listed on the **Items** tab for a Product Bundle in the Workarea. A content editor adds existing products to this tab when creating the bundle. Any products on the tab are displayed with the image, title and description for each product. A link to additional information about each product is also displayed.

Displaying a Complex Product

A Complex Product allows the site visitor to choose between variations of a product. For example, if your site sells books, variant selections might be Paperback or Electronic.



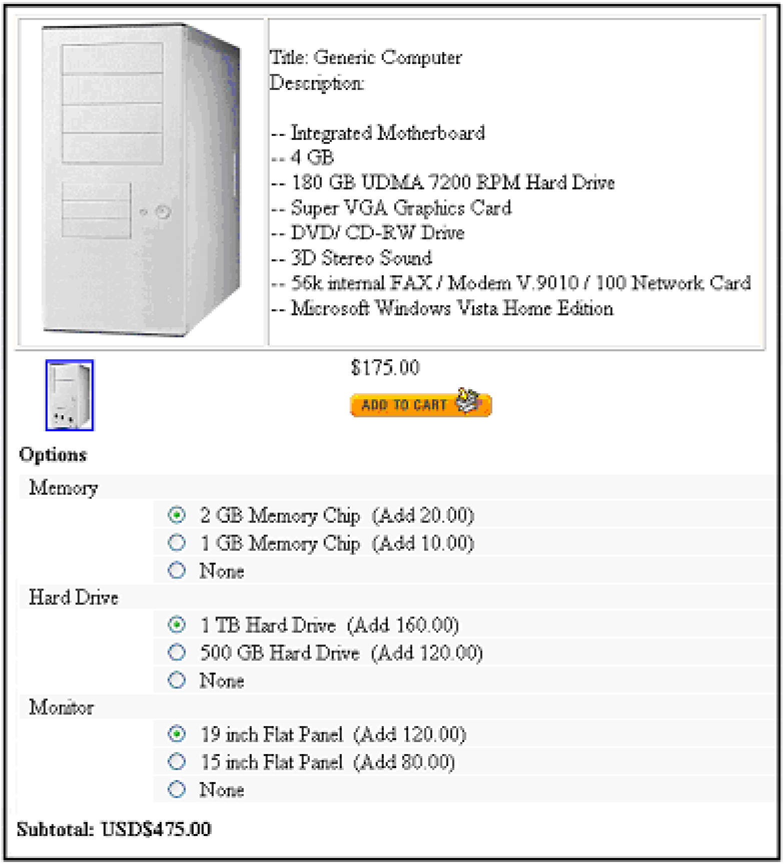
See Also: "Creating a Complex Product" on page 17-117

When displaying a Complex Product, the Product server control displays all of the information displayed in a Product in addition to the following information:

Area	Where the information comes from:
Variants:	Products listed on the **Items** tab. A content editor adds products to this tab when creating content. Products on the **Items** tab are displayed with a radio button, image, title and description. A link to additional information about each product is also displayed. The radio buttons are used to select which product will be added to the cart.

Displaying a Kit

A kit allows the site visitor to select product options, which can affect the product's price. There is no limit to the types of options you can add, nor to the number of items in an option. For example, a site visitor purchasing a computer can add RAM, a hard drive, and a larger monitor.



See Also: "Creating a Kit" on page 17-113

When displaying a kit, the Product server control displays all information displayed in a product in addition to the following information.

Area	Where the information comes from:
Options	The Item tab for a kit in the Workarea. Options are divided into groups. A radio button, name and price appears for each item. The radio button allows you to select one item from each group.
Subtotal:	The updated cost of the product with all options.

Product Server Control Properties

The following table explains the properties of the Product control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
AddToCartAction This property is has been removed. If it is not added back in by the release, remove.	Specifies the action to take when an item is added to the cart. Choices are: **GoToCartPage** - once the site visitor clicks the **Add to Cart** button, the item is added to his cart and he is taken to the page containing the Cart server control. This option has been suppressed by Scott K. Per Defect #40615 **StayOnPage** - once the site visitor clicks the **Add to Cart** button, the item is added to his cart, but he remains on this page. If you are using StayOnPage, Ektron recommends that you add a link to a master page or menu that allows a user to navigate to the template containing the Cart server control.	AddToCartActionType
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections,	String

Property	Description	Data Type
	etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set the `CacheInterval` property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42.	Double
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-49	String
DefaultProductID	Enter a default product's ID. This is the default product that's displayed when the template containing this control is viewed by a site visitor and a product ID is not dynamically passed. To make this server control dynamic, enter zero (0) for this property and set the `DynamicProductParameter` to the QueryString parameter used to pass the product ID.	Integer
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `product.xsl`. This file is located in `<SiteRoot>\Workarea\Xslt\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade. See Also: "The OverrideXslt and DisplayXslt Properties" on page 17-163	String
DynamicParameter	The QueryString parameter name which is used to read the product ID. For example, if your QueryString parameter for products is ID, enter that in this property. Then, when site visitors views a product's details, the product's ID is passed to this control.	String

Property	Description	Data Type
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
ImageGallery	Determine if the image gallery is displayed along with a product's information. Images that appear in the gallery are set in the Workarea's Media tab when creating or editing a product. The Gallery Display property for each image on the Media tab must be set to Yes. Note: To set images on the Media tab, thumbnail information must be defined on the Media Defaults tab at the Product Type level. See Also: "Media Defaults Tab" on page 17-113 Choices are: **List** = display gallery images **None** = hide gallery images In the Image Gallery, images are displayed at their smallest size. If a site visitor clicks an image, a full size version is displayed. See Also: "Image Gallery" on page 17-156	ImageGalleryType
Language	Set a language for viewing product information. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
OverrideXslt	Specifies an XSLT identified in the Edit Product Type Configuration screen. See Also: "The OverrideXslt and DisplayXslt Properties" on page 17-163.	Integer

Property	Description	Data Type
ShowAddToCart	Set to true if you want to the **Add to Cart** button to appear. The default is True. See Also: "Add to Cart button" on page 17-156 Setting this property to false allows you to show details of a product, but not offer it for sale. For example, you have a product that is no longer for sale, but you want to allow people who purchased the product to view its details. Also, by using code behind to dynamically set the property, you could create code that looks at your inventory system and hides the button depending on whether a product is in stock. You could also accomplish this for a specific product by removing the check from the Buyable property when creating or editing a product in the Workarea.	Boolean
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
Stylesheet	Specify the location of a style sheet to use for the product page. Set the location relative to the site root folder.	String
TemplateCart	Enter the URL path of the template that contains the Cart server control. This path can be relative or absolute. See Also: "Cart Server Control" on page 17-3 and "Using the Add to Cart Button with Aliasing" on page 17-157.	String

The OverrideXslt and DisplayXslt Properties

The `DisplayXslt` property is optional. If used, it specifies an external XSLT file. If the `DisplayXslt` property is not defined, the `OverrideXslt` property specifies an XSLT identified in the Edit Product Type screen. The following table provides more information about these properties.

<table>
<tr><th>To use this display XSLT</th><th>Enter this value for DisplayXslt</th><th>Enter this value for OverrideXslt</th></tr>
<tr><td>The default XSLT specified in the Edit Smart Form Configuration screen (illustrated below). Note that, in this example, the XSLT Packaged option is the default XSLT, since it is selected.

XSLT Packaged is the XSLT from the Edit Smart Form Configuration screen (that is, the XSLT created in the Data Designer).

</td><td></td><td>0</td></tr>
<tr><td>XSLT 1 from the Edit Smart Form Configuration screen</td><td></td><td>1</td></tr>
<tr><td>XSLT 2 from the Edit Smart Form Configuration screen</td><td></td><td>2</td></tr>
<tr><td>XSLT 3 from the Edit Smart Form Configuration screen</td><td></td><td>3</td></tr>
<tr><td>An absolute or relative path to an XSLT file.</td><td>An external XSLT file not specified in the Edit Product Type Configuration screen.

For example
<code>sample.xslt</code></td><td>does not matter - if XSLT value exists, OverrideXSLT is ignored</td></tr>
</table>

Product List Server Control

The ProductList Server control displays a list of products on a Web page.

You decide which products appear by selecting a `SourceType` and populating either the `SourceId` or the `IdList` property, depending on the source type. You can choose from these source types.

Source Type Table

If you want to:	Set the SourceType property to:	In the SourceId property, enter:	In the IdList property, enter:
Display all products for a selected catalog	Catalog	The ID of the catalog.	
Display all products across multiple catalogs	CatalogList		A comma separated list of catalog IDs
Display all products for a selected taxonomy	Taxonomy	The ID of the Taxonomy.	
Displays all products across multiple taxonomies	TaxonomyList		A comma separated list of taxonomy IDs
Display a list of products	IdList		A comma separated list of product IDs

Sorting the Product List

The ProductList server control allows a site visitor to sort by: Title, SKU, Price High to Low, Price Low to High, Highest Rated, Lowest Rated and Most Ratings. You can set the default sort order by setting the `SortMode` property.

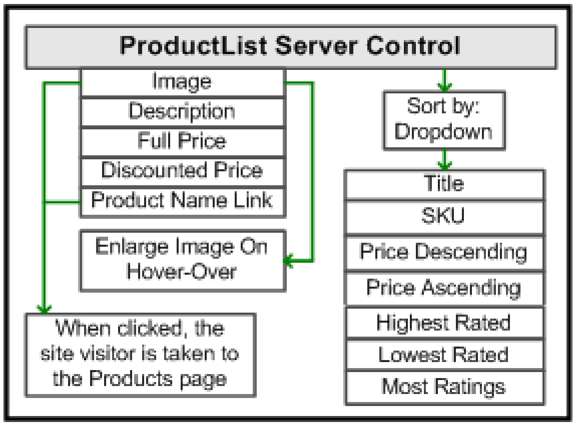
For the Highest Rated, Lowest Rated and Most Ratings sorting options to work as intended, you should have ContentReview server control associated with each product. (See Also: "ContentReview Server Control" on page 7-736) This allows site visitors to rate your products.

For example, place a ContentReview control on the Master page of the template that display products, and set its `DynamicParameter` property to ID. Then, when site visitors view the product, they can rate and comment on it.

Flow of the ProductList Server Control

There are several ways site visitors might arrive at the ProductList server control, such as

- when a list of products appears on the side of a page
- through a link in a master page
- when they click the **Continue Shopping** button on the Cart or Checkout server control.



ProductList Server Control Properties

The following table explains the properties of the ProductList server control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set the `CacheInterval` property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31	Double
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-37	String

Property	Description	Data Type
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `ProductList.xsl`. This file is located in `<SiteRoot>\Workarea\Xslt\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
DynamicParameter	Sets the QueryString parameter to read a source's ID dynamically. For example, if your QueryString parameter for a source ID is SID, enter that. See Also: "SourceId" on page 17-169.	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
IdList	Enter a comma separated list of IDs when the `SourceType` property is set to IdList, TaxonomyList or CatalogList. See Also: "Source Type Table" on page 17-166	String
Language	Set a language for viewing a product list. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LoadingImage	The image to display while the Product List is loading. The default is `<siteroot>\Workarea\images\application\ajaxloader_circle_lg.gif`.	String
PageSize	Specify the number of items to show per page when a site visitor views the product list. If the number of items exceeds the quantity defined in this property, the list is paged and the site visitor can use the paging navigation system to move through the list.	Integer
PageSpan	The number of pages to show before and after the current page. Enter zero to show all pages. For example, if you set this property to 2 and you are on page four of the product list, you see: First ... 2 3 4 5 6 ... Last	Integer

Property	Description	Data Type
SortMode	Select the default way the product list is sorted when a site visitor first views the page. Once the page is loaded, a site visitor can change the sort via a drop down list. Choices are: **Title** - sorts in alphabetical order. **SKU** - sorts by the product number. This number is typically a unique number supplied by the producer of the product. **Price Descending** - sorts by price from highest to lowest. **Price Ascending** - sorts by price from lowest to highest. **Highest Rated** - sorts by rating from highest to lowest. **Lowest Rated** - sorts by rating from lowest to highest. **Most Rated** - sorts by products that have most ratings from highest to lowest.  See Also: "Sorting the Product List" on page 17-166	SortModes
SourceId	The ID of the catalog or taxonomy that is being used as a product list. This property is used when the `SourceType` property is set to Catalog or Taxonomy. See Also: "Source Type Table" on page 17-166	Integer
SourceType	The type of source being used to create the list. Choices are: **Catalog** - use the `SourceId` property to specify the ID of a single catalog when this source type is selected. **CatalogList** - use the `IdList` property to specify a list of catalog IDs when this source type is selected. **Taxonomy** - use the `SourceId` property to specify the ID of the single taxonomy when this source type is selected. **TaxonomyList** - Use `IdList` property to specify a list of taxonomy IDs when this type is selected. **IdList** - Use the `IdList` property to specify a list of product IDs when this source type is selected. See Also: "Source Type Table" on page 17-166	SourceObjectType
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**.	Boolean

Property	Description	Data Type
	True - Suppress wrap tags. **False** - Allow wrap tags.	
TaxonomyDepth	Enter the number of taxonomy levels to retrieve below each taxonomy/category. Only the top level is displayed in the control. The rest of the levels are available through XML in code behind. For example, if the taxonomy is **DVDs > Movies > Comedies**, and you set **Taxonomy Depth** to **2**, only DVDs and Movies are available in code behind. To retrieve all categories for a taxonomy recursively, enter -1. A depth greater than 1 or using -1 is only useful if you create a custom output using the Taxonomy's XML. The default value is 1. - For a live site, Ektron strongly recommends leaving this value at **1**. Increasing this value can slow down your live Web server. However, for testing on a staging server, you can increase the depth.	Integer
TemplateProduct	Specify the URL that contains the Product server control. This allows a site visitor to see the details of the product when the product link is clicked.	String

ProductSearch Server Control

The ProductSearch server control allows site visitors to search for products on your site. Products are the same as catalog entries in the Workarea. For an eCommerce site, the ability to find products or services on your site is key to generating more sales.

The ProductSearch server control is based on Ektron's WebSearch server control. Products are similar to content, and information about them is stored in Ektron's Indexing Catalogs. This provides extremely fast results without impacting the load on your database.

For information on how the Indexing Service works with search, see "The Catalog and Index Files" on page 9-7.

Note: While the ProductSearch server control is based on the WebSearch server control, some functionality described in "Searching Your Web Site" on page 9-4 does not apply to the ProductSearch server control. For example, the ProductSearch only searches for products added to a Catalog in the Workarea. It does not find images, documents or multimedia.

When you place a ProductSearch server control on a Web page, and a site visitor browses to it, he sees the following.

The control is divided into two sections:

- Basic Search (shown above)
- Advanced Search (access this by clicking the Advanced Search tab from the Basic Search screen)

Basic Search

The Basic Search finds content that satisfies these criteria.

- published
- active (archived content is ignored)
- its Searchable check box is checked. See Also: "The Content Searchable Field" on page 17-174.
- public. However, private content is available to those with permission to view it, such as membership users after logging in. See Also: "Private Content" on page 7-237
- resides in the CMS catalog specified in the ProductSearch server control's `CatalogId` property, or in one of that folder's subfolders if the control's `Recursive` property is set to true
- satisfies text and/or query entered in the search box (no value returns nothing)
  - The text inserted in the search field can appear in the content or metadata

Searching Multiple Terms

If a site visitor enters several terms, the search only returns pages that include all terms. This is known as an 'and' relationship. For example, if the site visitor enters cancer and cure in the Search box, only content that includes both terms (and satisfies the other criteria) appears.

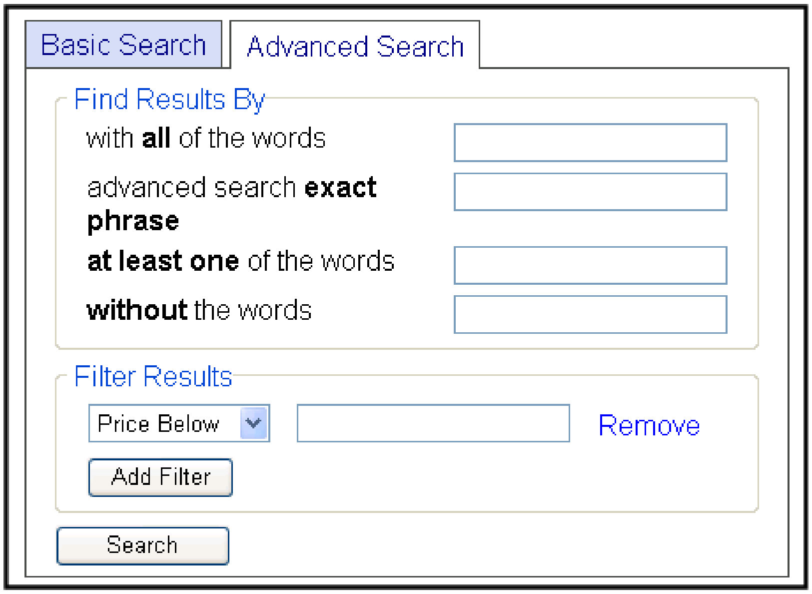
Ektron uses an 'and' relationship because we believe it's what a site visitor expects. Consider a simple Google search – the more you enter into the Google Search text box, the fewer results you get, since your phrase is more precise.

The advanced search screen, on the other hand, lets the site visitor determine if he wants an and, or, not, or exact phrase relationship.

Advanced Search

The Advanced Search uses nearly all the same search criteria as the Basic Search. See Also: "Basic Search" on page 17-171.

The differences are additional options and filters (explained below) and the fact that you cannot use queries.



Advanced Search Options

Search Option	Finds these pages
with all of the words	Web page must include all submitted terms; their position on the page does not matter. You cannot enter queries into this field.
advanced search exact phrase	Web page must include the exact phrase. For example, if you enter **Large Round Window**, a page with the term **Large Round Tinted Window** is not found because it is not an exact match.
at least one of the words	Web page can include any one of the submitted terms.
without the words	Web page contains none of the submitted terms. Only use this option if you also reply to one of the three fields above.

Advanced Result Filters

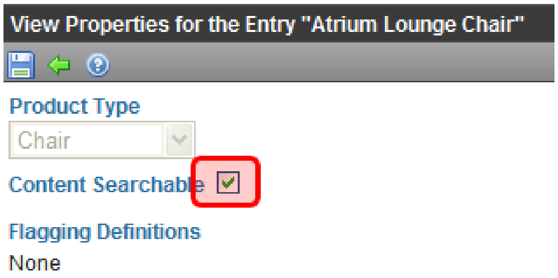
Below the Advanced Search Options is a list of additional fields you can use to refine the search. These are titled Filter Results.

Result Filter	Prompts site visitor to enter
Price Below	the highest price for which a site visitor is willing to search. This is based off of a product's Sale Price not its List Price.
Price Above	the lowest price for which a site visitor is willing to search. This is based off a product's Sale Price not its List Price. For example, if you are searching for a product above $350.00, products that lists for $400.00 and are on sale for $300.00 do not show up in the results.
Product SKU	the Stock Keeping Unit for product. This information is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137

To add a filter, click Add Filter. To remove a filter, click Remove to the right of the filter.

The Content Searchable Field

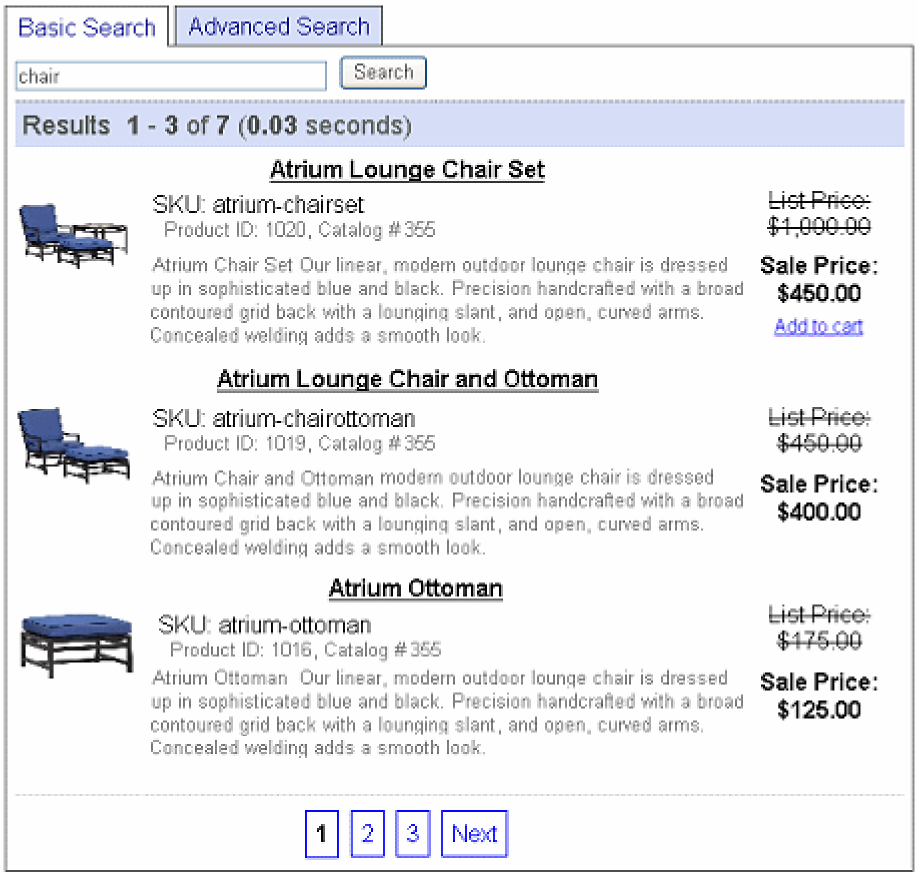
Each content item includes a **Content Searchable** field. The search only considers catalog entries whose field is checked. See illustration below.



By default, this field is checked when a product is created.

Display of Search Results

Below is an example of the ProductSearch server control's results page. You can customize it through the use of XSLTs and CSS files.



Optionally, below the search box, a **Filter by Category** link can appear. When you set the `ShowCategories` property to True, a site visitor can click it to see a folder structure of taxonomy categories. He can then select categories of interest. When he does, only products that include the search term and which are assigned to the selected categories appear.

Note: Filtering by category works the same way as in the WebSearch server control. See the section "Filtering Search Results by Category" on page 9-99 in that chapter for additional information.

Query Language

Searching by Query Language is described in "Query Language" on page 9-65. This functionality works the same for product searches as it does for Web searches except for properties related to documents, images and multi-media. Instead, the following properties can be queried for products.

Product Search Query Properties Table

Property	Descriptions	Example	Results
edescription	Searches only the description of a product for the matching text. The description of a product is set in the **Content** tab's editor for a product in the Workarea. See Also: "Creating a Product Type Step 2: Creating the Content Page" on page 17-124	@edescription chair	Products with "chair" in the description.
eheight	Searches based on the height of a product. The height of a product is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137	@eheight = 40	Products that have a height equal to 40 inches or centimeters.
		@eheight > 40	Products that have a height greater than 40 inches or centimeters.
		@eheight < 40	Products that have a height less than 40 inches or centimeters.
eimage	Searches based on an image name associated with a product; for example, chair.jpg. Images are associated with a product when they are added to a product's **Media** tab in the Workarea. See Also: "Entering a Catalog Entry's Media" on page 17-146	@eimage chair.jpg	Products with an associated "chair.jpg" image.
elength	Searches based on the length of a product. The length of a product is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137"	@elength = 15	Products that have a length equal to 15 inches or centimeters.
		@elength > 15	Products that have a length greater than 15 inches or centimeters.
		@elength < 15	Products that have a length less than 15 inches or centimeters.

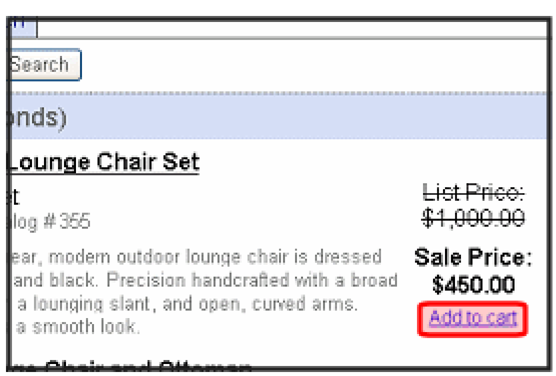
Property	Descriptions	Example	Results
elistprice	Searches based on the list price of the product. The list price for a product is set on the product's **Pricing** tab in the Workarea. See Also: "Entering a Catalog Entry's Price Information" on page 17-140	@elistprice = 299.00 @elistprice > 299.00 @elistprice < 299.00	Products that have a list price equal to 299.00. Products that have a list price greater than 299.00. Products that have a list price less than 299.00.
ereorderlevel	Searches for a product based on its reorder level. The reorder level for a product is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137	@ereorderlevel = 125 @ereorderlevel > 125 @ereorderlevel < 125	Products that have a reorder level equal to 125. Products that have a reorder level greater than 125. Products that have a reorder level less than 125.

Property	Descriptions	Example	Results
esaleprice	Searches based on the sale price of the product. The sale price for a product is set on the product's **Pricing** tab in the Workarea.See Also: "Entering a Catalog Entry's Price Information" on page 17-140	@esaleprice = 249.00 @esaleprice > 249.00 @esaleprice < 249.00	Products that have a sale price equal to 249.00. Products that have a sale price greater than 249.00. Products that have a sale price less than 249.00.
eskunumber	Searches based on the Stock Keeping Unit for product. This information is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137"	@eskunumber 52-154	Products that have a matching SKU.
eunitsinstock	Searches for a product based on its level of units in stock. The units in stock for a product is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137	@eunitsinstock = 63 @eunitsinstock > 63 @eunitsinstock < 63	Products that have a unit stock level equal to 63. Products that have a unit stock level greater than 63. Products that have a unit stock level less than 63.
eunitsonorder	Searches for a product based on the amount of units on order. The amount of units on order for a product is set on the item's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137	@eunitsonorder = 30 @eunitsonorder > 30 @eunitsonorder < 30	Products that have an on order level equal to 30. Products that have an on order level greater than 30. Products that have an on order level less than 30.

Property	Descriptions	Example	Results
eweight	Searches based on the weight of a product. The weight of a product is set on the product's **Properties** tab in the Workarea.See Also: "Entering a Catalog Entry's Properties" on page 17-137"	@eweight = 45 @eweight > 45 @eweight < 45	Products that have a weight equal to 45 units. Products that have a weight greater than 45 units. Products that have a weight less than 45 units.
ewidth	Searches based on the width of a product. The width of a product is set on the product's **Properties** tab in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137	@ewidth = 7 @ewidth > 7 @ewidth < 7	Products that have a width equal to 7 inches or centimeters. Products that have a width greater than 7 inches or centimeters. Products that have a width less than 7 inches or centimeters.

The Add to Cart Link in a Search Result

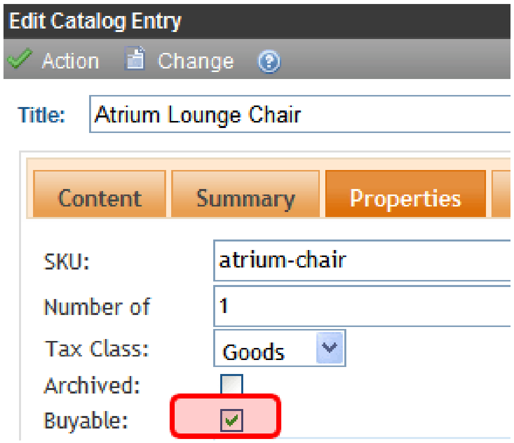
Site visitors can add a product to their cart directly from the search results by clicking an **Add to cart** link in a search result. This link appears below the price and allows them to skip the product's information page and add the product directly to their cart.



By default, this link appears when the following conditions are met:

- The product is a simple product, kit or bundle. The link does not appear for complex product types. In complex product types, site visitors must select one variation of a product. For example, you are selling movies and the site visitor needs to select between either DVD or Blue-Ray format.

The product is buyable. That is, there is a check mark in the **Buyable** property for a product in the Workarea. See Also: "Entering a Catalog Entry's Properties" on page 17-137"



- The product has an **In Stock** quantity of at least one.

- The `TemplateCart` property has a cart's template location defined.

Property Usage Table

Properties in the ProductSearch server control generally affect the control in one of three ways:

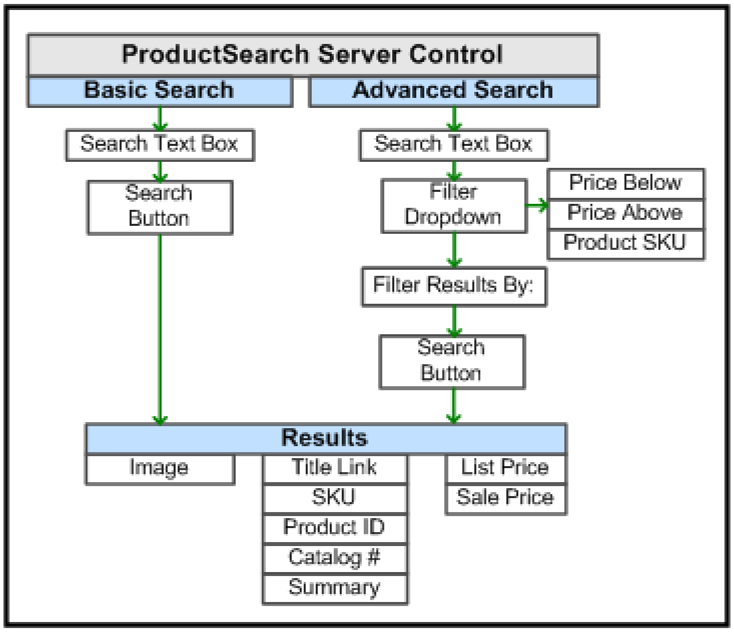
- **Search Display** - the ProductSearch server control's appearance on your site.
- **Search Criteria** - criteria used to search the site
- **Search Results Display** - appearance of search results on your site

The following table shows which properties are associated with each category. See Also: "ProductSearch Server Control Properties" on page 17-182

Search Display	Search Criteria	Search Results Display
ButtonImgSrc	CatalogId	CustomOrderBy
ButtonText	Language	CustomXml
EnableAdvancedLink	Recursive	DisplayXslt
Hide	ShowCategories	Hide
Language	TaxonomyOperator	Language
MaxCharacters		LinkTarget
TextBoxSize		LoadingImage
		MaxTeaserLength
		OrderBy
		OrderDirection
		ResultsPageSize
		ResultTagId
		ShowCustomSummary
		ShowSearchBoxAlways
		Stylesheet
		SuppressWrapperTags
		TemplateCart
		TemplateProduct

Flow of the ProductSearch Server Control

The following image depicts the flow of the ProductSearch Server Control.



ProductSearch Server Control Properties

The following table explains the properties of the ProductSearch control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
ButtonImgSrc	If you want to display an image on the **Submit** button, enter the server path to it.	String
ButtonText	The text used for the **Submit** button if no image source is identified. If an image source is identified, this is alternative text for the button.	String

Property	Description	Data Type
CatalogId	The catalog at which the search begins. The starting folder need not be the root folder. The `Recursive` property determines if the search examines this folder's subfolders. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CustomOrderBy	Provide a property's Friendly Name defined in the Indexing Service to sort search results by that property. Results can be ascending or descending based on `OrderDirection`. If you enter an invalid property, no search results are returned. If you specify `CustomOrderBy` and `OrderBy`, the OrderBy property is ignored. The Friendly Name of a property can be found in **Computer Management** > **Services and Applications** > **Indexing Service** > ***Your Index*** > **Properties** > **Friendly Name column**.	String
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-50	String
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `ProductSearch.xsl`. This file is located in `<SiteRoot>\Workarea\Xslt\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
DynamicProductParameter	The QueryString parameter name which is used to pass the product ID to the product details page. For example, if your QueryString parameter for products is ID, enter that in this property. Then, when site visitors click a product in their search results, this parameter is passed with the product's ID to the product details page.	String

Property	Description	Data Type
EnableAdvancedLink	Set to True to display an **Advanced Search** tab on the ProductSearch control. 	Boolean
Hide	Used to hide ProductSearch Server Control in design time and runtime. **True** = Hide control **False** = Show control	Boolean
Language	If the template on which this server control resides includes a language selection control, and you want to let the site visitor select the language, enter zero (0). Otherwise, click the field, then the ellipsis button (...) and a popup box appears. Select a language from the list. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Defines how a link on the search results display acts when clicked. The choices are: **_blank** - loads the link in a new blank window. This window is not named. **_self** - loads the link in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - loads the link in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - loads the link in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	String
LoadingImage	The image to display while the product search is loading. The default is `ajaxloader_circle_lg.gif.` This file is located in: `<siteroot>\Workarea\images\application`	String

Property	Description	Data Type
MarkupLanguage As of 7.6.1 this property does not work. It should work in a future release.	Identify the template markup file that controls the display of search results. For example, myproductsearchmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\siteroot\workarea\customfiles\markup\myproductsearchmarkup.ekml`. If you enter a valid EkML file, the `Displayxslt` and `Stylesheet` property values are ignored. See Also: "Ektron Markup Language" on page Right.	String
MaxCharacters	The maximum number of characters the **Search** text box accepts. If you enter a value less than 50, set the `TextBoxSize` property to the same number.	Integer
MaxTeaserLength	Limits the length of any returned content's abstract. To allow unlimited length, set to zero. This property is active only if both of these conditions are true. you use `the` DisplayXslt property to identify an XSLT and `ecmteaser` as a value of that property. the `ShowCustomSummary` property is set to **false**. If `ShowCustomSummary` is set to **true**, the entire summary appears in search results.	Integer
OrderBy	The order of search results. For example, you want to sort search results by last modified date. **Note**: The **Order Direction** field determines the *direction* of the search results. For example, if you sort by ID and **OrderDirection** is set to **Descending**, the results sort by ContentID number with the highest number at the top of the list.	String
OrderDirection	The direction in which search results are sorted. The default is **Ascending**. **Ascending** - Alphabetical results from A to Z; numeric values low to high; dates from oldest to most recent **Descending** - Alphabetical results from Z to A; numeric values high to low; dates from most recent to oldest	String
Recursive	Set to True to search sub-folders of the starting folder. The starting folder is identified in the `CatalogID` property.	Boolean

Property	Description	Data Type
ResultsPageSize	Set the maximum number of results on a page. If a search returns more than this number of results, the following text appears below the last one: Result Page: 1 2 3 Next The site visitor can click **Next** or a number to view additional results. **This property defaults to the value set at the** `ek_PageSize element` **in the** `web.config` **file.Property's Effect on Suggested Results** Only the number of Suggested Results up to this maximum appear. If more than this number should display, they do not. This is unlike natural search results, whose additional links are available via numbers below the maximum page size. See Also: Ektron CMS400.NET Administrator Manual "Searching Your Web Site" > "Suggested Results"	Integer
ResultTagId	Lets you designate where search results appear. You can place search criteria in one area of a Web form and the results in another. For example, you have the following tag. `<span id="results"></span>` In this case, enter **results** for this property value. Additional information can be found in the WebSearch server control section "ResultTagId" on page 9-85.	String
ShowCategories	If set to **true**, when this server control appears, the site visitor see a **Filter by Category** option. This option helps a site visitor zero in on relevant content. If **false**, the **Filter by Category** option does not appear. **Note**: To see the **Filter by Category** option, the `ShowSearchBoxAlways` property must be set to `true`. Additional information can be found in the WebSearch server control section "Filtering Search Results by Category" on page 9-99.	Boolean
ShowCustomSummary	If set to **true**, the search results display the content item's summary instead of the characterization. **Note:** If this property is set to **true**, the `MaxTeaserLength` property is ignored. So, the entire summary appears with search results, regardless of length. If **false**, the search results display the characterization. The default is **false**. See Also: "Display of Search Results" on page 9-30	Boolean

Property	Description	Data Type
ShowSearchBoxAlways	If set to **true**, the search box appears on the PostBack screen. If **false**, the search box does not appear on the PostBack screen. The default is **true**.	Boolean
Stylesheet	Specify the location of a style sheet to use for the search results page. Set the location relative to the site root folder. For example: `Workarea\csslib\mytest.css`	String
SuppressWrapperTags	Suppresses the output of span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TaxonomyOperator	Select whether to use an **And** or **Or** operator when filtering results by taxonomy. By default, the property is set to **Or**. This allows for a wider range of returned results. **And** - Only results that match all categories selected in the Filter by Category tree appear. For example, if you are searching for a medical document in the Hospital and Doctor's Office categories, the document must be assigned to both categories or it is not shown. **Or** - when more than one category is selected in the Filter by Category tree, results must match at least one category to be shown. **Note:** For this property to be active, the `ShowCategories` property must be set to **True**. See Also: "Filtering Search Results by Category" on page 9-99	Enum - TaxCategoryOperator
TemplateCart	Controls whether the **Add to Cart** link appears with search results. Enter the URL path of the template that contains the Cart server control. This path can be relative or absolute. See Also: "The Add to Cart Link in a Search Result" on page 17-179 and "Cart Server Control" on page 17-3.	String
TemplateProduct	Specify the URL that contains the Product server control. This allows a site visitor to see the details of the product when the product link is clicked. This path can be relative or absolute.	String
TextBoxSize	The size of the **Search** text box for user input. The width is based on the number of characters.	Integer

eCommerce Analytics

The eCommerce Analytics screen provides a visual display of order information for a selected catalog entry.

- The top left section graphs the quantity of this catalog entry ordered over the past seven days
- The top right charts the number of orders that used a coupon versus the number that did not
- Below that pie chart is another that shows the number of returning customers versus the number of new ones
- The lower part of the screen shows the following order information
  - order number
  - date/time when order was entered
  - site from which order was entered
  - order status
  - customer information: new or returning, name, number of orders entered, value of all orders entered, average order monetary value
  - order monetary value
  - whether or not a coupon was used

eCommerce Recommendations

Adding Cross Sell and Upsell Recommendations to a Catalog Entry

Cross sell and upsell tactics are designed to increase the amount of cart sales.

Cross sell offers items related to a catalog entry. So, for example, if someone is purchasing a digital camera, cross sell items might be a carrying bag, digital photo printer, larger memory cards, additional warranty, etc.

Up Sell refers to similar but more expensive items. So, for example, if someone is viewing a 7 megapixel digital camera, upsell items might be a 10 megapixel camera, or a digital SLR camera.

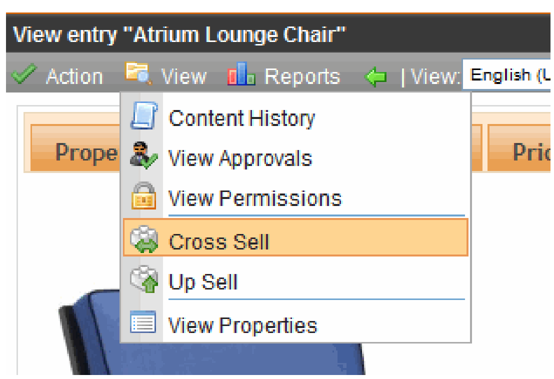
The following sections explain how to assign cross sell and up sell items to any catalog entry, and how to display those options on your Web site.

See Also:

- "Assigning Cross Sell and Upsell Items to a Catalog Entry" on page 17-189
- "Displaying Cross Sell and Upsell Items on Your Web Site" on page 17-190

Assigning Cross Sell and Upsell Items to a Catalog Entry

1. Open the catalog folder containing the catalog entry to which you want to assign cross sell items.
2. Click that entry.
3. Click **View** > **Cross Sell** or **View Upsell**.

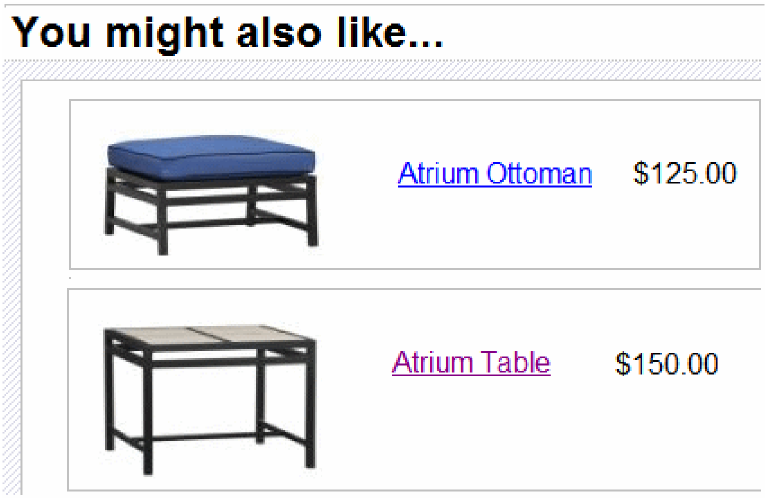


4. Click the Add button ( ).
5. A screen displays all catalog folders.
6. Open the folder that contains the cross sell or upsell catalog entry.
7. Click that catalog entry.
8. Press **OK**.
9. Enter additional cross sell entries as needed.
10. Click **Action** > **Save**.

Displaying Cross Sell and Upsell Items on Your Web Site

Use the Recommendation server control to place cross sell or upsell items anywhere on a Web page. A single control can only show *either* cross sell *or* upsell items.

See Also: "Recommendation Server Control" on page 17-190



Recommendation Server Control

Prerequisite: Cross sell or upsell products have been assigned to a catalog entry. See Also: "eCommerce Recommendations" on page 17-188

The Recommendation server control allows you to cross-sell or up-sell products to a site visitor based on another product's ID. After a user creates a product in the Workarea, he can define a list of other products he wants to associate with the newly-created product. This can be done while viewing a product in the Workarea and selecting the View menu > Cross Sell or Up sell. Then, by adding the Recommendation server control to a Web form that contains a Product server control, the site visitor sees the recommendations when he views the details of the product.

Typically, this control appears on a page along with a "Product server control." By using this control in conjunction with the Product control, a site visitor can view the details of a product and also receive suggestions on additional purchases. A site visitor can click the title to view the suggested product to view its details.

For example, if your site is selling a hat, mitten and scarf set, you might use this server control to cross-sell winter jackets. You could also use the control to up-sell a more expensive hat, mitten and scarf set, or a set that includes additional items.

For information on adding cross sell and upsell information to a product in the Workarea, see "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 17-188”.

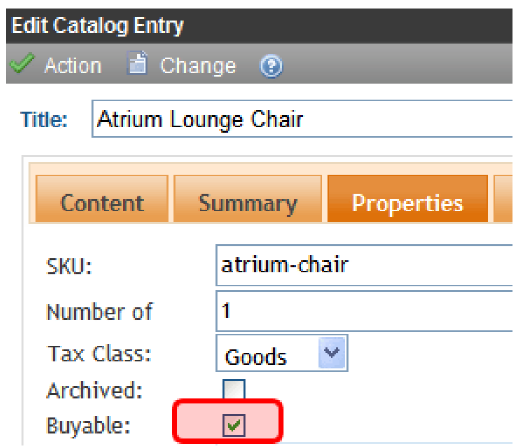
Setting the `RecommendationType` property determines whether the Recommendation server control is used for up-selling or cross-selling.

Enabling the Add to Cart Button

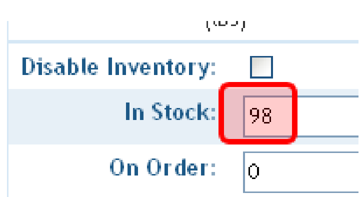
Site visitors can add a product to their cart directly from the Recommendation server control by clicking an **Add to cart** button next to a product. This link appears below the price and allows them to skip the product’s information page and add the product directly to their cart.

By default, this button appears when the following conditions are met:

- The product is buyable. That is, there is a check mark in the **Buyable** property for a product in the Workarea. See Also: "Buyable" on page 17-138”



- The product has an **In Stock** quantity of at least one.



- The `TemplateCart` property has a cart’s template location defined.

In addition, when a product has an alias path associated with it, you need to do the following:

- Make sure the `TemplateCart` property’s path is relative to the site root. For example:

```
TemplateCart="Developer/Commerce/CartDemo.aspx"
```

- Add the following to the code behind page. This example is in C#:

```
protected void Page_Init(object sender, EventArgs e)
{
Utilities.RegisterBaseUrl(this.Page);
}
```

Recommendation Server Control Properties

The following table explains the properties of the Recommendation control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set the `CacheInterval` property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-49	String
DefaultProductID	Enter a default product ID that contains either cross sell or up sell products. To make the server control dynamic, enter zero (0) in this property and set the `DynamicProductParameter` to QueryString parameter used to pass the product's ID.	Integer

Property	Description	Data Type
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `Recommendation.xsl`. This file is located in `<SiteRoot>\Workarea\Xslt\Commerce` **Warning! Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
DynamicCartParameter	The QueryString parameter name which is used to pass the product ID to the Cart server control. For example, if your QueryString parameter for products is Product, enter that in this property. Then, when site visitors click the **Add to Cart** button, this parameter is passed with the product's ID Web form containing the Cart server control. See Also: "Cart Server Control" on page 17-3	String
DynamicProductParameter	The QueryString parameter name which is used to pass the product ID to the product details page. For example, if your QueryString parameter for products is ID, enter that in this property. Then, when site visitors click a product's title, this parameter is passed with the product's ID to the product details page.	String
Hide	Used to hide the Server Control in design time and runtime. **True** = Hide control **False** = Show control	Boolean
Language	If the template on which this server control resides includes a language selection control, and you want to let the site visitor select the language, enter zero (0). Otherwise, click the field, then the ellipsis button (...) and a popup box appears. Select a language from the list. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer

Property	Description	Data Type
MarkupLanguage As of 7.6.1 this property does not work. It should work in a future release.	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 3636.	String
PageSize	Specify the number of items to show per page when a site visitor views recommendations. If the number of items exceeds the quantity defined in this property, the list is paged and the site visitor can use the paging navigation system to move through the list.	Integer
RecommendationType	The type of recommendation to show. Choices are: - **CrossSell** - used to help sell additional products that a site visitor might be interested in. For example, if you are selling Denim Jackets, you might want to cross sell them pants or shirts. - **UpSell** - used to sell additional products that improve on the product being purchased. For example, if you are selling 7 megapixel digital cameras, you might want show the site visitor 10 megapixel digital cameras. See Also: "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 17-188 Data Type: EkEnumeration.RecommendationType	
Stylesheet	Specify the location of a style sheet to use for the recommendation. Set the location relative to the site root folder. For example: `Workarea\csslib\mytest.css` Leave blank to use the default style sheet.	String
SuppressWrapperTags	Suppresses the output of span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

Property	Description	Data Type
TemplateCart	The URL to navigate to when the site visitor clicks the **Add to Cart** button. This path can be relative or absolute. When a path is entered, the **Add to Cart** button appears next to the product and allows a site visitor to add the product directly to their cart. See Also: "Enabling the Add to Cart Button" on page 17-191 and "Cart Server Control" on page 17-3.	String
TemplateProduct	Specify the URL that contains the Product server control. This allows a site visitor to see the details of the product when the product link is clicked. This path can be relative or absolute.	String

eCommerce Order Management

The fulfillment aspect of eCommerce involves

- tracking submitted orders, including
  - order status
  - charge capture
  - shipping
  - cumulative sales information on customers

For more information, see "Orders" on page 17-197.

- customer information, such as
  - orders submitted
  - addresses
  - current shopping carts

For more information, see "Customer Information" on page 17-211.

Orders

The orders screen provides information about all orders in your eCommerce system. To access it, go to **Ektron CMS400.NET Workarea > Settings > Commerce > Fulfillment > Orders**.

Warning! In order to process orders, the Distributed Transaction Coordinator (DTC) Windows service must be running. It is started by default when you install Ektron CMS400.NET.

Orders

Reporting

Id	Date	Site	Status	Customer
10003	9/14/2009 2:26:22 PM	ws10196	InProcess	Application Administrator (AA) Orders: 1 Value: USD$350.00 Avg Value: USD$350.00
10002	9/11/2009 2:45:57 PM	ws10196	InProcess	Mike Angelo (Mike Angelo) Orders: 1 Value: USD$500.00 Avg Value: USD$500.00

Initially, orders are sorted by submission date and time, with the most recent at the top.

See Also:

- "Selecting Orders by Criteria" on page 17-198
- "Order Statuses" on page 17-198
- "The View Order Screen" on page 17-199
- "Capturing the Order" on page 17-200
- "Cancelling the Order" on page 17-202
- "Entering a Tracking Number" on page 17-202
- "Marking the Order as Fraud" on page 17-203

Selecting Orders by Criteria

You can select orders by any of the following criteria.

- entry date range
- customer
- catalog entry

To use any filter, click **Reporting** (see below) then the appropriate filter option.

Note: The **Most Recent** menu option is the default select and sort order: all orders with the most recent on top.

See Also: "Orders" on page 17-197

Order Statuses

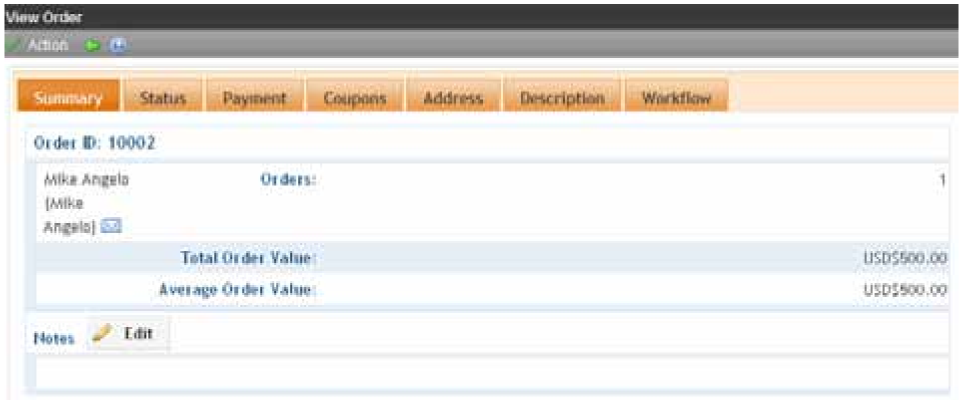
Note: The following table assumes you use the default workflow installed with eCommerce. If you customize the workflow, the following table may be inaccurate. See Also: "Customizing Workflows" on page 17-249"

Status	Description	How Set
Received	Order has been submitted.	Site visitor submits order
Fraud	Your organization has determined that the order is fraudulent.	View Order Screen > Action Menu > Mark as Fraud
Shipped	Order has been shipped Note: This status can be the workflow's end point. You do not need to use the Completed status.	View Order Screen > Action Menu > Ship Order or View Order Screen > Action Menu > Enter/Edit Tracking Number > Check **Mark as Shipped** checkbox and save
Completed	All order activities are finalized. No events can occur to a Completed order.	View Order Screen > Action Menu > Process Order
Cancelled	Order has been cancelled.	View Order Screen > Action Menu > Cancel Order
InProcess	Automatically assigned when order is submitted.	Order placed but not yet captured

The View Order Screen

To view the details of any order, click it. When you do, the View Order screen appears. From this screen you may view the following about the order.

- Summary (shown below)
- Status
- Payment
- Coupons
- Address
- Description
- Workflow



Note: If the View Workflow option does not display a flowchart, verify that the server's Distributed Transaction Coordinator (DTC) Windows service is running. It is started by default when you install Ektron CMS400.NET, but if it stops for some reason, the Workflow does not appear on this screen.

The View Order screen's **Action** menu has the following options.

- Capture - See "Capturing the Order" on page 17-200
- Mark as Fraud - "Marking the Order as Fraud" on page 17-203
- Edit Tracking Number - "Entering a Tracking Number" on page 17-202
- Cancel Order - "Cancelling the Order" on page 17-202

You can also edit the order's billing and shipping addresses. See "Editing an Order's Billing and Shipping Addresses" on page 17-203.

These options are explained below.

Capturing the Order

Authorization versus Capture

Authorization occurs while a customer is using the Checkout server controls. It submits a customer's payment information to a payment gateway, bank, or PayPal, and returns either an approval with an authorization number (transaction ID) or a decline along with an explanation.

Capture is the process of submitting encrypted order information (including the transaction ID) to a payment gateway account, bank, or PayPal. At this time, the account is charged for the order amount.

NOTES

Note: * In many states, you must ship an item before you can charge a customer's credit card for it.
* Items that are not tangible are automatically captured if paid by PayPal or a credit card. See Also: "Tangible Item" on page 17-139

Next, you receive confirmation from the paying agency that the money has been deposited to your account and is available. At this time, you use the **Mark as Settled** option to inform the eCommerce feature that payment has been received. This changes the order status to Complete.

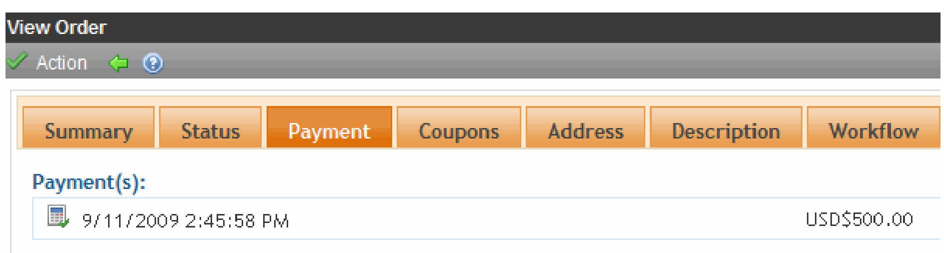
Payment Method	Tangible item	Intangible Item
PayPal or credit card	When goods are shipped	When customer submits order
Check	When check clears	When check clears

See Also: "Payment Options" on page 17-61

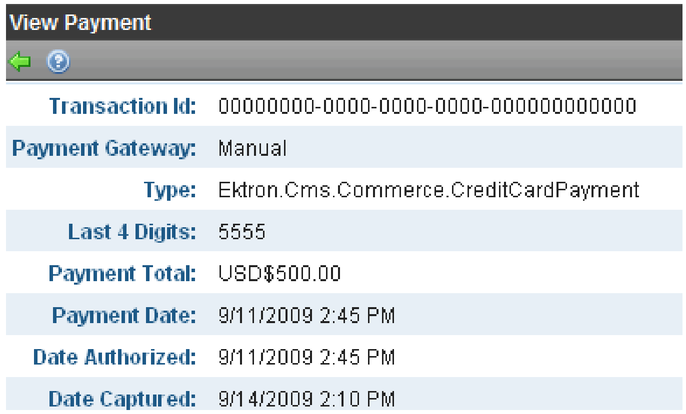
The Capture

To capture an order, follow these steps.

1. **Workarea** > **Settings** > **Commerce** > **Fulfillment** > **Orders**.
2. Click the order that you want to capture.
3. Click the **Payment** link (see illustration below).



4. The View Payment screen appears, showing information about the transaction captured when the site visitor submitted his payment information.



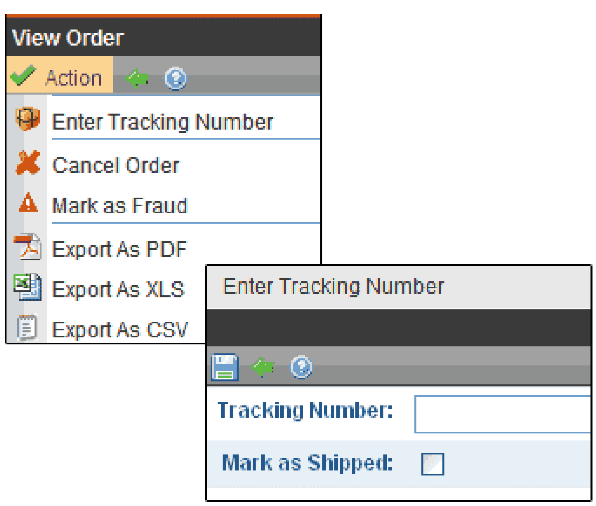
5. Click **Action** > **Capture**.
6. You are asked to confirm the action.
7. Click **OK**.

Cancelling the Order

Click **Action** > **Cancel Order** to stop all processing on the order. If you do, the order's status changes to Cancelled.

Entering a Tracking Number

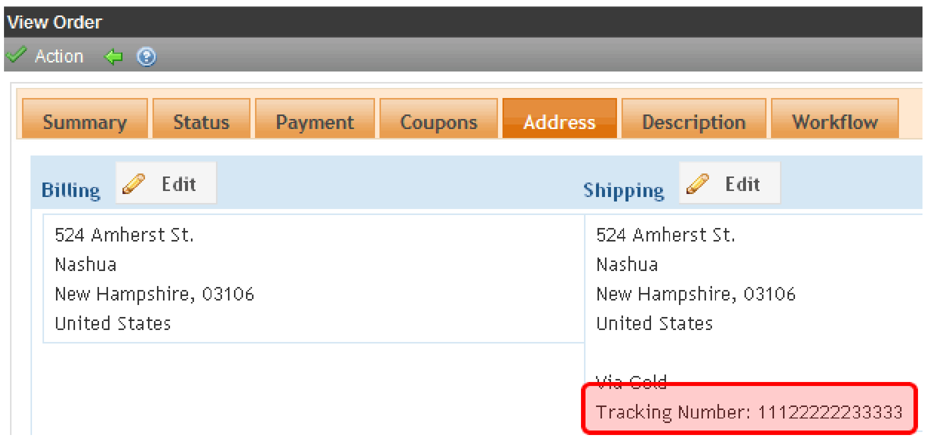
When an order is shipped, the shipping provider typically provides a tracking number to help locate the shipment within the delivery chain. Use the **Enter Tracking Number** option to enter this part of the order information.



After entering the tracking number, you can indicate whether the order has shipped.

Viewing the Tracking Number

You can see an order's tracking number on the View Order screen, under the **Shipping Address** (as illustrated below).



Marking the Order as Fraud

Use this option if your organization determines that the order is fraudulent. These orders cannot be processed any further.

Marking the Order as Shipped

To denote that an order has shipped, follow these steps.

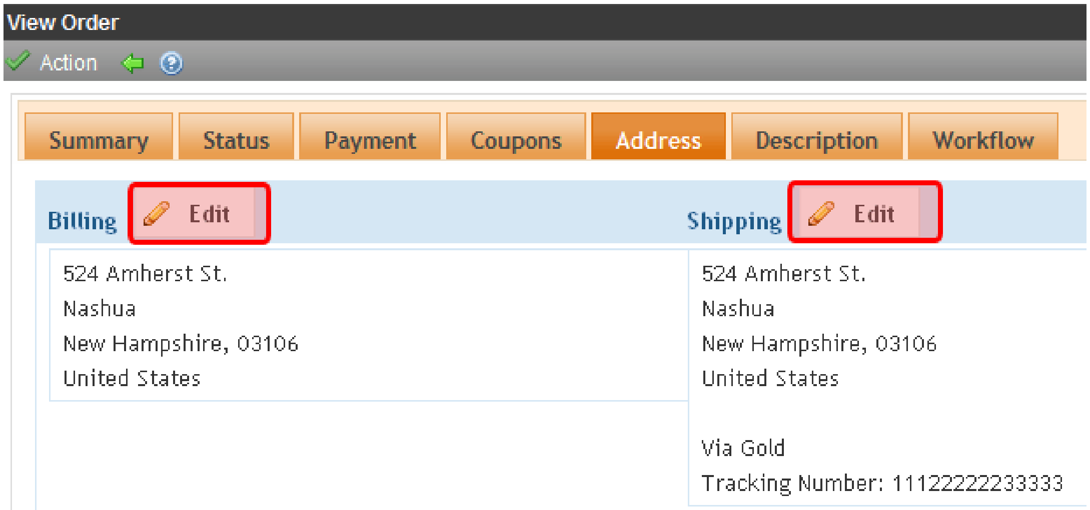
Note: If that order has not yet been captured, it will be captured as part of the shipping of the order.

1. Go to **Settings** > **Commerce** > **Fulfillment** > **Orders**.
2. Click the order that is being shipped.
3. Click **Action** > **Ship Order**.

Alternatively, you can mark the order as shipped while entering its tracking number. See Also: "Entering a Tracking Number" on page 17-202

Editing an Order's Billing and Shipping Addresses

To edit an order's billing or shipping address, click **Edit** as circled below.



Order Workflow

Ektron CMS400.NET uses Microsoft's Windows Workflow Foundation to create and implement order process workflows to handle the ordering process. The workflow can be as simple or complex as your business requires.

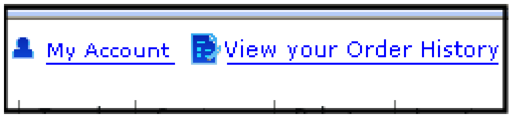
For example, you could have a simple workflow that sends one email to the customer when an order is received, and another to your shipping department. Or, you could have a more complex workflow that:

- sends an email to the customer when the order is received
- checks to see whether the item is a tangible product or a virtual product. Then, continues down the workflow path that's appropriate for the item.
- handles shipping notifications and updates the account throughout the
- shipping process
- handles the order if it is canceled
- handles the order if it is determined to be fraudulent
- marks the order as complete once all activities are finished

For more information on workflows, see "Customizing Workflows" on page 17-249.

OrderList Server Control

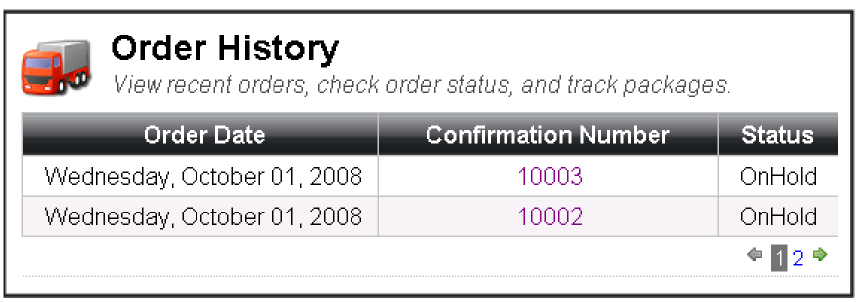
The OrderList server control allows site visitors to view a list of processed orders. Site visitors typically reach this server control by clicking a link on your site, such as the **View Order History** link (shown below).



Site visitors can also reach this control is through a link at the end of the Checkout process. The link appears when the Checkout server control's `TemplateOrderHistory` property contains the path to the template containing the OrderList server control. See Also: "Checkout Server Control" on page 17-16.

Viewing a Site Visitor's Orders List

When site visitors arrive at this server control, they see the View All Orders portion of the server control.



This part of the server control allows site visitors to view a list of submitted orders. They can view the date of each order, its confirmation number and its status. When the number of orders exceeds the number defined in the MaxResults property, the list is paged and a user can navigate from page to page with the links and buttons provided.

A site visitor can click the confirmation number to access (or view) the Order Details screen.

To navigate back to the list of all orders, site visitors click the **View All Orders** button.

Viewing an Order's Details

The order details portion of this control displays the following information.

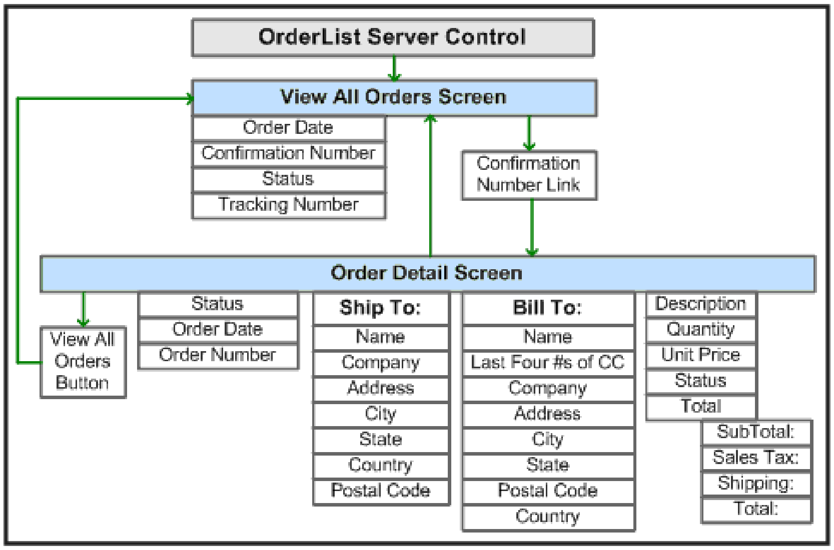
Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Field	Description
Status	The status of the order. See Also: "Order Statuses" on page 17-198
Order Date	The date the order was submitted. This is the date an order went through the checkout process.
Order Number	The ID number of the order.

Field	Description
Ship To:	Information needed to ship the order to customer. The following information is included in this area. Person to which the product is being shipped Company Name (optional) Street Address City and State or Region Country Zip Code Tracking Number - this field appears if a tracking number has been entered in the View Order screen in the Workarea.See Also: "Entering a Tracking Number" on page 17-202"
Bill To:	Displays information about who is being billed for the order. Person paying for the order Credit Card information - For security purposes, only the last four digits appear. Company Name (optional) Street Address City and State or Region Country Zip Code
Description	A list of products in the order. When the path to the product server control is entered in the `TemplateProduct` property, the product's title becomes a hyperlink.
Quantity	The total number of each product.
Sale Price	The per unit price of each product.
Total	The total amount paid for each product ordered. This is the Unit Price multiplied by the Quantity.
Subtotal	The sum of all the order's line products before additional charges or discounts, such as tax, shipping and coupons.
Coupon Total	The total amount discounted, based on all applied coupons.
Tax	The tax amount applied to this order. See Also: "How an Order's Tax Amount is Calculated" on page 17-95
Shipping	This is the amount being charged to ship the order to the recipient. See Also: "eCommerce Shipping Screens" on page 17-85
Total	The sum of all charges, including all line items, tax, shipping and handling.

Flow of the OrderList Server Control

The following image depicts the flow of the OrderList Server Control.



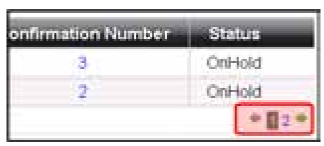
OrderList Server Control Properties

The following table explains the properties of the OrderList control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five	Double

Property	Description	Data Type
	minutes, set the `CacheInterval` property to 300 (three hundred). See Also: ”Caching with Server Controls” on page 21-42	
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: ”Displaying Custom XML in Ektron’s Server Controls” on page 21-49	String
DefaultUserId	The default ID of the user for which to display a list of orders.	Long
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `OrderList.xsl`. This file is located in `<SiteRoot>\Workarea\Xslt\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site’s Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
DynamicProductParameter	The QueryString parameter name which is used to pass the product ID to the product details page. For example, if your QueryString parameter for products is ID, enter that in this property. Then, when site visitors click a product in their order list, this parameter is passed with the product’s ID to the product details page.	String
DynamicOrderParameter	Sets the QueryString parameter name which is used to pass an order ID dynamically. By default, this parameter is OID.	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean

Property	Description	Data Type
Language	Set a language for viewing the OrderList control. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
MarkupLanguage As of 7.6.1 this property does not work. It should work in a future release.	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 3636.	String
MaxResults	Specify the number of orders to show per page when a site visitor views their order history. If the number of orders exceeds the quantity defined in this property, the list is paged and the site visitor can use the paging navigation to move through the list. 	Integer
PageSize	The maximum number of orders to show per page.	Integer
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
TemplateProduct	The URL path of the template that allows a site visitor to view the details of a product in an order. When a path is entered, the product's title becomes a link that allows site visitors to navigate to the template containing details of the product; for example, the template containing a Product server control. See Also: "" on page 17-211.	String

Customer Information

Customers create an account the first time they complete the checkout procedure. The Customers screen provides information about all customers who order from your Web site. The first screen presents the

- customer ID number
- user name
- number of orders
- amount of all orders
- average order amount

You can click any customer's ID number or name to see more details about his order history. The View Customer screen (shown below) provides information about the customer's

- summary information (name, number of orders, total of all orders, average order amount)
- orders (see "Customer Information" on page 17-211)
- addresses
  - You can edit any address or enter a new one (see "Entering a New Customer Address" on page 17-212)
  - Whenever a user creates a new order and enters a new or selects an existing billing/shipping address, that becomes the new default
- shopping carts (see "Viewing a Customer's Shopping Cart" on page 17-213)

The My Account Server Control

While you use this screen to view and update customer information within the Ektron CMS400.NET Workarea, your site visitors use the My Account server control on your Web site to enter and update their information. For more information, see "MyAccount Server Control" on page 17-213.

Entering a New Customer Address

Use this screen to enter a new address for a customer or edit an existing one. It may be used as the default billing address, shipping address, or both.

Use the following table to complete the screen.

Field	Description
Name	Enter the customer's name.
Company	If available, enter the name of the customer's company.
Street Address	Enter the customer's street address.
City	Enter the customer's city.
Postal Code	Enter the customer's postal code.
Country	Select the customer's country from the pull-down list. See Also: "Countries" on page 17-47
State/Province	Select the customer's state or province from the pull-down list. See Also: "Regions" on page 17-50
Phone	Enter the customer's phone number. You can add characters or spaces between groupings if you wish. For example: 603-594-0249.
Default Billing	If you want this address to appear by default as the billing address whenever this customer makes a purchase, check this box.
Default Shipping	If you want this address to appear by default as the shipping address whenever this customer makes a purchase, check this box.

Viewing a Customer’s Shopping Cart

To view active shopping carts for a customer, follow these steps. After viewing the carts, you can delete any of them.

1. **Settings** > **Settings** >**Commerce** > **Customers**.
2. Click a customer ID number.
3. Click the **Baskets** tab.
4. Click the ID number of the shopping cart that you want to view.
5. A View Cart screen shows information for items in the cart.

Deleting a Shopping Cart from the Workarea

Follow these steps to delete a shopping cart from the Ektron CMS400.NET Workarea.

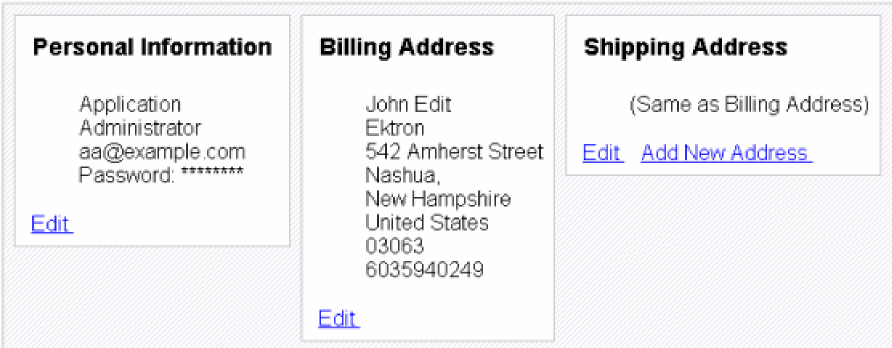
1. Access the View Cart screen by following the steps in "Viewing a Customer’s Shopping Cart" on page 17-213.
2. Click the delete button ( ).
3. A confirmation message appears. Click **OK**.

MyAccount Server Control

The MyAccount server control allows logged in site visitors to view and edit their Personal Information, Billing Address and Shipping Address. If the site visitor is not logged in and arrives at this control, one of the following happens:

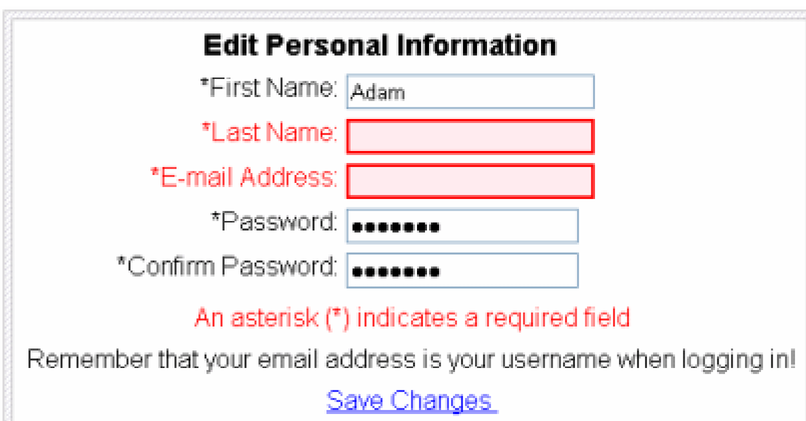
- he receives a message that states he is not logged in. This happens when the server control’s `RedirectUrl` property is empty and the `web.config` file’s `<add key="ek_RedirectToLoginURL" value="" />` value is blank.
- he is redirected to a login page and once logged in, he is sent back to the template containing the MyAccount server control. This happens when either the server control’s `RedirectUrl` property contains the path of a template that contains a Login server

control or when the web.config file’s `<add key=”ek_ RedirectToLoginURL” value=”” />` value is set to the path of a template that contains a Login server control. If the control’s RedirectUrl property and the web.config file contain different locations, the RedirectUrl property in the control overrides the web.config file.



Typically, the information displayed in this control is collected the first time a site visitor goes through the checkout process. A site visitor’s information might appear in the Personal Information area before they have been through the checkout process if they are a current CMS400.NET user or registered membership user.

If a logged in site visitor arrives at this server control and is missing required information, he must enter it before continuing. For example, a site visitor needs to provide his Last Name or E-mail Address.



As a developer, you need to create a link to this control in a site location that appears only after log in. For example, you might place the link on a menu or on a master page that appears after a site visitor logs in.

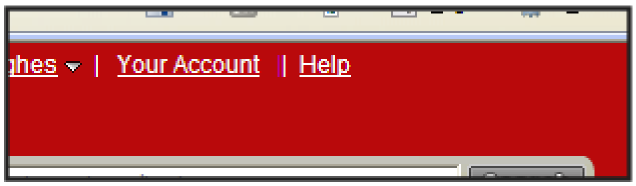
This section includes the following topics:

- "Flow of the MyAccount Server Control" on page 17-215

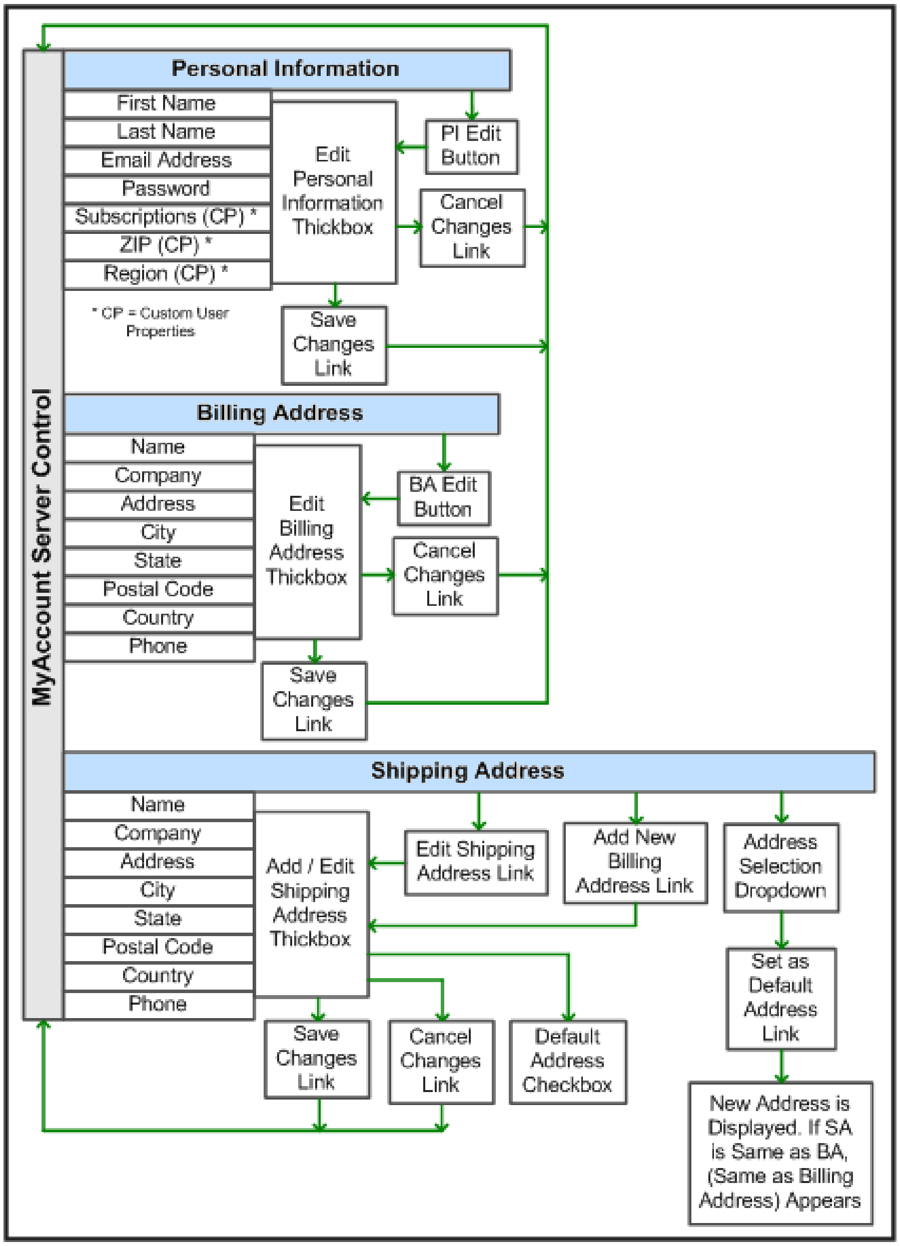
- "The Personal Information Area" on page 17-216
- "The Billing Address Area" on page 17-217
- "The Shipping Address Area" on page 17-219
- "MyAccount Server Control Properties" on page 17-222

Flow of the MyAccount Server Control

A site visitor typically arrives at this control by clicking a link placed on a main page, master page, or menu. Below is an example image.



Below is an image depicting the flow of the MyAccount server control.

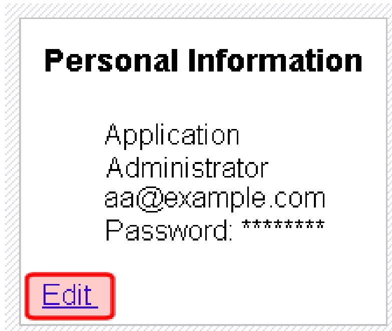


The Personal Information Area

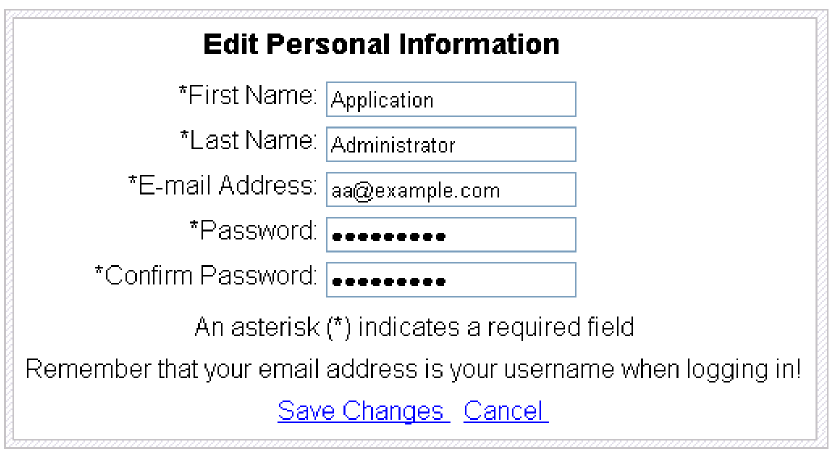
The Personal Information area allows site visitors to view and edit some information contained in their profile. By default, a site visitor can edit their First Name, Last Name, email Address, and Password. By adding a list of Custom User Property IDs to the `CustomPropertyID` property, you can allow site visitors to view and edit custom properties in their profile. See Also: "Custom User Properties" on page 15-16

Editing Personal Information

A site visitor can change the information in the Personal Information area by clicking **Edit** in the lower left corner of this area.



If the site visitor clicks the link, a page allows him to change any information in this area.



When done, the site visitor clicks **Save Changes** to save the changes and return to the My Account page.

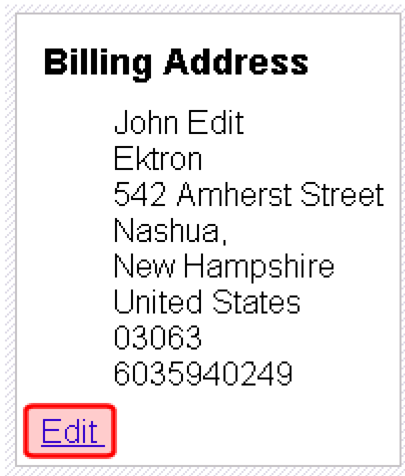
The Billing Address Area

The Billing Address area allows site visitors to view and edit their billing address information. A site visitor can edit their Name, Company, Address, City, State, Postal Code, Country, and Phone number.

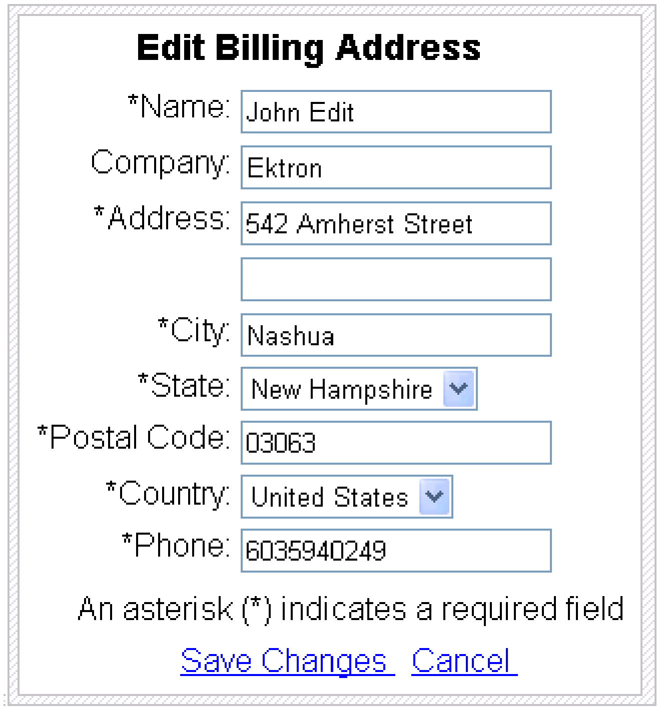
This information is used for billing purposes when the site visitor makes a purchase. Credit card companies typically want part or all of this information to match a customer's credit card account information when making a purchase.

Editing the Billing Address

To edit a site visitor's billing address, click the **Edit** link in the lower left corner of the Billing Address area.



Once a site visitor clicks the link, a page allows him to change any information in this area.



When done, a site visitor clicks **Save Changes** to save the changes and return to the My Account page.

The Shipping Address Area

The Shipping Address area allows site visitors to view, edit or add a new address to their shipping address information. The fields in this area are the same as those in the Billing Address area with two exceptions: a **Same as Billing** check box, and a **Default Address** check box.

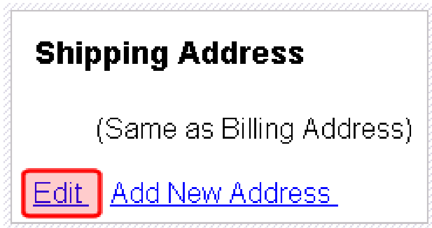
The **Same as Billing Address** check box allows site visitors to place a check mark in the box and use their billing address information as their shipping address.

The **Default Address** check box allows site visitors to specify the current shipping address as the default they want to use when making future purchases.

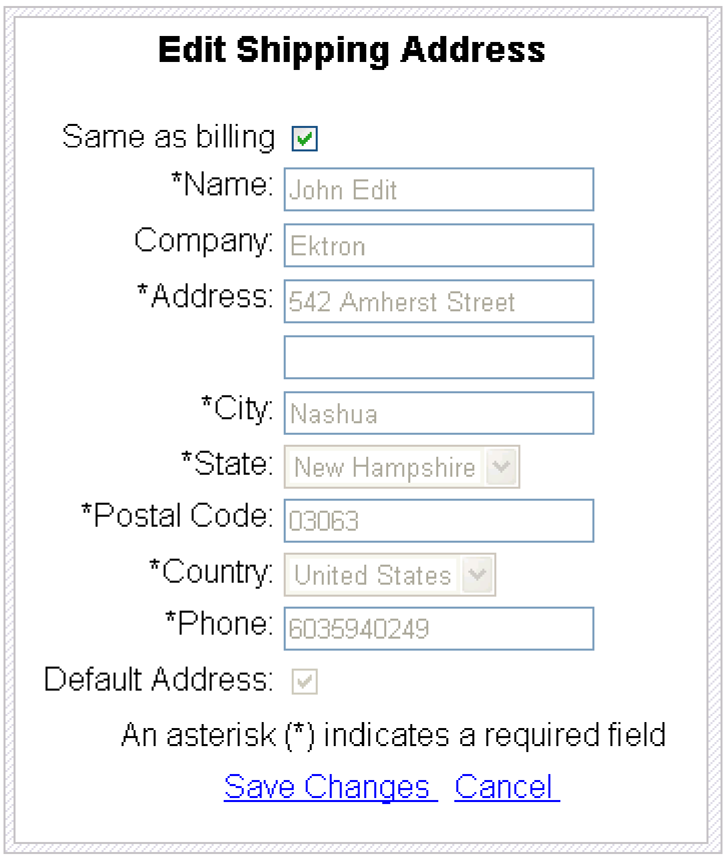
Editing the Shipping Address

To edit a site visitor's shipping address, click the **Edit** link located in the lower left corner of the Shipping Address area.

Note: The image below shows the *(Same as Billing Address)* message because this person has the Same as Billing checkbox checked.



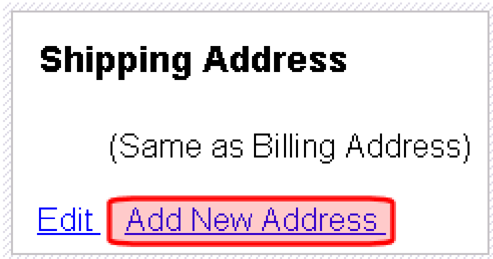
If a site visitor clicks the link, a page allows him to change any information in this area. Note that a site visitor must uncheck **Same as Billing** to be able to edit the shipping address. Otherwise, it is locked to the billing address.



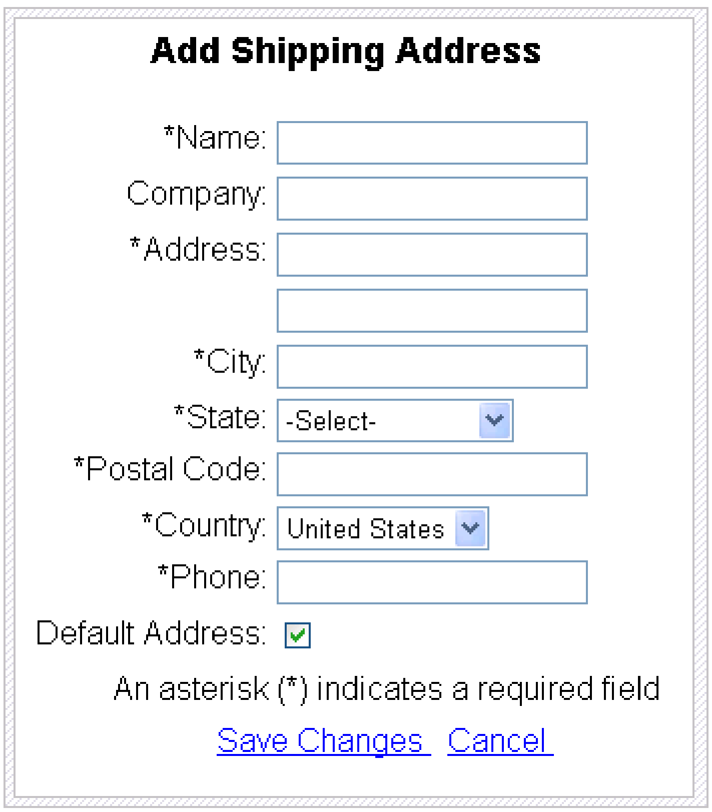
When done, a site visitors clicks **Save Changes** to save the changes and return to the My Account page.

Adding a New Shipping Address

To add a new shipping address, the site visitor clicks the **Add New Address** link located in the bottom center of the Shipping Address area.



If a site visitor clicks the link, a page appears where he can enter new shipping address information. Note that the **Same as Billing** checkbox is not available when adding a new address.



When done, a site visitor clicks **Save Changes** to save the changes and return to the My Account page.

MyAccount Server Control Properties

The following table explains the properties of the MyAccount control.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Description	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-12	String
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set the `CacheInterval` property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-42	Double
CustomerPropertyID	An ID or comma separated list of IDs for a Custom User Property (or properties) to expose in the UI. These properties are used to define information about a user beyond the standard Ektron CMS400.NET user properties; such as Username, First Name, Password and email Address. See Also: "The Personal Information Area" on page 17-216. IDs for these properties can be found in the Workarea > Settings > Configuration > User Properties > User Properties screen. See Also: "Custom User Properties" on page 15-16	String
CustomXml (Code Behind Only)	Provides a mechanism to inject custom XML into the generated XML before being processed by the XSLT. The injected XML is appended to the end of the XML produced by this control. See Also: "Displaying Custom XML in Ektron's Server Controls" on page 21-49	String
DefaultCountryID	The ID of the default country that appears in the Billing Address and Shipping Address. Set this ID to the country from which the majority of your customers will be making purchases. If the site visitor is from a different country, he can it change when editing the Billing or Shipping Address. Note: If a site visitor enters information in the Billing Address area,	Integer

Property	Description	Data Type
	his Billing Country seeds the Shipping Country when adding a new Shipping Address. To find a country's numeric ID, sign into the Ektron CMS400.NET Workarea. Then go to **Settings > Commerce > Configuration > Countries**. The Numeric ID is in the left column of that screen.	
DisplayXslt	Specify an external XSLT file to render the control. By default, the control uses `MyAccount.xsl`. This file is located in `<Site Root>\Workarea\Xslt\Commerce` **Important:** If you want to edit this file, it is strongly recommended that you make a copy, change its name and move it outside your site's Workarea folder. If you make changes to this file and do not move it out of the Workarea folder, this file and the changes will be lost when you upgrade.	String
Hide	Used to hide the control in design time and run time. **True** = Hide the control **False** = Show the control	Boolean
Language	Set a language for viewing the account information. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LoadingImage	The image to display while the control is fetching data. The default is `<siteroot>\Workarea\images\application\ajax-loader_circle_lg.gif`.	String
MarkupLanguage As of 7.6.1 this property does not work. It should work in a future release.	Identify the template markup file that controls the display of the server control. For example, mymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. Otherwise, the path to the file can be relative or absolute. See Also: "Ektron Markup Language" on page 3636.	String
RedirectUrl	Enter the path of a template that contains the Login server control. When a site visitor arrives at this control and is not logged in, the control checks this property for a path to template containing a Login server control. If one exists, the site visitor is sent to that template. Once he's logged in, he's returned to the template containing the MyAccount server control. If no path exists, the control checks the `web.config` file's <add key="ek_RedirectToLoginURL" value="" /> value for a path.	String

Property	Description	Data Type
Stylesheet	Specify the path to a style sheet for use with this server control. The location can be relative or absolute. Leave blank to use the default style sheet.	String
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean

eCommerce Coupons

Most eCommerce sites periodically offer coupons to provide discounts to customers, either to attract new business or reward loyalty. Ektron CMS400.NET's eCommerce feature provides a coupon generation capability with the following features.

- discount can be an amount or percentage
  - if percentage, you can set a maximum coupon value regardless of the amount calculated by percentage
- restrict coupon to catalog entries that you accept
- restrict coupon to most or least expensive entry
- limit to one use per customer
- prevent coupon from being used with other coupons
- specify a maximum number of redemptions
- specify a minimum order amount required to activate coupon
- designate a date range when coupon is active

See Also: "Creating a Coupon" on page 17-225

Creating a Coupon

Create coupons in the Ektron CMS400.NET Workarea by going to **Settings** > **Commerce** > **Catalog** > **Coupons**. To make it easy to complete the information, the screens are arranged in numbered steps. Subsequent screens are context-sensitive, so that you only see fields that are a logical result of previous decisions.

The following table summarizes the information collected on each screen.

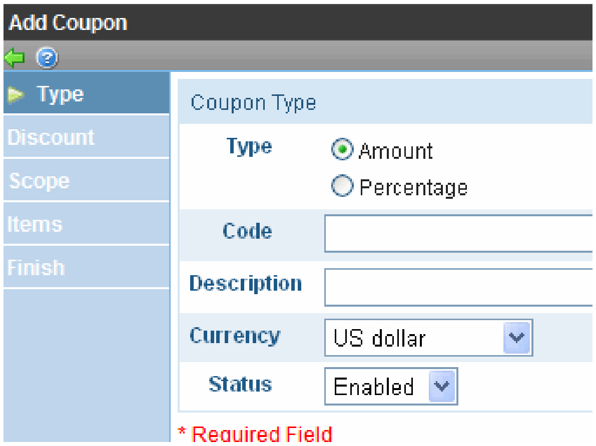
Screen	Information collected	For more information, see
1. Type	▪ code (that is, unique identifier) ▪ description ▪ whether discount is based on amount or percentage ▪ currency (applicable to amount-	"Completing the First Coupon Screen (Type)" on page 17-226

Screen	Information collected	For more information, see
	based coupons only) ■ enabled or disabled	
2. Discount	■ If amount, dollar amount ■ If percentage, percentage and maximum coupon value	"Completing the Second Coupon Screen (Discount)" on page 17-228
3. Scope	■ applies to entire cart, accepted items only, most/least expensive item only ■ limit to one per customer? ■ allow combination with other coupons? ■ maximum number of redemptions ■ minimum cart value ■ start and end dates	"Completing the Third Coupon Screen (Scope)" on page 17-229
4. Items	If coupon is restricted to certain items, designate the items	"Completing the Fourth Coupon Screen (Items)" on page 17-231

See Also:

- "Disabling a Coupon" on page 17-233
- "Deleting a Coupon" on page 17-234

Completing the First Coupon Screen (Type)



Use the following table to complete the first coupon screen.

Field	Description
Type	Select the type of coupon you are creating/editing. ■ **Amount** - discount is a dollar amount. If you select this type, choose a currency at the **Currency** field (below). Then, enter the dollar amount on the **Discount** screen. See Also: "Amount Based Coupon" on page 17-228 ■ **Percentage** - discount is a percentage. If you select this type, enter the percentage on the **Discount** screen. That screen also lets you enter a maximum amount. See Also: "Percentage Based Coupon" on page 17-229 Also, if the coupon type is **percentage**, the **Currency** field is disabled. Percentage-based coupons are currency neutral.
Code	Enter the coupon code. The code cannot contain ■ spaces ■ angle brackets (<, >) ■ single (‘) or double quotes (“) ■ ampersand (&) ■ slash (/) or back slash (\) ■ plus sign (+) When done, click the **Validate Code** button. When you do, Ektron CMS400.NET verifies that the code contains the correct characters and is not already in use. Tip! The following page gives suggestions about eCommerce coupons, including coupon-naming strategies: http://www.ecommerce-guide.com/solutions/advertising/article.php/3667331 Site visitors enter this code to redeem the coupon on a page that hosts the Cart server control (see image below).

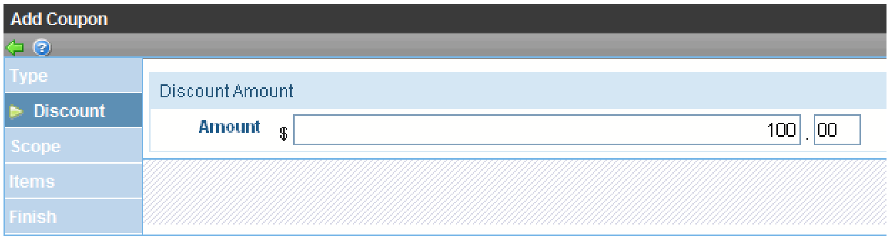
Field	Description
Description	Enter a free text description of the coupon. This helps describe it on the initial Coupons screen in the Ektron CMS400.NET Workarea.

Field	Description
Currency	Select the currency to which this coupon applies. A dropdown list of all enabled currencies is available. See Also: "Currencies" on page 17-53 If the coupon type is percentage, this field is disabled. **Warning!** The coupon is only valid if a site visitor selects this currency. So, for example, if you create a coupon for a USD amount, and a site visitor selects Euros when shopping on your site, the coupon is not accepted. To work around this restriction, create a coupon for every applicable currency.
Status	Set to **enabled** to let site visitors uses this coupon (providing all other conditions are met). Or, set to **disabled** to keep the coupon in the eCommerce feature but prevent it from being used.

Completing the Second Coupon Screen (Discount)

- "Amount Based Coupon" on page 17-228
- "Percentage Based Coupon" on page 17-229

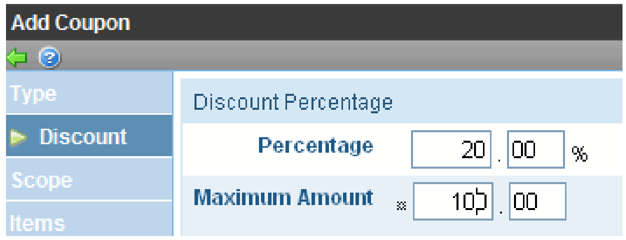
Amount Based Coupon



Use the following table to complete the second coupon screen if the coupon is based on amount.

Field	Description
Amount	Enter the coupon's discount amount. Note: If the coupon amount exceeds the sum of all items to which it is applied, it is reduced to the sum of the items. For example, a coupon amount is $10.00 and applies to the least expensive item. If that item is $3.00, the amount changes to $3.00.

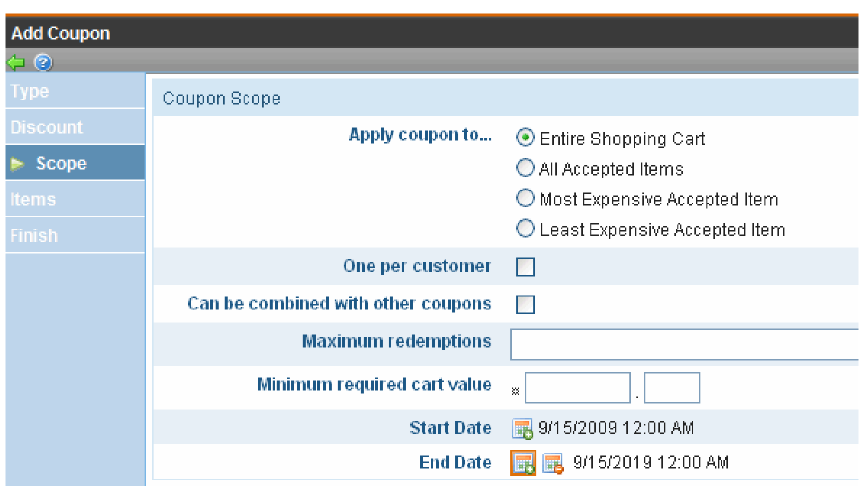
Percentage Based Coupon



Use the following table to complete the second coupon screen if the coupon is based on percentage.

Field	Description
Percentage	Enter the percentage of the discount.
Maximum Amount	Enter the maximum value of this coupon. For example, if you set a discount of 10% and a **Maximum Amount** of $20.00, the discount will never exceed $2.00 (that is, 10% of the **Maximum Amount**) regardless of the amount of the goods ordered. Typically, you would include a Maximum Amount in the email or announcement that describes the coupon.

Completing the Third Coupon Screen (Scope)



Use the following table to complete the coupon **Scope** screen.

Field	Description
Apply Coupon to	- **Entire cart** - coupon applies to all items in cart - **All accepted items** - coupon applies all *accepted* items in cart. Items are accepted on the **Items** screen. - **Most expensive accepted item** - coupon applies to most expensive *accepted* item in the cart. Items are accepted on the **Items** screen. - **Least expensive accepted item** - coupon applies to least expensive *accepted* item in the cart. Items are accepted on the **Items** screen. Important: If you select **All accepted items**, **Most expensive accepted item**, or **Least expensive accepted item**, you must identify accepted items on the **Items** tab. If you do not, the coupon is effectively inactive. Note: You cannot apply a *cart-level* coupon to a subscription product. However, you can apply an *item-level* coupon to a subscription product. (An an *item-level* coupon is one that applies to all accepted items, or the most or least expensive item.) See Also: "Creating a Subscription" on page 17-119
One Per Customer	Check this box if you want to limit each customer to one use of the coupon. If you do and a site visitor completes an order with the coupon then tries to use it a second time, he is notified that the coupon is not valid.
Can be combined with other coupons	Check this box if this coupon can be combined with other coupons in the same order. If you do not check this box and a site visitor tries to add this coupon to an order to which a coupon is already applied, he is notified that the coupon is not valid.
Maximum Redemptions	If desired, enter a maximum number of times this coupon can be used. It does not matter which site visitors use the coupon. If you set a maximum, and the coupon is applied that number of times, the next time someone tries to use the coupon, he is informed it is not valid.
Minimum Required Cart Value	If desired, enter the minimum order amount required to activate this coupon. The order amount does not include tax or shipping charges. For example, enter **$50.00**. If a shopping cart total is $40.00, and a site visitor adds this coupon to an order, he is informed the coupon is not valid.
Start Date/End Date	Enter the date range within which this coupon is valid. For example, you enter a **Start Date** of January 1, 2008 and an **End Date** of December 31, 2008. If a site visitor inserts this coupon on February 9, 2009, he is informed the coupon is not valid.

Completing the Fourth Coupon Screen (Items)

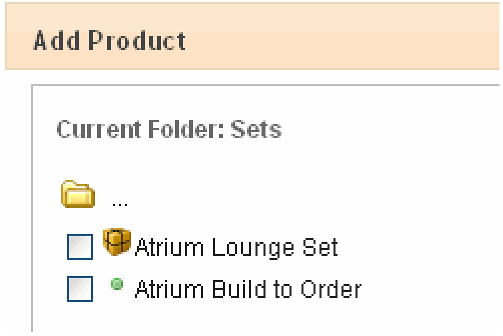
Use the following table to complete the **Items** coupon screen.

Field	Description
Include/ Exclude	Use this screen to identify items to which this coupon applies if the Coupon Scope screen's **Apply Coupon to** field is set to ■ All accepted Items ■ Most Expensive accepted Item ■ Least Expensive accepted Item **Warning!** - Item-level coupon types apply *only* to items selected on this screen. If a site visitor orders a catalog entry that's not defined on this screen, an item-level coupon does not apply to the item. For example, you create a coupon worth 10% off any digital camera. The coupon is only applicable if a digital camera is in the shopping cart. Typically, the email or announcement that describes the coupon includes item restrictions. The discount is applied to each accepted item in the cart. For example, a coupon provides a 10% savings on items 1, 3, and 5 but not 2 and 4 because 2 and 4 are not on the accepted items list. See Also: "Selecting a Coupon's Accepted Items" on page 17-231; "Include vs. Exclude" on page 17-232

Selecting a Coupon's Accepted Items

There are three ways to select items to add to the Include or Exclude list. You can select

- **individual items** - click the **Include Product** button and navigate through the Ektron CMS400.NET folder system to that content. You can only select items in a category folder (which are blue to distinguish them from regular folders).



- **all items in a catalog folde**r - click the **Include Catalog** button and navigate through the Ektron CMS400.NET folder system to that folder. You can only select items in a category folder (which are blue to distinguish them from regular folders).

- **all items in a taxonomy or category** - click the **Include Category** button and navigate through the Ektron CMS400.NET taxonomies to the desired taxonomy or category. All content applied to the category will be eligible for the coupon.

Include vs. Exclude

You can both include and exclude using any of the criteria listed above. If any product appears on both lists, it is *excluded* from coupon eligibility.

So for example, one of your folders contains 500 digital cameras that your site offers. You want the coupon to apply all but a few cameras.

On the **Include** tab, select the cameras folder. Then, use the **Exclude** tab to select the few cameras to which the coupon does not apply. In this way, you can easily select the majority of items but exclude a few.

Disabling a Coupon

When the coupon’s status is Disabled, site visitors can no longer apply it to an order.

Coupons can be disabled automatically (according to a schedule) or manually.

Using an Expiration Date to Disable a Coupon

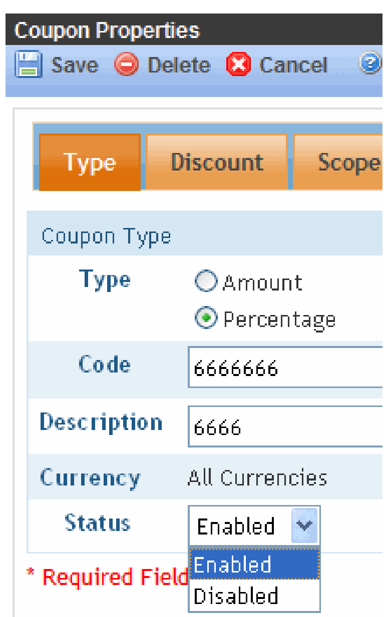
When you create a coupon, a default end date is set for 10 years from the end of the current year. At that time or at any time the coupon is active, you can change its end date.

When the coupon’s end date is reached, its status changes to Disabled.

Manually Disabling a Coupon

To disable an active coupon, follow these steps.

1. Go to Ektron CMS400.NET Workarea > Settings > Commerce > Coupons.
2. Locate the coupon that you want to delete.
3. Go to its **Type** screen.
4. Change its **Status** field to **Disabled** (see below).

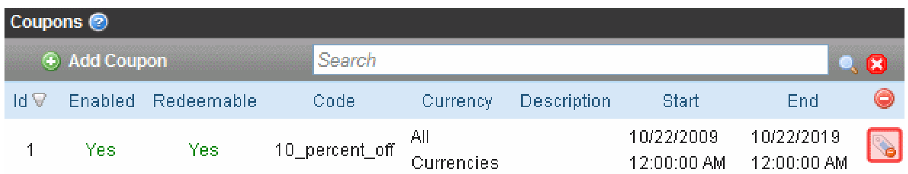


Deleting a Coupon

Warning! You cannot delete a coupon that is applied to any order within Ektron CMS400.NET.

Follow these steps to delete a coupon that is not applied to an order. If a coupon is applied to an order, you cannot delete it but you can disable it. See "Deleting a Coupon" on page 17-234.

1. Go to Ektron CMS400.NET **Workarea** > **Settings** > **Commerce** > **Coupons**.
2. Locate the coupon that you want to delete.
3. Click the delete button on the far right of the coupon information (circled below).



4. A strike through line appears over all coupon text, and a Restore button ( ) replaces the delete button.

Note: If you change your mind and do not want to delete the coupon, click the Restore button.

5. Click the Save button ( ).

If the coupon cannot be deleted (because it is applied to an order), it remains on the main Coupons screen and **No** appears in the **Enabled** field. This coupon can no longer be used.

Using eSync with eCommerce

When using eSync with an eCommerce site, you will want to prevent orders from being processed on your staging server. This is to prevent orders from being processed twice.

For example, a customer on your production site purchases a product. If the staging server and production server are synced before the credit card is processed, the potential exists for the customer's credit card to be charged twice; once from the production server and again from the staging server.

To prevent orders from being processed on your staging server, edit your staging site's web.config file. Next, set the following property to true.

```
<add key="ek_ecom_OrderProcessingDisabled" value="true" />
```

Once the property is set to true, you cannot process or edit orders from the Workarea's View Order screen on the staging server. Also, if you try to create an order from the staging server's Web site, you receive the following message.

"***We're sorry, an error occurred while processing your request. Please try again later...***"

It is important to note that all other eSync functions still work properly. For example, when you create catalog entries on a staging server and perform a sync, the entries will be moved to the production server. This key only affects the processing of orders.

The eCommerce Audit Screen

As an administrator, you should regularly review the eCommerce Audit log. This is vital to keeping your site secure and will help you determine the source when data is compromised.

While it is important that CMS400.NET captures this information, it is even more important that you review, analyze and use it. For example, while reviewing eCommerce event logs in CMS400.NET, you might find that one of your eCommerce administrators has an unusually large amount of login failures. This could be a sign someone is trying to break into your system.

You can view a log of your CMS400.NET Web site's eCommerce activity in the **Workarea** > **Settings >Commerce >Audit**.

To turn eCommerce Logging on, open the Web site's web.config file and change the following key to **true**.

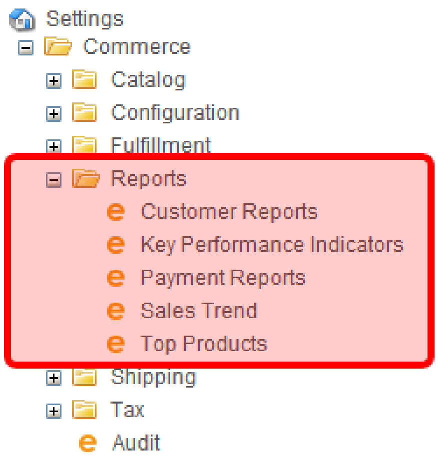
```
<add key="ek_ecom_ComplianceMode" value="false"/>
```

When compliance mode is turned on, Ektron CMS400.NET logs and displays the following events.

- Actions affecting administrators (Administrator Group member, Commerce Admin Role, Builtin Account).
  - An administrator logs in or out
  - An administrator's login attempt fails
  - An administrator password is changed
- Actions affecting an Ektron CMS400.NET user's rights to eCommerce.
  - Adding a user to the Commerce Admin Role
  - Removing a user from the Commerce Admin Role
  - Adding a user to the Admin group
  - Removing a user from the Admin group
- Actions affecting order information.
  - Updates to an order's address
  - The transaction ID and response from the payment gateway
  - Any action conducted with the payment gateway. For example, when capturing a previously authorized transaction.
  - Workflow activities. For example, sending an email.
  - Whenever the default gateway or payment options are changed in the Workarea.

eCommerce Reports and Widgets

eCommerce provides a set of standard reports to measure your commerce activity. View these reports by clicking the **Settings Tab** then choose the **Commerce > Reports** folder. These are also found in the **Reports > Commerce** section.



The following reports are described below.

- "Customer Reports" on page 17-237
- "Key Performance Indicators Report" on page 17-238
- "Payment Reports" on page 17-240
- "Sales Trends Report" on page 17-241
- "Top Products Report" on page 17-242

eCommerce Reports Widgets

The eCommerce reports are also available as Widgets for the Smart Desktop. See also ”Personalizing the Smart Desktop” on page 4-6.

Customer Reports

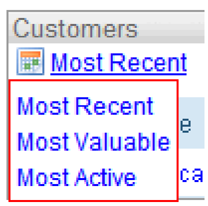
The Customer Report shows 5 customers ranked according to account date, sales, and orders.

The following table describes the report's fields.

Field	Description
Name	Customer first and last name
Orders	Total number of orders by this customer
Order Value	Total amount of sales to this customer
Date Created	The date this person first became a customer

To change the report type, do the following.

1. Click the Most Recent link next to the Calendar Button ( )
2. Click the type of report to view.



The types of reports are:

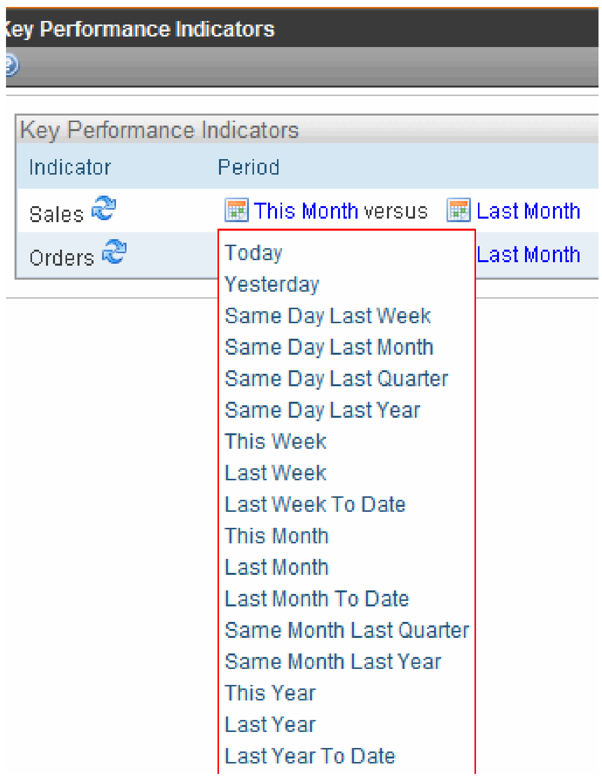
- Most Recent - the newest customers joining the site
- Most Valuable - customers ranked by order value
- Most Active - customers ranked by number of orders

Key Performance Indicators Report

The Key Performance Indicators report lets you compare the sales and orders for two different time periods.

Change the current and previous periods for comparison by doing the following.

1. Click the link called This Month in the Period column. The list of choices is shown below.



2. Click the appropriate period.
3. Repeat steps 1 and 2 for the current period.
4. Click the Refresh button ( ) to update the report.

Customizing Key Performance Indicators

You may create your own Key Performance Indicators and display it on the report.

To do this....

Insert steps here???

Add the new Key Performance Indicator provider to the `siteroot\web.config` file.

```
<KPIProvider>
 <providers>
 <add name="Orders" type="Ektron.Cms.Commerce.Providers.KPI.OrdersKPI,
Ektron.Cms.Commerce.Providers" />
 <add name="Sales" type="Ektron.Cms.Commerce.Providers.KPI.SalesKPI,
Ektron.Cms.Commerce.Providers" />
 </providers>
 </KPIProvider>
```

Payment Reports

The Payments report lists payments for a specific time period. It may be used by the accounting department to reconcile bank statements with the order system.

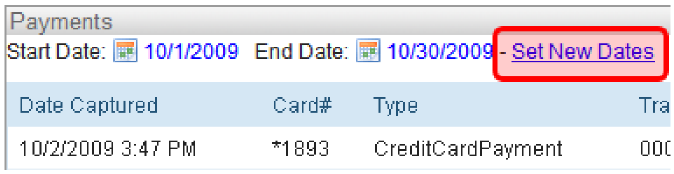
The following table describes the report's fields.

Field	Description
Date Captured	Date the payment was captured. See Also: "Capturing the Order" on page 17-200.
CardID	The last four digits of the credit or debit card used for payment.
Type	Type of payment used. See Also: "Payment Options" on page 17-61.
TransactionId	The unique number returned from the Payment Provider for this payment. See Also: "Capturing the Order" on page 17-200.
Amount	Total amount of the payment for this transaction.
Voided	Total amount voided in the transaction.

To run a report, do the following.

1. Click the Calendar button ( ) next to Start Date to open the calendar.

2. Click the date on the calendar to set the start date.
3. Click the Calendar button ( ) next to End Date to open the calendar.
4. Click the date on the calendar to set the end date.
5. Click the Set New Dates link (circled below) to refresh the report.

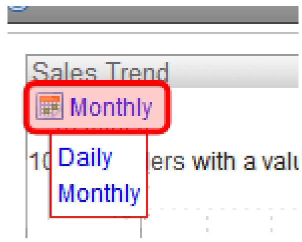


Sales Trends Report

The Sales Trends reports shows the number of orders for the past 8 periods. You can choose monthly or daily orders. At the top of the graph, you see the total number of orders and sales.

Set the time period for the graph by doing the following.

1. Click the period link circled below.



2. Click the proper time period .

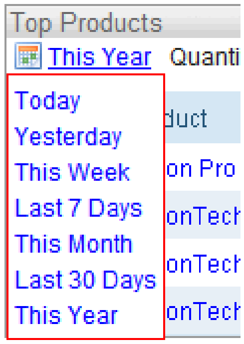
Top Products Report

The Top Products reports shows the most popular products on your site.

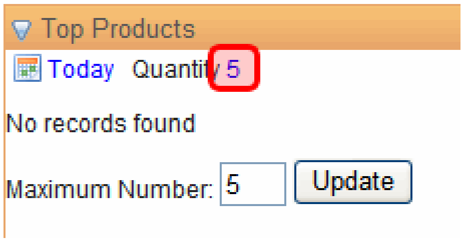
	Product	Sold	Value
1	Ektron Pro	3	USD$1,350.00
2	EktronTech Training	1	USD$1,250.00
3	EktronTech Starter (bundle)	1	USD$1,750.00
4	EktronTech Base (kit)	1	USD$200.00

Create the report by doing the following.

1. Click the link next to the calendar icon ( ).
2. Click the time period of sales from the choices shown in the select box.



3. Click the Quantity link (circled below) to change this value.



4. Enter the maximum number of products to show.
5. Click the Update button.

eCommerce Server Controls

Introduction

Ektron provides a complete set of eCommerce server controls that allow you to set up an online marketplace where site visitors can purchase merchandise, services or content. Site visitors interact with these server controls on your site to

- select the type of currency
  - see the "CurrencySelect Server Control" on page 17-59
- search for products or view a list of products
  - see the "ProductSearch Server Control" on page 17-170 and the "Product List Server Control" on page 17-165
- view the details of a product and add it to their shopping cart
  - see the "Product Server Control" on page 17-154
- get recommendations on other products
  - see the "Recommendation Server Control" on page 17-190
- view products in a shopping cart, create new carts, and apply discounts
  - see the "Cart Server Control" on page 17-3
- go through the checkout process
  - see the "Checkout Server Control" on page 17-16
- view a list of processed orders
  - see the "OrderList Server Control" on page 17-205
- view and change their account information
  - see the "MyAccount Server Control" on page 17-213

Most eCommerce server controls allow site visitors to move from one control to another. In these controls, there are template properties that allow you to define the location of another server control. For example, if you define the path to the Cart server control in the Product server control's `TemplateCart` property, site visitor are sent to the Cart control when they click the **Add to Cart** button in Product control.

Using the eCommerce Server Controls

The following table shows typical actions a site visitor might perform when visiting your eCommerce site and how you can facilitate these actions.

Site Visitor Action	How you accomplish this	When to Use
View account information	Create a link in the master page that leads to the template containing the MyAccount server control.	This link should be available from any page.
View previous and current orders	Create a link in the master page that leads to the template containing the OrderList server control.	This link should be available from any page.
Change the currency type	Add the CurrencySelect server control to a master page.	This server control should be available from any page.
Search for products	Either create a link to the template containing the ProductSearch server control. - Or - On the master page, add a textbox that passes the text to a hidden ProductSearch server control and post the results to a separate template.	This link or textbox should be available from any page.
View a list of products	Create a template that contains the ProductList server control. This template might be the first page site visitors see when they view the eCommerce portion of your site.	Whenever you want to display a list of products based on a catalog, taxonomy or a list content IDs. For example, you could create a list of products in a panel on the right side of your Web site.
View a product's details	Create a template that contains the Product server control. Set any of the following server control's `TemplateProduct` property to the path of this control. This makes a product's title being displayed by one of these controls a clickable link that takes the site visitor to this control. ■ ProductSearch ■ ProductList ■ OrderList ■ Cart ■ Recommendation	When ever a site visitor needs to view details of a product.

Site Visitor Action	How you accomplish this	When to Use
View additional products associated with another product	Add the Recommendation server control to a template that contains a Product server control and set the Recommendation control's `DynamicProductParameter` property to the QueryString parameter that's used to pass a products ID.	When ever you want to present a site visitor with cross-sell and upsell opportunities associated with a given product.
Add a product to their shopping cart	Set the `TemplateCart` property in the following server controls to the path of the Cart server control. Setting this property is one of the requirements for the **Add to Cart** button or link to appear in these controls. - ProductSearch - ProductList - Product - Recommendation **Note:** In addition to setting the above property, a product must be in-stock, not archived and buyable. Otherwise, the **Add to Cart** button or link does not show for a product.	When you want to allow site visitors to add products to their shopping cart.
View products in their shopping cart	When a site visitor adds a product to their cart, they are sent to the Cart server control. You should also create a link in the master page that leads to a template containing this control.	The link should be available from any page.

Site Visitor Action	How you accomplish this	When to Use
Checking out and paying for their selected product.	Add the Checkout server control to a template and add that template's path to the Cart server control's `TemplateCheckout` property. When you do, the Checkout button in the Cart server control becomes active.	You must set this up in order for site visitors to checkout.

Using eCommerce Server Control Events

The eCommerce server controls contain event hooks that allow you to customize or manipulate them.

To use these event hooks, create a handler for each needed event in the code behind of the ASPX page that contains an eCommerce server control. Then, in that page's `OnInit` method, hook each event.

For an example of working with the eCommerce server control's event hooks in code behind, download Ektron's Developer Sample Site and view these files.

For the Checkout server control:

```
[Site Root]/Developer/Commerce/CheckoutDemo_Advanced.aspx
[Site Root]/Developer/Commerce/CheckoutDemo_Advanced.aspx.cs
```

For the Cart server control:

```
[Site Root]/Developer/Commerce/CartDemo_Advanced.aspx
[Site Root]/Developer/Commerce/CartDemo_Advanced.aspx.cs
```

For the Product server control:

```
[Site Root]/Developer/Commerce/ProductDemo_Advanced.aspx
[Site Root]/Developer/Commerce/ProductDemo_Advanced.aspx.cs
```

Event	This Hook is Called...	Description
PhaseChange	when the current	Supervise phase changes and allow or prevent changing as needed. It also allows you to jump to a specified phase. For example, you could jump to a passed phase, prevent

Event	This Hook is Called...	Description
(Used only in the Checkout server control.)	phase is about to change.	the phase from changing from the current one under certain conditions, or jump to a phase that is not necessarily the next one in line.
PreProcessXml	immediately before the control's XML is transformed.	Inspect or manipulate the server control's XML before being processed. This is the only time the XmlDoc property should be used to access the controls XML.
PostProcessXml	immediately after the control's XML is transformed.	Work with processed transformed XML output inside the Text property before sending it to the browser. This allows simple string manipulation of the server control's markup.
FilterAjaxCallback	when an Ajax-Callback event occurs.	Inspect or modify callback parameters. For example, you could use this event to receive custom values entered in a page.
PostLogin (Used only in the Checkout server control.)	immediately after a (possibly new) user logs in with this control	Calls custom code immediately after a returning user logs in with his email and password. Or, immediately after a new customer fills out the billing info screen. For example, you could add code that allows new customers to sign up for Web Alerts after they add their information to the billing screen.

Using the EkItems Property with eCommerce Server Controls

When using the EkItems property with eCommerce server controls it can only be used with the Product and ProductList server controls. This property gets EntryData for a product and can only be called during the PreProcessXml or PostProcessXml event. If you use it outside of these events, it will return empty values for the entry data.

Customizing eCommerce

Introduction

Ektron's CMS400.NET eCommerce Module allows you to set up an eCommerce Web site which delivers a full set of functionality for building an online marketplace.

As a developer, you can use Ektron's standard functionality and out of the box Server Controls to quickly create an eCommerce Web site. Ektron also provides the ability to partially or fully customize your Web site. For example, you can customize your site's order process workflow.

The following topics are covered in this chapter.

Customizing Workflows

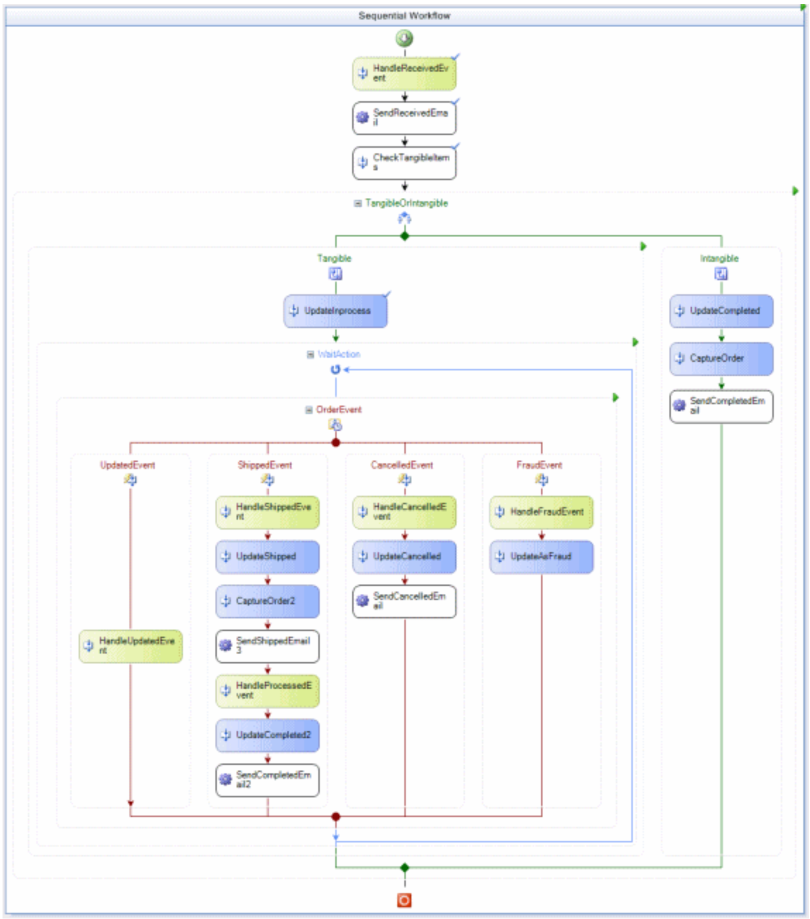
Introduction

Ektron utilizes Microsoft's Windows Workflow Foundation to create and implement order process workflows in CMS400.NET. Within CMS400.NET eCommerce functionality, you use a workflow to handle the ordering process after your site has received an order. The workflow can be as simple or complex as your business requires.

For example, you could have a simple workflow that sends an email to the customer when their order is received and sends another to the person shipping product for you. Or, you could have a more complex workflow that:

- sends an email to the customer when the order is received
- checks to see whether the item is a tangible product or a virtual product. Then, continues down the workflow path that's appropriate for the item.
- handles shipping notifications and updates the account throughout the shipping process
- handles the order if it is canceled
- handles the order if it is determined to be fraudulent
- marks the order as complete once all activities are finished

Ektron's default sample workflow is shown below.



Windows Workflow Foundation is a development tool that allows you to automate a business process. Released with Microsoft's .NET 3.0, it allows you to create an activities based workflow that has the ability to persist over a given length of time or be paused and restarted depending on events. From Microsoft's MSDN:

> *Windows Workflow Foundation (WF), originally introduced as part of the .NET Framework 3.0 with extensions for Visual Studio 2005's designers, has continued to be enhanced for the .NET Framework 3.5 and Visual Studio 2008. WF makes it possible, and for many workflow scenarios, even easy to create robust, manageable workflow-based applications. WF is actually many things: It's a programming model, and runtime engine, and a set of tools that help you create workflow-enabled applications hosted by Windows. For more information on WF, drop by the portal site here: http://msdn.microsoft.com/en-us/netframework/aa663328.aspx.*

Workflows are comprised of Activities; each activity represents a portion of your Business Process. Once all activities have finished within a workflow, the workflow terminates. There are two types of activities:

- **Activities** - executed inside the workflow once the activity is reached. For example, an email might be sent to a customer once their order is received by using the AdvancedEmailActivity placed after the OrderReceivedEventActivity. This email would be automatically sent with no human interaction needed and the workflow would continue on.
- **Event Activities** - cause the workflow to pause until the event has taken place. Once the event takes place, the activity associated with it is executed. Think of events as road blocks in the workflow that don't open unless a matching action happens. Once the event happens, the workflow follows the path associated with

that event. For example, an OrderFraudEventActivity in a workflow would keep the workflow from going through the Fraud Event portion of the workflow unless the order is marked as fraud.

Ektron supports Sequential Workflows and State Machine Workflows. Sequential Workflows are structured; a step based process where one activity leads to the next. State Machine Workflows typically move from one activity to another when their state has changed.

Only one workflow project can be run at a time. You can have multiple workflows projects associated with your eCommerce site and you can change workflow projects at anytime. Note however, once an order process is started with a specified workflow, it will continue through that Workflow.

Installing Ektron's Sample Workflow Template

Prerequisites - Ektron's CMS400.NET SDK is installed

IMPORTANT!

Warning! If you use Visual Studio 2005 and want to work with Microsoft Windows Workflow Foundation, install Microsoft's Visual Studio 2005 Extensions for Windows Workflow Foundation. http://www.microsoft.com/downloads/details.aspx?FamilyId=5D61409E-1FA3-48CF-8023-E8F38E70-9BA6&displaylang=en

Ektron provides a C# workflow template sample for a sequential workflow. This sample can be modified or used to create new workflows. It is based on the default workflow included with Ektron CMS400.NET.

To install Ektron's sample workflow template, simply copy the "Ektron Ordering Sequential Flow.zip" file using the **From** & **To** information below.

Note: If you are using Visual Studio 2005, replace 2008 with 2005 in paths below.

From:

```
C:\Program Files\Ektron\CMS400SDK\Commerce\Workflow\Templates\VS2008
```

To:

Note: Make sure you replace ***~user name~*** in the path below with the user name under which Visual Studio project templates are saved.

```
C:\Documents and Settings\~user name~\My Documents\Visual Studio 2008\Templates\ProjectTemplates\Visual C#\Workflow
```

Once the Workflow zip file is saved to the ProjectTemplate location, you are ready to start working with a sample workflow.

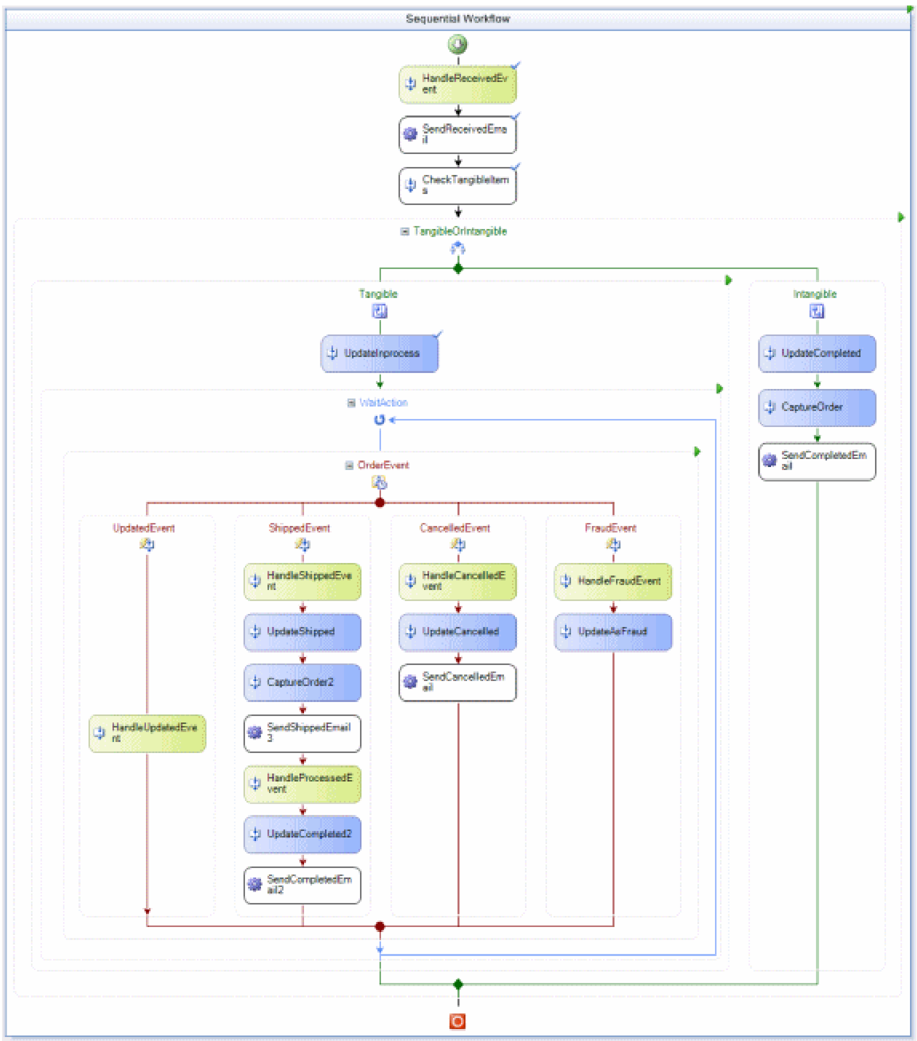
Working with the Sample Workflow

Follow the steps below to open and work with Ektron's sample workflow.

Prerequisites - Install Ektron's sample workflow template. See "Installing Ektron's Sample Workflow Template" on page 17-251.

1. Open Visual Studio.

2. Click **File** > **New** > **Project**.
3. If you are using C#, expand the Visual C# project type. Otherwise, expand the Visual Basic project type.
4. Click **Workflow**.
5. Select **Ektron Ordering Sequential Flow** from the My Templates area.
6. Select a new Name, and if necessary, change the Location, Solution and Solution Name.
7. Click **OK**.
8. Copy **Ektron.Cms.Common.dll** and **Ektron.Workflow.dll** from the Bin folder of your Ektron site to the Bin folder for newly created project. For example, copy the files to `C:\Documents and Settings\`*`~user name~`*`\My Documents\Visual Studio 2008\Projects\MyWorkFlow\MyWorkFlow\bin`.
9. Open the **Workflow.cs** file in the Solution Explorer.



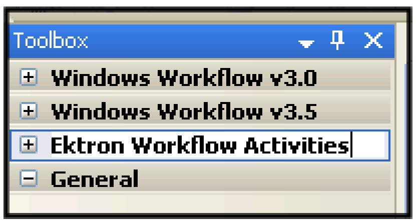
10. Make any necessary changes to the workflow. For information on Ektron's Workflow Activities, see "List of Workflow Activities" on page 17-256. For information on Microsoft's Workflow Activities, see
11. Debug as needed.
12. Build the workflow. This creates a DLL of the workflow and places it in the project's bin/debug folder.

13. Navigate to the folder where the DLL is stored. For example, `C:\Documents and Settings\~`*`user name`*`~\My Documents\Visual Studio 2008\Projects\MyWorkFlow\MyWorkFlow\bin\Debug`.
14. Move or copy the newly created workflow DLL file to your Web site's bin folder.

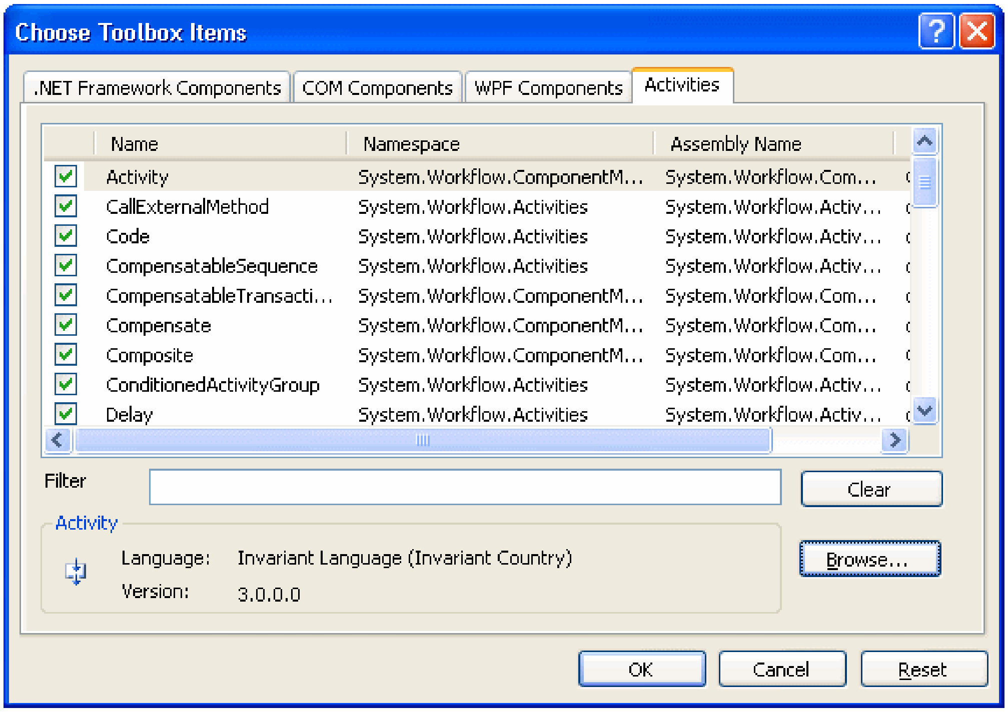
Making Ektron's Workflow Activities Available

To add Ektron's Workflow Activities to your Toolbox, follow these steps.

1. Open or create a Workflow in Visual Studio 2005/2008.
2. Display the Toolbox (View > Toolbox).
3. Right click the mouse within the Toolbox.
4. Click **Add Tab**.
5. Type **Ektron Workflow Activities** then press enter.



6. Click the **Ektron Workflow Activities** tab.
7. Right click the mouse in the empty area.
8. Click **Choose Items**.
9. The Choose Toolbox Items dialog appears.



10. Select the **Activities** tab.
11. Browse to the directory that stores Ektron CMS400.NET's DLL files, `[Web root]\[Site Root]\bin`
    . file. This file provides access to Ektron CMS400.NET's workflow activities.

    Alternatively, you could use the following location, `C:\Program Files\Ektron\CMS400v8x\bin`. The file is identical in both places.

    Using the bin folder in your site provides better speed. However, if you use the bin folder located in Program Files, you do not have to worry about deleting the .dll file if you change or delete your site.
12. Click **OK**.

For easier viewing, once the workflow activities are installed, you can right click on them and select **Sort Items Alphabetically**.

Note: Ektron's workflow activities appear only when the workflow is opened in design mode.

Removing Ektron's Workflow Activities

1. Display the Visual Studio toolbox (**View > Toolbox**).
2. Right click the mouse within the Toolbox.
3. Click **Choose Items**.
4. Click the **Activities** tab.
5. Click **Namespace** or **Assembly Name** to sort the Workflow Activities by manufacturer.
6. Uncheck all boxes that are Ektron.Workflow.Activities.

7. Click **OK**.
8. Right click the **Ektron Workflow Activities** tab.
9. Click **Delete Tab** to remove it.

Updating Ektron's Workflow Activities

To update the workflow activities, you must first remove the existing ones in Visual Studio, then add the new workflow activities.

For information on removing workflow activities, see "Removing Ektron's Workflow Activities" on page 17-254.

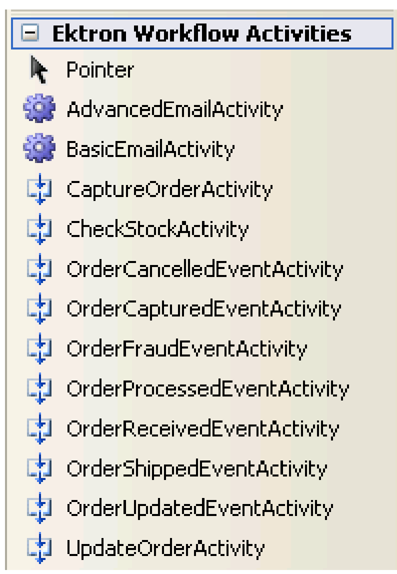
For information on adding workflow activities, see "Making Ektron's Workflow Activities Available" on page 17-253.

Inserting Workflow Activities Using Drag and Drop

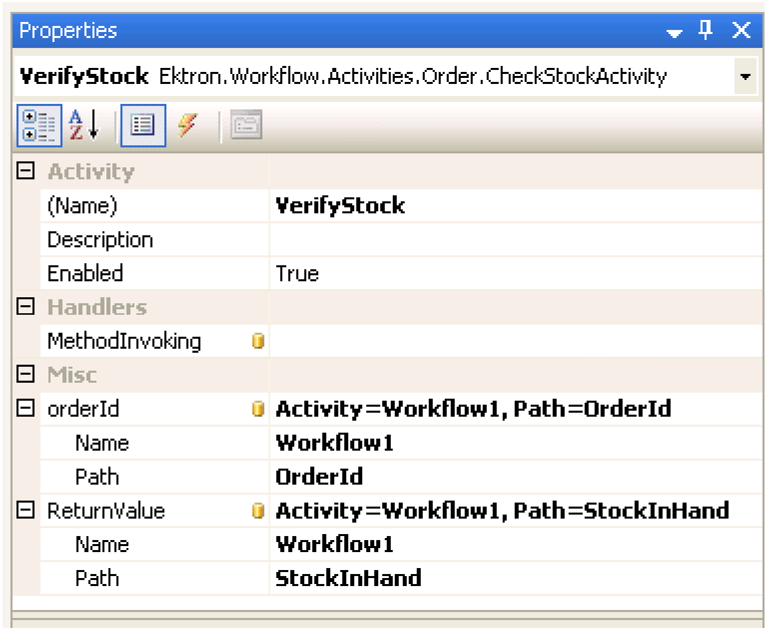
Because Visual Studio is a visual environment, you can see the workflow change as you add or remove activities. Lines that connect the different events and activities change depending on what you add, move, or remove.

Adding an Activity to a Workflow

1. Display the Visual Studio toolbox (**View** > **Toolbox**).
2. Click the **Ektron Workflow Activities** tab. Ektron's Workflow Activities appear.



3. Drag an activity and drop it into the desired location in the Workflow.
4. As desired, modify the activity's properties using the Properties area of Visual Studio.



For a description of server control properties, see "List of Workflow Activities" on page 17-256.

List of Workflow Activities

You can customize your workflow using the following activities.

Activity	Description	More Information
AdvancedEmailActivity	Send an email based on the order ID and a specified message type.	"AdvancedEmailActivity" on page 17-257
BasicEmailActivity	Send a generic email message when this activity is reached in the workflow.	"BasicEmailActivity" on page 17-260
CaptureOrderActivity	Submits order information to a payment gateway.	"CaptureOrderActivity" on page 17-262
CheckStockActivity	Verifies whether the item is an in-stock item or not.	"CheckStockActivity" on page 17-263
OrderCancelledEventActivity	Customize the handling of an order when it's cancel.	"OrderCancelledEventActivity" on page 17-264
OrderCapturedEventActivity	Customize the handling of an order when it's captured.	OrderCapturedEventActivity

Activity	Description	More Information
OrderFraudEventActivity	Customize the handling of an order when it's marked as fraud.	"OrderFraudEventActivity" on page 17-265
OrderProcessedEventActivity	Customize the handling of an order when it's being processed.	"OrderProcessedEventActivity" on page 17-267
OrderReceivedEventActivity	Customize the handling of an order when it's marked as received.	"OrderReceivedEventActivity" on page 17-268
OrderShippedEventActivity	Customize the handling of an order when it's marked as shipped.	"OrderShippedEventActivity" on page 17-269
OrderUpdatedEventActivity	Customize the handling of an order when it's updated.	"OrderUpdatedEventActivity" on page 17-270
UpdateOrderActivity	Updates the order when once this activity is reached.	"UpdateOrderActivity" on page 17-271

AdvancedEmailActivity

Add the Advanced Email activity to a workflow when you want to send an email notification, based on an order ID in CMS400.NET, after an event takes place in the workflow. For example, after an order is shipped, you might choose to send an email that notifies customers when their orders are shipped. Or, you might send an email to a customer when their order is received.

With this activity you can choose to send a predefined email message. These messages are defined in the Workarea under **Settings** > **Commerce** > **Configuration** > **Messages**. For more information, see "Messages" on page 17-81.

There are two event handler properties in this activity that allow you to add custom code to the `SendingEmail` and `SentEmail` events. The SendingEmail event fires right before the email is sent. The SentEmail event fires right after the email sent.

Key Properties

- **EventArgs** - Set this property to `OrderId` to associate the activity with orders in CMS400.NET.
- **MessageTypes** - Set this property to the type of email message this activity sends.

AdvancedEmailActivity vs. BasicEmailActivity

The AdvancedEmailActivity allows you to associate email activity with orders in CMS400.NET. You can either supply information such as, To:, From:, Body:, etc. or use information associated with the order. It also allows you to specify the type of message type that's sent.

The BasicEmailActivity, on the other hand, is a generic email activity where you specify To:, From:, Body:, and other email information.

AdvancedEmailActivity Properties

The following table explains the properties of the AdvancedEmailActivity workflow activity.

Property	Description	Data Type
Activities		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Email Message		
Bcc	A blind carbon copy of the email is sent to the address entered in this property. If you select `OrderId` for the `EmailArgs` property, the `Bcc` property is dynamically populated with the order's information.	String
Body	Enter the main content of the email. If you select a parameter from the `MessageType` property, the `Body` property uses the corresponding content for that message type.	String
CC	A carbon copy of the email is sent to the email address entered in this property. If you select `OrderId` for the `EmailArgs` property, the `CC` property is dynamically populated with the order's information.	String

Property	Description	Data Type
From	The address from which the email is sent. If you select `OrderId` for the `EmailArgs` property, the `CC` property is dynamically populated with the order's information.	String
HtmlBody	Select whether to send the email in HTML or plain text. Default is **True**. Choices are: **True** - send the body of the email in HTML. **False** - send the body of the email as plain text.	Boolean
ReplyTo	Specify the address to which the recipient of the email replies.	String
Subject	Enter subject information for the email. If you select a parameter from the `MessageType` property, the `Subject` property uses the subject information for that message type.	String
To	The email is sent to the address in this property. If you select `OrderId` for the `EmailArgs` property, the `To` property is dynamically populated with the order's email information.	String
Email Server		
Port	Set this value to the port your system uses access to retrieve email. In most cases, the port is set to 25. If that is not the case, see your System Administrator. The default is **25** If blank, this property uses the `ek_SMTPPort` value in the site's web.config file.	Integer
SmtpHost	The address of the server hosting the email system. If blank, this property uses the `ek_SMTPServer` in the site's web.config file.	String
Handlers		
SendingEmail	Event handler to add custom code to the sending email event. This event fires right before the email is sent.	String
SentEmail	Event handler to add custom code to the sent email event. This event fires right after the email is sent.	String
Misc		

Property	Description	Data Type
EmailArgs	Select OrderId to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	NEED DATA TYPE
MessageType	Select the type of message that is sent for this activity. If you select None, the message is sent with the text in the Body property, The default is **None**. Choices are: ■ **None** - uses the text in the Body property. ■ **OrderReceived** - Sends the Order Received email defined in the **Workarea** > **Settings** > **eCommerce** > **Configuration** > **Messages** screen when an order is received. ■ **OrderCancelled** - Sends the Order Cancelled email defined in the **Workarea** > **Settings** > **eCommerce** > **Configuration** > **Messages** screen when an order is received. ■ **OrderShipped** - Sends the Order Confirmation email defined in the **Workarea** > **Settings** > **eCommerce** > **Con-figuration** > **Messages** screen when an order is received. For additional information on defining these messages, see "Messages" on page 17-81.	NEED DATA TYPE

BasicEmailActivity

Add the Basic Email activity to a workflow when you want to send an email after an event takes place in the workflow. These emails are usually generic and contain the same information for To:, From:, Subject, Body, etc.

There are two event handler properties in this activity that allow you to add custom code to the SendingEmail and SentEmail events. The SendingEmail event fires right before the email is sent. The SentEmail event fires right after the email sent. For example, you want to notify a supervisor when orders are received, but you don't want the notification to contain any order specific information.

Key Properties

- **To** - enter the address to receive the email.
- **From** - enter the address from which the email is being sent.
- **Subject** - enter a brief summary for the email.
- **Body** - enter the main subject text of the email.

BasicEmailActivity vs. AdvancedEmailActivity

BasicEmailActivity sends a generic email. In the activity, you specify To:, From:, Body:, and other email information.

The AdvancedEmailActivity, on the other hand, allows you to send an email associated with orders in CMS400.NET. You can either supply information such as, To:, From:, Body:, etc. or use information associated with the order. It also allows you to specify the type of message type that's sent.

BasicEmailActivity Properties

The following table explains the properties of the BasicEmailActivity workflow activity.

Property	Description	Data Type
Activities		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Email Message		
Bcc	A blind carbon copy of the email is sent to the address entered in this property.	String
Body	Enter the main content of the email.	String
CC	A carbon copy of the email is sent to the email address entered in this property.	String
From	The address from which the email is sent.	String
HtmlBody	Select whether to send the email in HTML or plain text. Default is **True**. Choices are: **True** - send the body of the email in HTML. **False** - send the body of the email as plain text.	Boolean

Property	Description	Data Type
ReplyTo	Specify the address to which the recipient of the email replies.	String
Subject	Enter a brief summary for the email.	String
To	The email is sent to the address in this property.	String
Email Server		
Port	Set this value to the port your system access to retrieve email. In most cases, the port is set to 25. If that is not the case, see your System Administrator. The default is **25** If blank, this property uses the `ek_SMTPPort` value in the site's web.config file.	Integer
SmtpHost	The address of the server hosting the email system. If blank, this property uses the `ek_SMTPServer` in the site's web.config file.	String
Handlers		
SendingEmail	Event handler to add custom code to the sending email event.	String
SentEmail	Event handler to add custom code to the sent email event.	String

CaptureOrderActivity

The CaptureOrderActivity initiates the capture of an order in CMS400.NET. When the Workflow reaches this activity, the process of submitting encrypted order information (including the transaction ID) to a payment gateway account happens. At this time, the account is changed for the order amount.

Use this activity when you want the capture to take place automatically in the Workflow. This activity is the same as a CMS400.NET user going to the Workarea and marking an order as Captured. For information on how a Capture works in the Workarea, see "Capturing the Order" on page 17-200.

Key Properties

- **orderId** - associate this activity with orders in CMS400.NET.

CaptureOrderActivity Properties

The following table explains the properties of the CaptureOrderActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Handlers		
MethodInvoking	Select a method to call before the order is captured.	
Misc		
orderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

CheckStockActivity

Add the CheckStockActivity to a workflow when you want to verify the quantity of items ordered is available for shipping. When the workflow reaches this activity, the quantity of each product in the order is checked. If the required quantity exists for each item, the activity returns True. Otherwise, the activity returns False.

Key Properties

- **orderId** - dynamically associate this activity with orders in CMS400.NET.

CheckStockActivity Properties

The following table explains the properties of the CheckStockActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Handlers		
MethodInvoking	Select a method to call before the stock level is checked.	
Misc		
orderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	
ReturnValue	Default is **False**.Choices are: **True** - the quantity of each product ordered is in stock. **False** - there is not enough product in stock to fulfill the order.	Boolean

OrderCancelledEventActivity

Add the OrderCancelledEventActivity to a workflow when you want to block the workflow from going down a cancel path until the order has actually been cancelled.

This activity does not cancel the order. It waits for a user, API code or UpdateOrderActivity to mark the order cancelled in CMS400.NET before it continues down the order cancel path. Think of it as gate that’s waiting for a certain event to happen before it can continue. Once the event happens, the path is opened in the workflow.

For information on how to cancel an order in the Workarea, see "Cancelling the Order" on page 17-202.

Key Properties

- **OrderId** - dynamically associate this activity with orders in CMS400.NET.

OrderCancelledEventActivity Properties

The following table explains the properties of the OrderCancelledEventActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Roles		
Handlers		
Invoked	Specify code that executes when the order is cancelled.	String
Misc		
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

OrderFraudEventActivity

Add the OrderFraudEventActivity to a workflow when you want to block the workflow from going down a path that handles fraudulent orders until the order has actually been marked as fraud.

This activity does not mark the order as fraudulent. It waits for a user, API code or the UpdateOrderActivity to mark the order as fraud in CMS400.NET before it continues down the path. Think of it as gate that's waiting for a certain event to happen before it can continue. Once the event happens, the path is opened in the workflow.

For information on how to mark an order as fraud in the Workarea, see "Marking the Order as Fraud" on page 17-203.

Key Properties

- **OrderId** - dynamically associate this activity with orders in CMS400.NET.

OrderFraudEventActivity Properties

The following table explains the properties of the OrderFraudEventActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Roles		
Handlers		
Invoked	Specify code that executes when the order has been marked as fraud.	String
Misc		
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

OrderProcessedEventActivity

Add the OrderProcessedEventActivity to a workflow when you want to block the workflow from going down an order process path until the order has actually been processed. This is a generic event activity that allows you to specify custom code to somehow process the order.

This activity does not start the process. It waits for a user, API code or the UpdateOrderActivity to kick off the Process Order action in CMS400.NET before it continues down the path. Think of it as gate that's waiting for a certain event to happen before it can continue. Once the event happens, the path is opened in the workflow.

For information on how to cancel an order in the Workarea, see "Cancelling the Order" on page 17-202.

Key Properties

- **OrderId** - dynamically associate this activity with orders in CMS400.NET.

OrderProcessedEventActivity Properties

The following table explains the properties of the OrderProcessedEventActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Roles		
Handlers		
Invoked	Specify code that executes when the order has been processed.	String
Misc		

Property	Description	Data Type
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

OrderReceivedEventActivity

The OrderReceivedEventActivity is usually the first item in an order workflow. This activity does not mark the order as received, but instead waits for CMS400.NET to register a new order. Once the order is received, this activity allows the workflow to start. Think of it as gate that's waiting for a certain event to happen before it can continue. Once the event happens, the path is opened in the workflow.

Key Properties

- **OrderId** - dynamically associate this activity with orders in CMS400.NET.

OrderReceivedEventActivity Properties

The following table explains the properties of the OrderReceivedEventActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Roles		

Property	Description	Data Type
Handlers		
Invoked	Specify code that executes when the order has been received.	String
Misc		
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

OrderShippedEventActivity

Add the OrderShippedEventActivity to a workflow when you want to block the workflow from going down a shipped order path until the order has actually been shipped.

This activity does not mark the order as shipped. It waits for a user, API code or UpdateOrderActivity to mark the order as shipped in CMS400.NET before it continues down the path. Think of it as gate that's waiting for a certain event to happen before it can continue. Once the event happens, the path is opened in the workflow.

For information on how to mark an order as shipped in the Workarea, see "Marking the Order as Shipped" on page 17-203.

Key Properties

- **OrderId** - dynamically associate this activity with orders in CMS400.NET.

OrderShippedEventActivity Properties

The following table explains the properties of the OrderShippedEventActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String

Property	Description	Data Type
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Roles		
Handlers		
Invoked	Specify code that executes when the order is shipped.	String
Misc		
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

OrderUpdatedEventActivity

Add the OrderUpdatedEventActivity to a workflow when you want to block the workflow from going down an updating order path until the order has actually been updated.

This activity does not update the order as shipped. It waits for a user, API code or UpdateOrderActivity to update an order in CMS400.NET before it continues down the path. Think of it as gate that's waiting for a certain event to happen before it can continue. Once the event happens, the path is opened in the workflow.

Key Properties

- **OrderId** - dynamically associate this activity with orders in CMS400.NET.

OrderUpdatedEventActivity Properties

The following table explains the properties of the OrderUpdatedEventActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Roles		
Handlers		
Invoked	Specify code that executes when the order has been updated.	String
Misc		
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	

UpdateOrderActivity

Add the UpdateOrderActivity to a workflow when you want to automate the updating of an order's status in one of the these ways:

- Received - marks an order as received
- InProcess - marks the order as in process
- Shipped - marks the order as shipped
- Completed - marks the order as completed
- Cancelled - marks the order as cancelled
- OnHold - puts the order on hold
- Fraud - marks the order as fraud

This activity is the same as a CMS400.NET user going to the Workarea and performing any of the above actions on an order. For information on how to manually complete these tasks in the Workarea, see "Orders" on page 17-197.

UpdateOrderActivity Properties

The following table explains the properties of the UpdateOrderActivity workflow activity.

Property	Description	Data Type
Activity		
(Name)	Enter a name for the Activity.	String
Description	Enter a description for the Activity.	String
Enabled	Set to true to enable this activity in the workflow. Default is **True**. Choices are: **True** - enable the activity. **False** - disable the activity.	Boolean
Handlers		
MethodInvoking		
Misc		
OrderId	Select `OrderId` to dynamically associate this activity with orders in CMS400.NET. Click the Ellipsis (...) button and select **OrderId** from the list.	
orderStatus	Default is Received. Choices are: Received - marks an order as received InProcess - Shipped - marks the order as shipped Completed - marks the order as completed Cancelled - marks the order as cancelled OnHold - puts the order on hold Fraud - marks the order as fraud	

Customizing the Payment Gateway Provider

A Payment Gateway Provider is a pluggable component that is integrated into Ektron's CMS400.NET eCommerce module. A Payment provider handles eCommerce customer payments by utilizing third party payment gateways. CMS400.NET's eCommerce module accepts payments such as credit cards. Then, it passes that information to a third party service. The third party service processes the payment, and returns a transaction ID that's stored with the customer's order.

Note: Your company needs to set up an account with a third party payment service before utilizing the payment provider. This includes payment providers such as Authorize.NET and PayFlow, which are included with CMS400.NET's eCommerce Module.

CMS400.NET comes with several payment providers, including Authorize.NET and PayFlow. You can customize these providers or create your own using the extendable Payment Gateway Provider architecture.

Each type of payment gateway provider accepts configuration parameters. For example, Authorize.NET requires a username and password while PayFlow requires a username, password, vendor, and partner.

In addition, some payment gateways may support recurring payments, while others may not. Recurring payments provide the ability to create a payment that recurs at a given interval for a specified period of time. For example, you could create a payment for $9.99 that occurs on the first of every month for the next 12 months. This is something to consider if your site relies on a subscription service. Contact your provider to find out if they support recurring payments.

The following table shows the flow of payment information for a customer purchasing a product from your site through you receiving the money in your account.

Step	Description
1.	A customer purchases a product from your site and submits his payment information.
2.	Ektron CMS400.NET's passes the information to your payment gateway.
3.	Your payment gateway provider passes the information to your bank's processor.
4.	The bank's processor submits the information to a credit card interchange for processing, clearing and settlement.

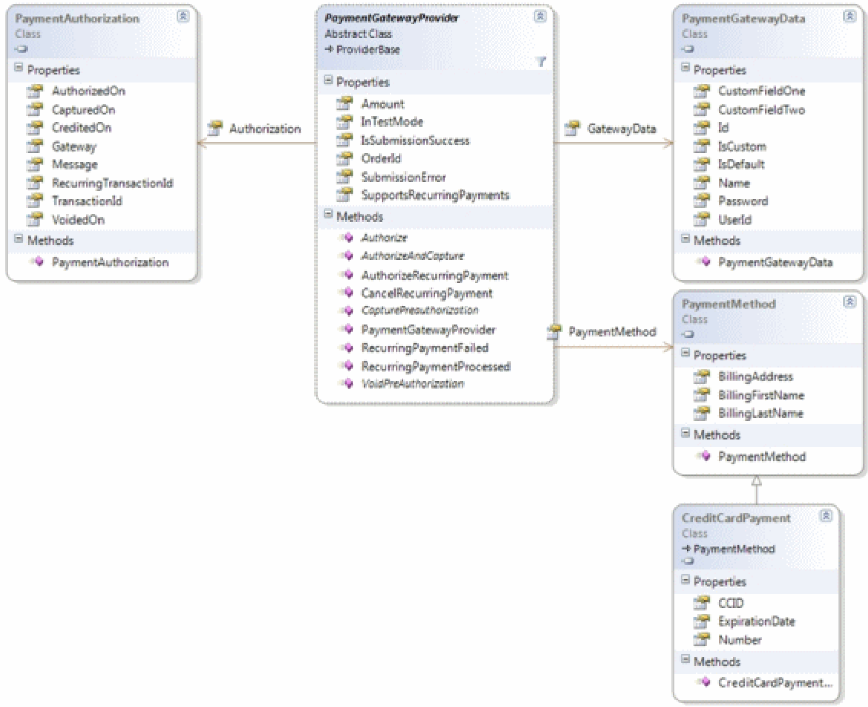
Step	Description
5.	The interchange notifies the customer’s credit card company of the transactions details.
6.	The credit card company accepts or declines the transaction based on the customers account information.
7.	If the transaction is approved, the funds are transferred to the interchange.
8.	The credit card interchange sends information about whether the transaction is approved or not to your bank’s processor.
9.	This information is passed to your payment gateway provider.
10.	The provider notifies your site of the information. The results of the transaction are displayed on the page the customer is viewing.
11.	The credit card interchange sends funds to your merchant account.

This section explains how to extend Ektron’s Payment Gateway Provider Architecture to build your own customized Payment Gateway Provider.

See Also: "Payment Options" on page 17-61

Payment Gateway Provider Object Model

Below is the Object Model for Ektron’s Payment Gateway Provider.



The PaymentGatewayProvider is the abstract base class you must extend to implement your own payment gateway. Details and descriptions of the PaymentGatewayProvider API can be found in the Ektron CMS400.NETAPI Reference Manual's **Providers API** > **PaymentGatewayProvider** section.

Creating a Custom Payment Gateway Provider

In addition to the out-of-the-box payment gateways providers shipped with CMS400.NET, you can create your own custom payment providers that connect with any payment gateway you choose. Below are the basic code steps you need to complete when creating a custom gateway provider. Additional code examples used by Ektron to create the PayFlow and Authourize.NET providers are located in:

C:\Program Files\E-ktron\CMS400SDK\Commerce\Providers\Commerce.Providers\PaymentGateways

Note: The complete C# code sample used in this example is available at the end of this section. See "CustomGatewayProvider Code Example" on page 17-280

1. Create a class library project in Visual Studio.
2. Add references to these DLLs:
   - Ektron.Cms.Commerce
   - Ektron.Cms.Common

- Ektron.Cms.ObjectFactory
- Ektron.Cms.Instrumentation
- System.Configuration

3. Add these using statements to the code behind:
   - `using System;`
   - `using System.Collection;`
   - `using System.Collection.Specialized;`
   - `using Ektron.Cms;`
   - `using Ektron.Cms.Common;`
   - `using Ektron.Cms.Commerce;`
4. Change the namespace to:

```
namespace Ektron.Cms.Extensibility.Commerce.Samples
{
```

5. Rename your class and inherit as below:

```
public class CustomPaymentProvider : Ektron.Cms.Commerce.PaymentGatewayProvider

{
```

6. Add the following constructor.

```
#region constructor, member variables
public CustomPaymentProvider() { }
#endregion
```

7. Add the methods required by the PaymentGatewayProvider base class. The **Initialize** method reads configuration information, the others are related to the payments and will be completed later in the example.

```
#region PaymentProvider Implementation

public override void Initialize(string name,
System.Collections.Specialized.NameValueCollection config)
{
if (config == null)
 throw new ArgumentNullException("config");

// Assign the provider a default name if it doesn't have one
if (String.IsNullOrEmpty(name))
 name = "CustomPaymentProvider";

if (string.IsNullOrEmpty(config["description"]))
 {
 config.Remove("description");
 config.Add("description", "CustomPaymentProvider");
 }

// Call the base class's Initialize method
base.Initialize(name, config);

// Throw an exception if unrecognized attributes remain
if (config.Count > 0)
 {
foreach (string key in config.AllKeys)
```

```
 {
EkException.WriteToEventLog("Unrecognized Payment Gateway Provider attribute: " + key,
System.Diagnostics.EventLogEntryType.Warning);
 }
 }
}

public override string Authorize()
{
}

public override string AuthorizeAndCapture()
{
}

public override string CapturePreauthorization(string transactionId)
{
}

public override string VoidPreAuthorization(string transactionId)
{
}


#endregion
```

8. Implement the **Authorize** method that you added in the previous step. This method is called to authorize a given amount of money when an order is submitted.

```
public override string Authorize()
{
if (PaymentMethod.GetType() != typeof(CreditCardPayment))
throw new Ektron.Cms.Commerce.Exceptions.AuthorizationException("Invalid Payment Type");

CreditCardPayment creditCard = (CreditCardPayment)this.PaymentMethod;

if (creditCard.ExpirationDate.IsExpired())
throw new Ektron.Cms.Commerce.Exceptions.Payment.CreditCard.CardExpiredException("Card
Is Expired");
 IsSubmissionSuccess = true;

 Authorization.AuthorizedOn = DateTime.Now;
 Authorization.TransactionId = new Guid().ToString();

return Authorization.TransactionId;

}
```

Note: In this example, the card number and the card holder name are not checked. In a real world scenario, there would be additional validation (for example, via checksum) and the authorization may be obtained via a Web service or HTTP post.

Note: If the authorization fails, you can choose to either throw an exception or manually set the failure. For example:

```
SubmissionError = "Not enough Funds";IsSubmissionSuccess =
false;
```

9. Implement the AuthorizeAndCapture, CapturePreauthorization and VoidPreAuthorization methods you added earlier.

- **AuthorizeAndCapture** requires that **Authorization.CapturedOn** be set, as the capture occurs at the same time as the Authorization.
- For **CapturePreauthorization** and **VoidPreAuthorization,** set the appropriate dates for these actions, so they are recorded in the system properly.

```
public override string AuthorizeAndCapture()
{
 IsSubmissionSuccess = true;

 Authorization.AuthorizedOn = DateTime.Now;
 Authorization.CapturedOn = DateTime.Now;
 Authorization.TransactionId = new Guid().ToString();

return Authorization.TransactionId;
}

public override string CapturePreauthorization(string transactionId)
{
 IsSubmissionSuccess = true;

 Authorization.CapturedOn = DateTime.Now;
return Authorization.TransactionId;
}

public override string VoidPreAuthorization(string transactionId)
{
 IsSubmissionSuccess = true;

 Authorization.VoidedOn = DateTime.Now;
 return Authorization.TransactionId;

}
```

10. Save and build the project.
11. Copy your project's DLL file to your Ektron Web site's **bin** directory.
12. Register the provider in your site's **Web.config** file. The Web.config file provides the facility to manage payment gateway providers within CMS400.NET. Locate the **EktronPaymentGateway** section and change the **defaultProvider** parameter to the name of your custom provider. Note that changing this from "Automatic" to the name of your provider overrides the settings in **Workarea** > **Settings** > **Commerce** > **Configuration** > **Payment Gateways** and CMS400.NET will now use the new provider.

Note: If you start your search from the top of the file, it will be the second instance.

```
<EktronPaymentGateway defaultProvider="CustomPaymentProvider">
```

13. Add your custom payment provider between the EktronPaymentGateway's `<providers>` tags. Note that the name defined here needs to match the name defined as the defaultProvider in the previous step.

```
<providers>
<add name="CustomPaymentProvider"
type="Ektron.Cms.Extensibility.Commerce.Samples.CustomPaymentProvider,
CustomPaymentProvider" />

</providers>
```

14. Save the Web.config file.

Next add the payment gateway to the Workarea with the following steps.

15. Go to **Workarea > Commerce > Configuration > Payment Options**.
16. Select New > Payment Gateway.
17. In the Name dropdown, select customerPaymentProvider.
18. Check both **Cards** and **Checks** checkboxes.
19. Save these changes.

Your custom payment provider is now the default provider. Whenever a payment provider needs to be contacted, the information routes through the new custom provider.

Making Your Custom Provider Appear as an Option in the Workarea

In the example above, you changed the web.config file's EktronPaymentGateway defaultProvider parameter to the name of your custom payment provider. This overrides the payment provider settings in the Workarea. If you want to manage all payment providers from the **Workarea** > **Settings** > **Commerce** > **Configuration** > **Payment Gateways** screen, follow these steps:

1. In the Web.config file, locate the **EktronPaymentGateway** section and make sure the **defaultProvider** parameter is set to "Automatic".

```
<EktronPaymentGateway defaultProvider="Automatic">
```

2. Save the Web.config file.
3. Navigate to the **Workarea** > **Settings** > **Commerce** > **Configuration** > **Payment Gateways** screen.
4. Click **New** > **Payment Gateway**.
5. Use the following table to complete the screen.

Field	Description
Name	From the drop down list, select the name of the your new custom gateway.
Default	Check this box if you want this to be the default payment gateway. The default payment gateway is the gateway all payment information is routed through.
User ID	Enter the User ID for this payment gateway. This ID will identify your account with this gateway provider.
Password	Enter the password for your account with this gateway provider.
Expand Custom Values	If this gateway provider expects additional parameters when contacting it, enter those values into the Custom 1 and Custom 2 fields.

6. Click the Save button ( ).

The custom gateway provider has been added and can now be managed from the Workarea.

CustomGatewayProvider Code Example

Warning! Copying and pasting the code below and using it without modification to create a DLL will not result in a working custom payment provider. This code is provided as an outline of what is needed to create an actual custom payment provider.

Below is the full C# code example used in this section. See Also: "Creating a Custom Payment Gateway Provider" on page 17-275.

```
using System;
using System.Collections;
using System.Collections.Specialized;
using System.Configuration.Provider;

using Ektron.Cms;
using Ektron.Cms.Common;
using Ektron.Cms.Commerce;

namespace Ektron.Cms.Extensibility.Commerce.Samples
{
public class CustomPaymentProvider : Ektron.Cms.Commerce.PaymentGatewayProvider
{
public CustomPaymentProvider() { }

public override void Initialize(string name,
System.Collections.Specialized.NameValueCollection config)
{
if (config == null)
throw new ArgumentNullException("config");

// Assign the provider a default name if it doesn't have one
if (String.IsNullOrEmpty(name))
name = "CustomPaymentProvider";

if (string.IsNullOrEmpty(config["description"]))
{
config.Remove("description");
config.Add("description", "CustomPaymentProvider");
}

// Call the base class's Initialize method
base.Initialize(name, config);

// Throw an exception if unrecognized attributes remain
if (config.Count > 0)
{
foreach (string key in config.AllKeys)
{
EkException.WriteToEventLog("Unrecognized Payment Gateway Provider attribute: " + key,
System.Diagnostics.EventLogEntryType.Warning);
}
}
}
```

```
public override string Authorize()
{
if (PaymentMethod.GetType() != typeof(CreditCardPayment))
throw new Ektron.Cms.Commerce.Exceptions.AuthorizationException("Invalid Payment Type");

CreditCardPayment creditCard = (CreditCardPayment)this.PaymentMethod;

if (creditCard.ExpirationDate.IsExpired())
throw new Ektron.Cms.Commerce.Exceptions.Payment.CreditCard.CardExpiredException("Card
Is Expired");

IsSubmissionSuccess = true;

Authorization.AuthorizedOn = DateTime.Now;
Authorization.TransactionId = new Guid().ToString();

return Authorization.TransactionId;
}

public override string AuthorizeAndCapture()
{
IsSubmissionSuccess = true;

Authorization.AuthorizedOn = DateTime.Now;
Authorization.CapturedOn = DateTime.Now;
Authorization.TransactionId = new Guid().ToString();

return Authorization.TransactionId;
}

public override string CapturePreauthorization(string transactionId)
{
IsSubmissionSuccess = true;

Authorization.CapturedOn = DateTime.Now;
return Authorization.TransactionId;
}

public override string VoidPreAuthorization(string transactionId)
{
IsSubmissionSuccess = true;

Authorization.VoidedOn = DateTime.Now;
return Authorization.TransactionId;
}
}
}
```

Customizing the Shipment Provider

A Shipping Provider is a pluggable component integrated into Ektron's CMS400.NET eCommerce module. The Shipping provider handles eCommerce real-time shipping rate retrieval by utilizing third party shipping services such as FedEx or UPS, or you can create your own fixed rate logic. CMS400.NET's eCommerce shipping module calculates the package(s) needed for an order and then passes the following information to the company providing the shipping services via a Shipping Provider.

- **package information** - for example, how many, height, width, depth and weight of each package.
- **warehouse address** - the address from which the items will be shipped. A warehouse's information can be set in the **Workarea** > **Settings** > **Commerce** > **Shipping** > **Warehouses** screen.
- **destination address** - the address a customer entered as his shipping address when making the purchase.
- **desired shipping options** - for example, if you have Next Day, 2-Day Ground and 3-Day Ground as shipping options, you can pass the option chosen by the customer.

CMS400.NET comes with several shipping providers, including FedEx and UPS. You can customize these providers or create your own using the extendable Shipping Provider architecture.

Note: Your company will need to set up or have an existing account with a third party shipping service before utilizing the shipping provider. This includes shipping providers such as, FedEx or UPS, which are included with CMS400.NET's eCommerce Module.

Each type of shipping provider accepts configuration parameters. For example, FedEx requires a username, password, account number, and meter number while UPS requires a Username, password, and account number. These configuration parameters along with the provider definitions are stored in the `SiteRoot/shipment.config` file. Below is a provider definition example for FedEx.

```
<add name="FedExShipmentProvider" type="Ektron.Cms.Commerce.Providers.Shipment.FedExShipmentProvider, Ektron.Cms.Commerce.Providers" serviceUrl="https://gatewaybeta.fedex.com/web-services" key="" password="" accountNumber="" meterNumber="" transactionId="Ektron FedEx v3 based transaction" />
```

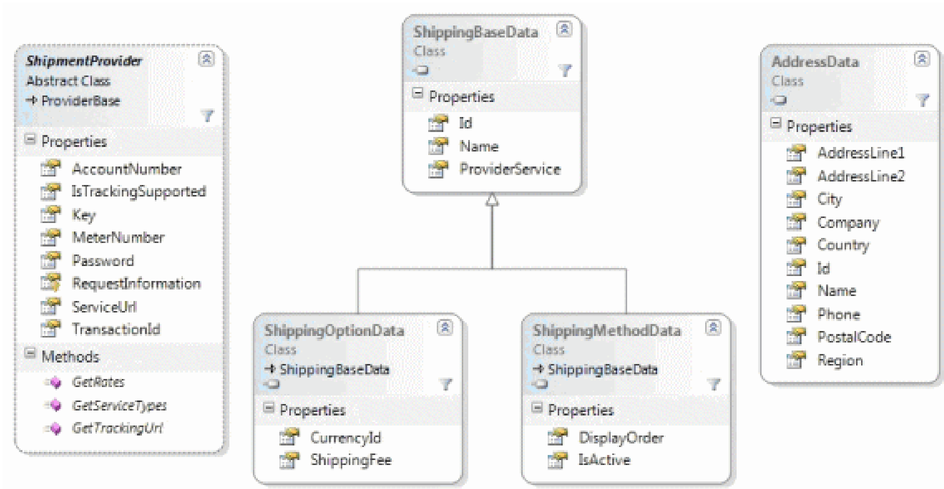
The following steps show the flow of shipping calculations for a customer purchasing a product from your site.

1. A customer adds two books his to cart and clicks checkout.
2. The shipping calculator looks for the smallest possible package that will fit the items.
3. The shipping calculator calls the registered shipping provider for each package in the order.
4. The shipping calculator combines all the rates received if more than one package is being shipped and returns the shipping method rates to the checkout control.
5. The customer selects the desired shipping method and it is saved with the cart.

Note: Many CMS400.NET settings affect your shipping calculations. A default warehouse must be defined with a valid shipping address. Shipping methods you would like to offer customers must be defined. For example, the FedEx provider supports over 10 possible shipping methods, but you may only be concerned with Priority, 2 Day, and Ground. This must be defined in CMS400.NET. You can also define the shipping packages your business uses. The Shipping calculator will try and fit the order items into any packages defined in the CMS. If no packages are defined, the item's dimensions are passed to the provider instead.

Shipment Provider Object Model

Below is the Object Model for Ektron's Shipment Provider.



The ShipmentProvider is the abstract base class you must extend to implement your own Shipping Provider. Details and descriptions of the ShipmentProvider API can be found in the Ektron CMS400.NET API Reference Manual's **Providers API** > **Shipment** > **Provider** > **ShipmentProvider**.

Creating a Custom Shipment Provider

In addition to the out-of-the-box shipment providers that come with CMS400.NET, you can create a custom provider that connects with any shipping company you choose. Below are the basic code steps you need to complete when creating a custom shipment provider. Additional code examples used by Ektron to create FedEx, Flat Rate and UPS shipment providers are located in:

```
C:\Program Files\Ektron\CMS400SDK\Commerce\Providers\Commerce.Providers\Shipping
```

Note: The complete C# code sample used in this example is available at the end of this section. See "CustomShipmentProvider Code Example" on page 17-287

1. Create a class library project in Visual Studio.
2. Add references to these DLLs:
   - Ektron.Cms.Commerce
   - Ektron.Cms.Common
   - Ektron.Cms.ObjectFactory

- Ektron.Cms.Instrumentation
- System.Configuration

3. Add these using statements to the code behind:

   - `using System.Configuration.Provider;`
   - `using Ektron.Cms.Commerce.Shipment.Provider;`
   - `using Ektron.Cms.Commerce;`
   - `using Ektron.Cms.Instrumentation;`

4. Change the namespace to:

```
namespace Ektron.Cms.Extensibility.Commerce.Samples
{
```

5. Rename your class and inherit as below:

```
public class CustomShipmentProvider : ShipmentPovider
{
```

6. Add the following constructor private variables and properties. The items added to the `shippingOptionList` are the shipping methods exposed as a service type in the management screen inside the Workarea.

```
#region constructor, member variables
public CustomShipmentProvider()
{
 IsTrackingSupported = false;
 _shippingOptionList = new List<string>();
 _shippingOptionList.Add("CustomOption_1");
 _shippingOptionList.Add("CustomOption_2");
}
private List<string> _shippingOptionList;
#endregion
```

7. Add the following methods required by the ShipmentProvider base class.

   - **Initialize** - reads configuration information
   - **GetServiceTypes** - returns a List <string> of the shipping options available
   - **GetTrackingUrl** - exposes tracking support
   - **GetRates** - returns a list of shipping rates for the items being shipped. The contents of this method will be added in the next step.

```
#region ShipmentProvider Implementation

public override void Initialize(string name,
System.Collections.Specialized.NameValueCollection config)
{
```

```
if (config == null)
throw new ArgumentNullException("config");

// Assign the provider a default name if it doesn't have one
if (string.IsNullOrEmpty(name))
 name = "CustomShipmentProvider";

 if (string.IsNullOrEmpty(config["description"]))
 {
 config.Remove("description");
 config.Add("description", "CustomShipmentProvider Provider");
 }

// Call the base class's Initialize method
base.Initialize(name, config);

// Throw an exception if unrecognized attributes remain
if (config.Count == 0)
 throw new ProviderException("Shipment provider attribute missing.");
else
 {
//read all config attributes.
 ServiceUrl = config["serviceUrl"];
 Key = config["key"];
 Password = config["password"];
 AccountNumber = config["accountNumber"];
 MeterNumber = config["meterNumber"];
 TransactionId = config["transactionId"];
 }
}

public override List<string> GetServiceTypes()
{
return _shippingOptionList;
}

public override string GetTrackingUrl(string trackingId)
{
return "";
}

public override List<ShippingOptionData>
GetRates(IEnumerable<ShippingMethodData> expectedOptions, AddressData
origin, AddressData destination, Weight weight, Dimensions dimensions)
{
}

#endregion
```

8. Implement the GetRates method. Add this code to public override for GetRates which was added during the previous step. When complete, the code should look like this.

Note: This example uses flat rates for your shipping methods. In a real world scenario, the shipping methods and their corresponding rates can be obtained via FedEx, UPS, a third party application or a Web service.

```
public override List<ShippingOptionData>
GetRates(IEnumerable<ShippingMethodData> expectedOptions, AddressData
origin, AddressData destination, Weight weight, Dimensions dimensions)
{
 List<ShippingOptionData> availableOptions = new
List<ShippingOptionData>();

try
 {
foreach (ShippingMethodData expectedOption in expectedOptions)
 {
Log.WriteInfo("Custom Shipping Provider. ExpectedOption:" +
expectedOption.Name);
switch (expectedOption.ProviderService.ToLower())
 {
case "customoption_1":
ShippingOptionData customOption1 = new ShippingOptionData();
 customOption1.Id = expectedOption.Id;
 customOption1.Name = expectedOption.Name;
 customOption1.ShippingFee = 25.00M;
 customOption1.ProviderService = "CustomOption_1";
 availableOptions.Add(customOption1);
break;
case "customoption_2":
ShippingOptionData customOption2 = new ShippingOptionData();
 customOption2.Id = expectedOption.Id;
 customOption2.Name = expectedOption.Name;
 customOption2.ShippingFee = 50.00M;
 customOption2.ProviderService = "CustomOption_2";
 availableOptions.Add(customOption2);
break;
 }
 }
 }
catch (Exception e)
 {
Log.WriteError("Custom Shipping Provider: Error retrieving shipping rates."
+ e.Message);
throw;
 }

return availableOptions;

}
}
}
```

Note: You can use the GetRates method to restrict countries to which you ship. For example, if you want to prevent shipping to all countries except Canada, add these lines of code to the GetRates method.

```
if (destination.Country.Id != 124)
throw new
Ektron.Cms.Commerce.Exceptions.Shipping.InvalidAddressException("We only
ship to Canada.");
```

9. Save and build the project.
10. Copy your project’s DLL file to your Ektron Web site’s **bin** directory.
11. Register the provider in your site’s **shipment.config** file. This file provides the facility to manage shipping providers within CMS400.NET. Locate the **shipmentProvider** section and change the **defaultProvider** parameter to the name of your custom provider.

```
<shipmentProvider defaultProvider="CustomShipmentProvider">
```

12. Add your custom shipping provider between the shipmentProvider’s `<providers>` tags. Note that the name defined here needs to match the name defined as the defaultProvider in the previous step.

```
<providers>
<add name="CustomShipmentProvider"
type="Ektron.Cms.Extensibility.Commerce.Samples.CustomShipmentProvider,
CustomShipmentProvider" serviceUrl="" key="" password="" accountNumber=""
meterNumber="" transactionId="CustomShipmentProvider based transaction" />
</providers>
```

13. Save the Web.config file.

    Your custom shipping provider is now the default provider. Whenever you need to obtain shipping rate information, the information routes through the new custom provider.
14. Add the shipping methods that are available for your provider in the **Workarea** > **Settings** > **Commerce** -> **Shipping** > **Methods** screen.
    - Select **New** > **Shipping Method**.
    - Enter a name. This is what a customer sees during the checkout process. An example is “Ground” or “Next Day”. For this example, use “Custom1”.
    - Check the **Active** checkbox.
    - Click the View Options link and select **CustomOption_1** from the list.
    - Click the Save button ( ).
    - Repeat this process for the **CustomOption2** shipping method type.

The options are now available in the checkout process, and are shown on the shipping method selection screen.

CustomShipmentProvider Code Example

Warning! Copying and pasting the code below and using it without modification to create a DLL does not result in a working “real time” shipping provider. This example uses fixed rates and should be modified to meet your needs.

Below is the full C# code example used in this section. See Also: "Creating a Custom Shipment Provider" on page 17-283.

```
using System.Configuration.Provider;
using Ektron.Cms.Commerce.Shipment.Provider;
using Ektron.Cms.Commerce;
using Ektron.Cms.Instrumentation;

namespace Ektron.Cms.Extensibility.Commerce.Samples
{
public class CustomShipmentProvider : ShipmentProvider
{
#region constructor, member variables
public CustomShipmentProvider()
{
IsTrackingSupported = false;
_shippingOptionList = new List<string>();
_shippingOptionList.Add("CustomOption_1");
_shippingOptionList.Add("CustomOption_2");
}

private List<string> _shippingOptionList;

#endregion

#region ShipmentProvider Implementation

public override void Initialize(string name,
System.Collections.Specialized.NameValueCollection config)
{
if (config == null)
throw new ArgumentNullException("config");

// Assign the provider a default name if it doesn't have one
if (string.IsNullOrEmpty(name))
name = "CustomShipmentProvider";

if (string.IsNullOrEmpty(config["description"]))
{
config.Remove("description");
config.Add("description", "CustomShipmentProvider Provider");
}

// Call the base class's Initialize method
base.Initialize(name, config);

 // Throw an exception if unrecognized attributes remain
if (config.Count == 0)
throw new ProviderException("Shipment provider attribute missing.");
else
{
//read all config attributes.
ServiceUrl = config["serviceUrl"];
Key = config["key"];
Password = config["password"];
AccountNumber = config["accountNumber"];
MeterNumber = config["meterNumber"];
TransactionId = config["transactionId"];
}
}

public override List<string> GetServiceTypes()
{
```

```
return _shippingOptionList;
}

public override string GetTrackingUrl(string trackingId)
{
return "";
}

public override List<ShippingOptionData> GetRates(IEnumerable<ShippingMethodData>
expectedOptions, AddressData origin, AddressData destination, Weight weight, Dimensions
dimensions)
{

List<ShippingOptionData> availableOptions = new List<ShippingOptionData>();

try
{
foreach (ShippingMethodData expectedOption in expectedOptions)
{
Log.WriteInfo("Custom Shipping Provider. ExpectedOption:" + expectedOption.Name);

switch (expectedOption.ProviderService.ToLower())
{
case "customoption_1":
ShippingOptionData customOption1 = new ShippingOptionData();
customOption1.Id = expectedOption.Id;
customOption1.Name = expectedOption.Name;
customOption1.ShippingFee = 25.00M;
customOption1.ProviderService = "CustomOption_1";
availableOptions.Add(customOption1);
break;

case "customoption_2":
ShippingOptionData customOption2 = new ShippingOptionData();
customOption2.Id = expectedOption.Id;
customOption2.Name = expectedOption.Name;
customOption2.ShippingFee = 50.00M;
customOption2.ProviderService = "CustomOption_2";
availableOptions.Add(customOption2);
break;
}
}
}
catch (Exception e)
{
Log.WriteError("Custom Shipping Provider: Error retrieving shipping rates." +
e.Message);
throw;
}

return availableOptions;

}

 #endregion

}
}
```

Customizing the Inventory Provider

An Inventory Provider is a pluggable component that's integrated into Ektron's CMS400.NET eCommerce module. An Inventory Provider handles the retrieving and updating of inventory information for products within the CMS. Out of the Box, the CMS400.NET comes with a default Ektron Inventory Provider that tracks inventory within the CMS database.

If your business has an Accounting or Enterprise Resource Management solution that manages inventory, you can create a custom Inventory Provider that retrieves and updates inventory information directly from that system. Inventory data can be stored in any number of locations, including databases, ERP or CRM systems, or even XML files.

Inventory Provider Object Model

Below is the Object Model for Ektron's Inventory Provider.

The InventoryProvider is the abstract base class you must extend to implement your own Inventory Provider. Details and descriptions of the InventoryProvider API can be found in the Ektron CMS400.NET API Reference Manual's **Providers API** > **Inventory** > **Provider** > **InventoryProvider**.

Creating a Custom Inventory Provider

In addition to the out-of-the-box inventory provider that comes with CMS400.NET, you can create your own custom provider that connects with an existing inventory system. Below are the basic code steps you need to complete when creating a custom inventory provider. A code example for the inventory provider used by CMS400.NET is located in:

```
C:\Program Files\Ektron\CMS400SDK\Commerce\Providers\Commerce.Providers\Inventory
```

Note: The complete C# code sample used in this example is available at the end of this section. See "CustomInventoryProvider Code Example" on page 17-292

1. Create a class library project in Visual Studio.
2. Add references to these DLLs:
   - Ektron.Cms.Commerce
   - Ektron.Cms.Common
   - Ektron.Cms.ObjectFactory
   - System.Configuration
3. Add these using statements to the code behind:
   - `using Ektron.Cms.Commerce.Inventory.Provider;`
   - `using Ektron.Cms.Commerce.Data;`
   - `using Ektron.Cms.Commerce;`
   - `using Ektron.Cms.Common;`
   - `using Ektron.Cms.Extensibility;`
   - `using Ektron.Cms.Extensibility.Commerce;`
4. Change the namespace to:

```
namespace Ektron.Cms.Extensibility.Commerce.Samples
{
```

5. Rename your class and inherit as below:

```
public class CustomInventoryProvider : InventoryPovider
{
```

6. Add the following constructor, private variables and properties.

```
public CustomInventoryProvider() { }private CmsInventory _inventory;
protected CmsInventory Inventory
 {
get
 {
if (_inventory == null)
 {
 _inventory = new CmsInventory(RequestInformation);
 }
return _inventory;
 }

 }
```

7. Override the following methods. These methods area called when the inventory system is queried.
   - **GetInventory** - returns an InventoryData data class for a given product id.
   - **SaveInventory** - persists updates to the stock levels inside the inventory system.

Note: In this example, we trigger CMS400.NET extensibility events, such as OnBeforeInventorySave() and OnAfterInventorySave(). In a real world scenario, your existing inventory system may have its own inventory events that are used.

```
public override InventoryData GetInventory(long entryId)
 {
return Inventory.GetInventory(entryId);
 }

public override void SaveInventory(InventoryData inventory)
 {
 OnBeforeInventorySave(inventory);
 Inventory.SaveInventory(inventory);
 OnAfterInventorySave(inventory);

if (inventory.UnitsInStock < inventory.ReorderLevel)
 {
 OnInventoryReorderLevelReached(inventory);
 }
 }
 }
}
```

8. Save and build the project.
9. Copy your project's DLL file to your Ektron web site's **bin** directory.
10. Register the provider in your site's **Web.config** file. The Web.config file provides the facility to manage inventory providers within CMS400.NET. Locate the **InventoryProvider** section and change the **defaultProvider** parameter to the name of your custom provider.

Note: If you start your search from the top of the file, it will be the second instance.

```
<inventoryProvider defaultProvider="CustomInventoryProvider">
```

11. Add your custom payment provider between the EktronPaymentGateway's `<providers>` tags. Note that the name defined here needs to match the name defined as the defaultProvider in the previous step.

```
<providers>
<add name="CustomInventoryProvider"
type="Ektron.Cms.Extensibility.Commerce.Samples.CustomInventoryProvider,
CustomInvnetoryProvider" />
</providers>
```

12. Save the Web.config file.

Your custom inventory provider is now the default provider. Whenever the inventory is queried, the call routes through the new custom provider.

CustomInventoryProvider Code Example

Warning! Copying and pasting the code below and using it without modification to create a DLL does not result in a working "real time" shipping provider. This example uses fixed rates and should be modified to meet your needs.

Below is the full C# code example used in this section. See Also: "Creating a Custom Inventory Provider" on page 17-290.

```
using Ektron.Cms.Commerce.Inventory.Provider;
using Ektron.Cms.Commerce.Data;
using Ektron.Cms.Commerce;
using Ektron.Cms.Common;
using Ektron.Cms.Extensibility;
using Ektron.Cms.Extensibility.Commerce;

namespace Ektron.Cms.Extensibility.Commerce.Samples
{
public class CustomInventoryProvider : InventoryProvider
{
public CustomInventoryProvider() { }private CmsInventory _inventory;
protected CmsInventory Inventory
{
get
{
if (_inventory == null)
{
_inventory = new CmsInventory(RequestInformation);
}
return _inventory;
}
}

public override InventoryData GetInventory(long entryId)
{
return Inventory.GetInventory(entryId);
}

public override void SaveInventory(InventoryData inventory)
{
OnBeforeInventorySave(inventory);
Inventory.SaveInventory(inventory);
OnAfterInventorySave(inventory);

if (inventory.UnitsInStock < inventory.ReorderLevel)
{
OnInventoryReorderLevelReached(inventory);
}
}
}
}
```

Chapter 18

Synchronizing Servers Using eSync

Ektron's eSync revolutionizes the way that Web sites are built, deployed and maintained and is the only synchronization solution that can keep Web sites up-to-date efficiently, giving you a level of control over your site that was impossible before. From single sites, to global multi-sites, to server farms, eSync gives you scalable, geo-synchronization capabilities that allow you to easily update exactly what you want, when you want to.

The following videos introduce eSync.

- http://media.ektron.com/flash/esync/800x600/esync.html
- http://media.ektron.com/webinars/esync/esyncwebinar.html

eSync moves only the changes you want to move, from single pieces of content to entire sites, making updates efficient and eliminating site downtime. With its intelligent synchronization technology, eSync is able to securely move selected content bidirectionally: Web 2.0 sites have a wealth of user-generated content and membership information. That data can now be synchronized back to the development side of the firewall.

By employing certificate-based authentication to secure your Web site, Ektron's eSync lets CMS users update content anywhere safely, whether it is on a production server or within the development environment. Alternatively, all of your updates can take place on the safe side of your firewall before they are moved to the live site.

If conflicting versions of content exist, eSync's configurable conflict resolution engine ensures that you won't lose your most up-to-date content. The version that isn't posted is saved in a history, along with other previous versions, enabling you to track changes or restore content if the need arises.

Within complex IT infrastructures, eSync can synchronize content, assets, HTML pages and other components of your Web site, whether it is managed by CMS400.NET or not.

Synchronization can be scheduled to take place at strategic times that assure optimal performance while facilitating site updates. Global multi-site setups can take advantage of this to coordinate synchronizations with servers around the world, taking advantage of low traffic periods. Or, use eSync's scheduling feature to set up time-sensitive events. Synchronization can take place with single or multiple servers, whatever your needs are.

eSync's ability to move and copy data is unparalleled, and it offers a host of options for managing multiple servers. If there is a need for multiple development servers, eSync can create another copy of the live site for you to work with. As your developers build out changes to the site, their updates can by synchronized to the staging and production servers. eSync can also support advanced infrastructures, including load balancing and failover server configurations.

Ektron's eSync is the only solution in the marketplace today that gives you the level of control you need to keep your Web sites completely up-to-date. Whatever your Web site structure is, Ektron's synchronization technology lets updates happen efficiently and quickly, and provides the tools to deal with today and tomorrow's information-hungry world.

eSync is more fully explained through these topics.

Setting Up eSync

This chapter helps you install and start using Ektron CMS400.NET’s eSync. For full details about the feature, see "Using eSync" on page 18-35.

For this configuration	See this section
Two sites on same server	"Scenario 1: Synching Two Sites on the Same Server" on page 18-4
One Local to one Remote server	"Scenario 2: Synching an Ektron CMS400.NET Server with Another Server" on page 18-5
Development to Staging to Production servers	"Scenario 3: Setting up a Development > Staging > Production Environment" on page 18-15

Scenario 1: Synching Two Sites on the Same Server

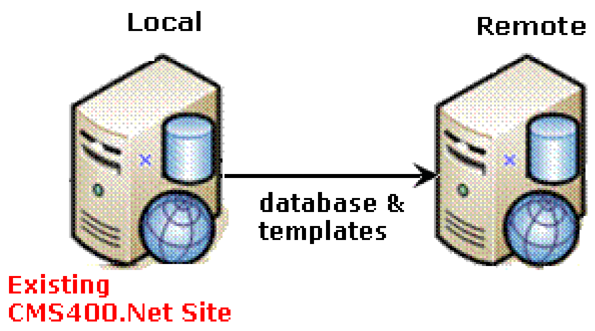
Although it is unlikely that you will use this configuration in “real-life” situations, it the simplest way to begin testing and learning how eSync works.

1. Install the first site.
2. See Also: ”Installing Ektron CMS400.NET” on page 1-20 and ”Installing the Minimum and Starter Sites” on page 1-23
3. Near the end of the installation, the following dialog appears.

4. Click **Yes**.
5. Install a second site on the same server.
6. Near the end of the installation, the same dialog appears.
7. Click **Yes**.

Both sites’ security certificates have been set up and configured. Continue from "Part Three: Connect the Local and Remote Servers" on page 18-9

Scenario 2: Synching an Ektron CMS400.NET Server with Another Server



This scenario assumes you have Ektron CMS400.NET on one server (call it local), and want to sync it with another (call it remote). To accomplish this, you install a minimal Ektron CMS400.NET site to the new, remote server. Next, use eSync to upload your Ektron CMS400.NET site from the local to the remote server.

After the you complete the initial and template syncs explained in this chapter, the two sites are a mirror image of each other.

Follow these steps to configure two servers to sync with each other.

Prerequisites - See eSync Requirements

- "Part One: Set up a Min Site on the Remote Server" on page 18-5
- "Part Two: Generate and Copy Security Certificates" on page 18-6
- "Part Three: Connect the Local and Remote Servers" on page 18-9
- "Part Four: Upload the Local Server's Database to the Remote Server" on page 18-11
- "Part Five: Upload the Local Server's Templates to Remote" on page 18-13

Part One: Set up a Min Site on the Remote Server

1. Upgrade the local server to the latest version of Ektron CMS400.NET if necessary.
2. On the remote server, install a minimum site whose Ektron CMS400.NET version matches the version on the local server.
3. To do this, run the Ektron CMS400.NET base installation file (CMS400Base8x.exe). For more information, see t"Installing Ektron CMS400.NET" on page 1-20.

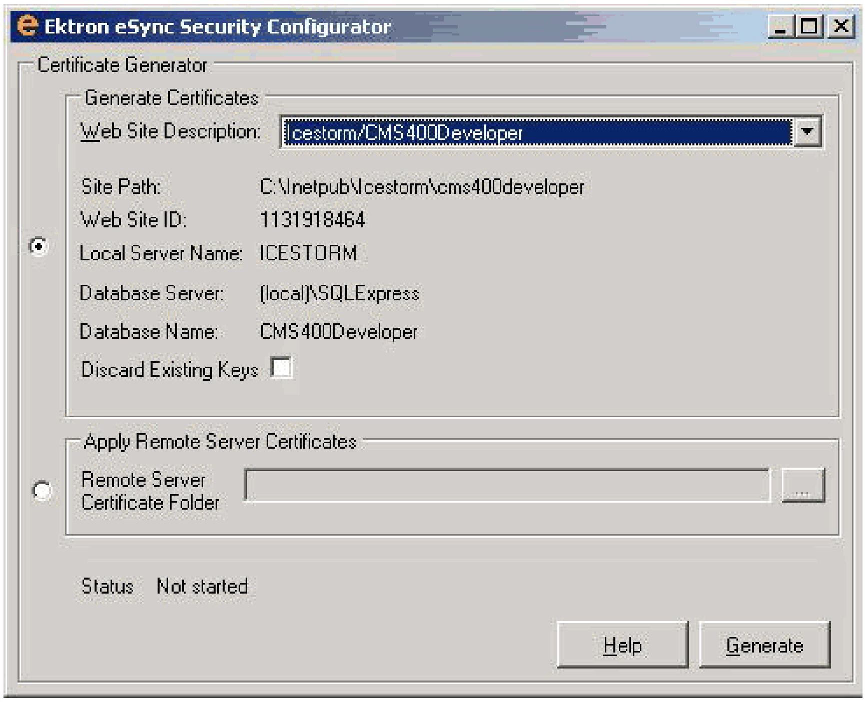
4. If the current site with which you will sync is precompiled, you must also precompile the min site.

Part Two: Generate and Copy Security Certificates

Security certificates authorize the synchronization of files between servers. In this part, you generate security certificates on the local server, then copy them to the remote.

Follow these steps to complete this procedure.

1. Sign on to the local server.
2. Click the **Windows Start Button**> **All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
3. The following screen appears.



4. At the **Web Site Description** field, select the Web site on the local server.
5. Press **Generate**.
6. The certificates are created on the local server.

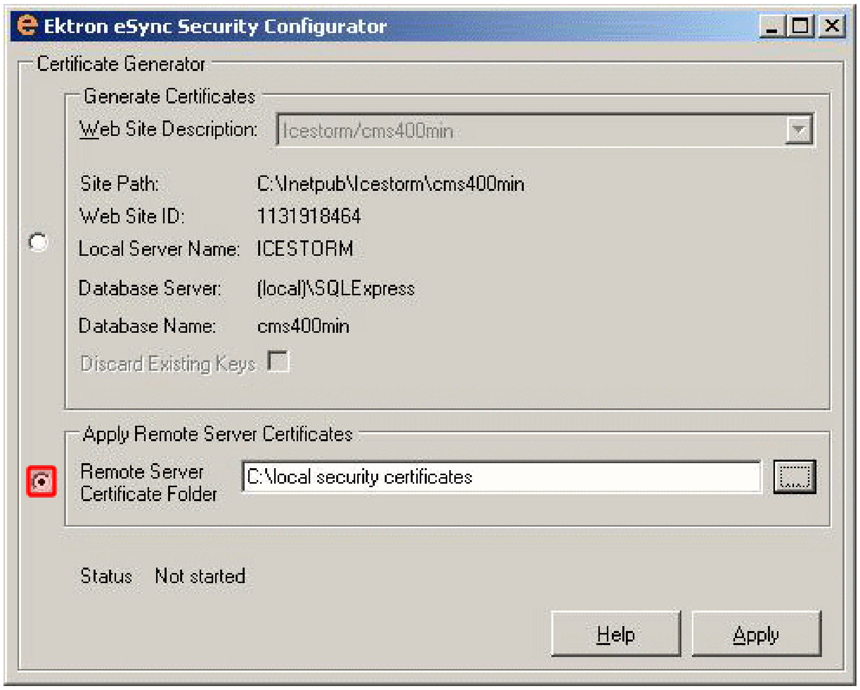
7. Close the Security Configurator dialog.
8. Open two Windows Explorer windows side-by-side: one showing the local server's file system, and the other showing the remote server's file system.
9. In the remote server window, create a folder underneath the root folder. Name the folder **local security certificates**.

Warning! Do not create the new folder under the web root, C:\inetpub\wwwroot.

10. In the local server window, open the following folder:
`C:\ProgramFiles\Ektron\CMS400v8x\Utilities\Software\SecurityConfigurator.`
11. From that folder, copy these files.
    - *servername*_SyncClient.pfx
    - *servername*_SyncClient.pvk
    - *servername*_SyncClient.cer
    - *servername*_SyncServer.pfx
    - *servername*_SyncServer.pvk
    - *servername*_SyncServer.cer
12. Paste the files into the folder you created in Step 9. Make sure there are no other security files in the folder.
13. Close both windows you opened in Step 8.

Note: After copying security certificates to the remote folder, you need to register and move them to the correct folders. The Security Configurator screen does this.

14. Sign on to the remote server.
15. Open the security configurator screen using this path: **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
16. The security configurator screen appears.



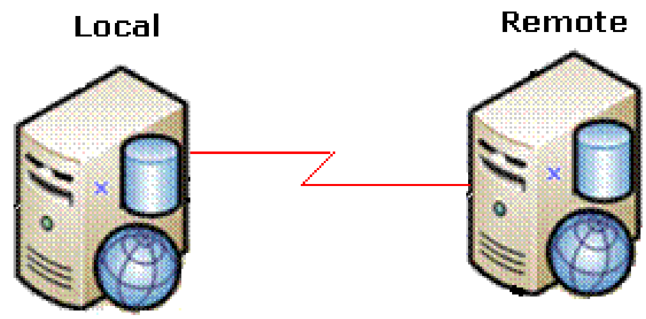
17. Click the **Apply Remote Server Certificates** button (circled above).
18. Click the **Browse** button next to that field.
19. Browse to the folder to which you pasted the security certificates in Step 12.
20. Click the **Apply** button.
21. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the remote server.

Next, you need to generate security certificates on the remote server, then copy them to the local.

To accomplish this, follow all steps in "Part Two: Generate and Copy Security Certificates" on page 18-6, but this time, consider the remote server to be the local server and vice versa.

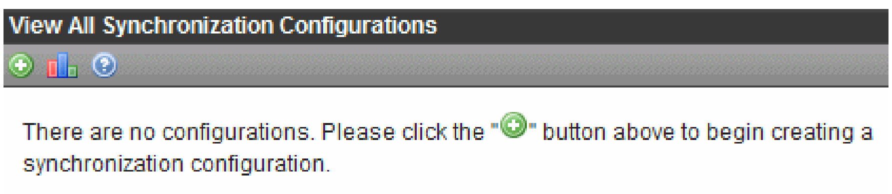
Now that you have generated and copied security certificates between servers, you can set up eSync.

Part Three: Connect the Local and Remote Servers

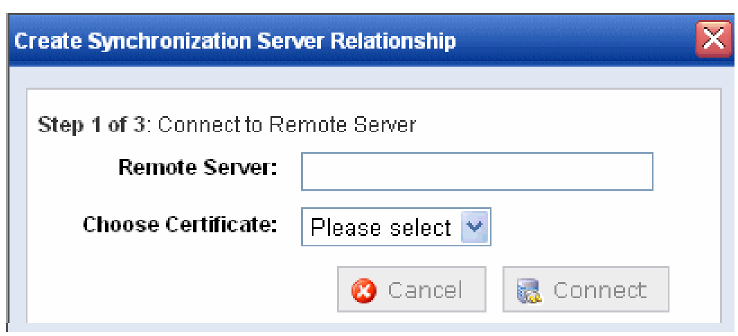


Warning! Back up your database before beginning this procedure!

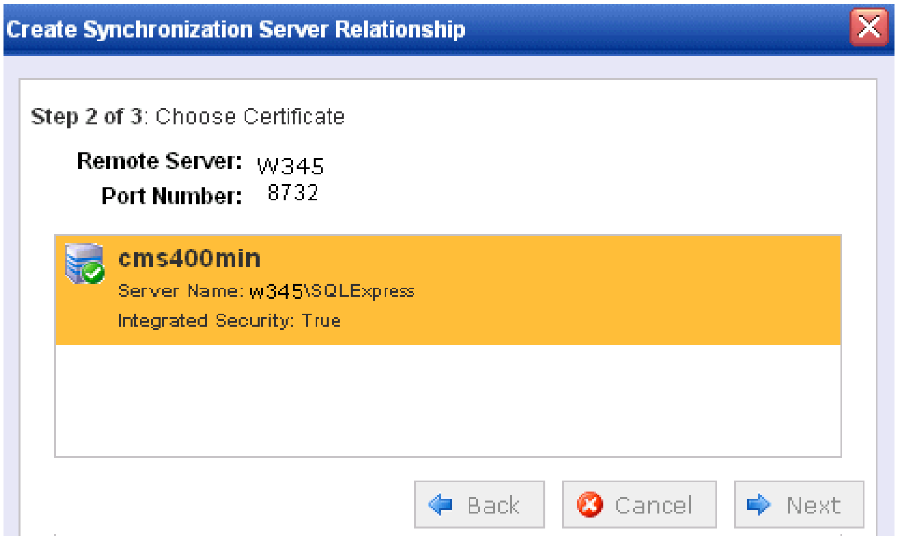
1. On the local server, sign on to Ektron CMS400.NET.
2. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Synchronization**.
3. The View All Synchronization Configurations screen appears.



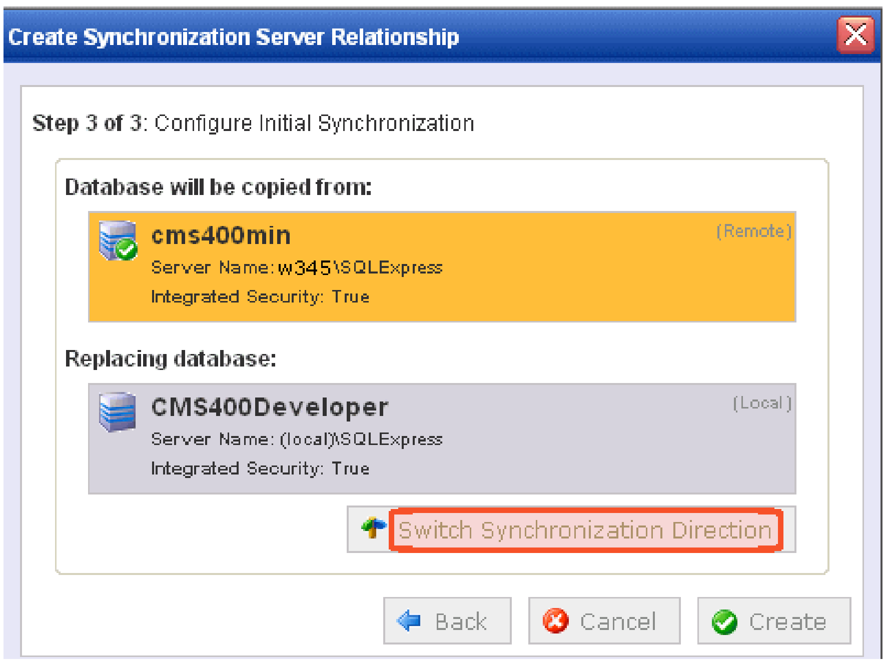
4. Click the **Add** button ( ).
5. The Create Synchronization Server Relationship screen appears.



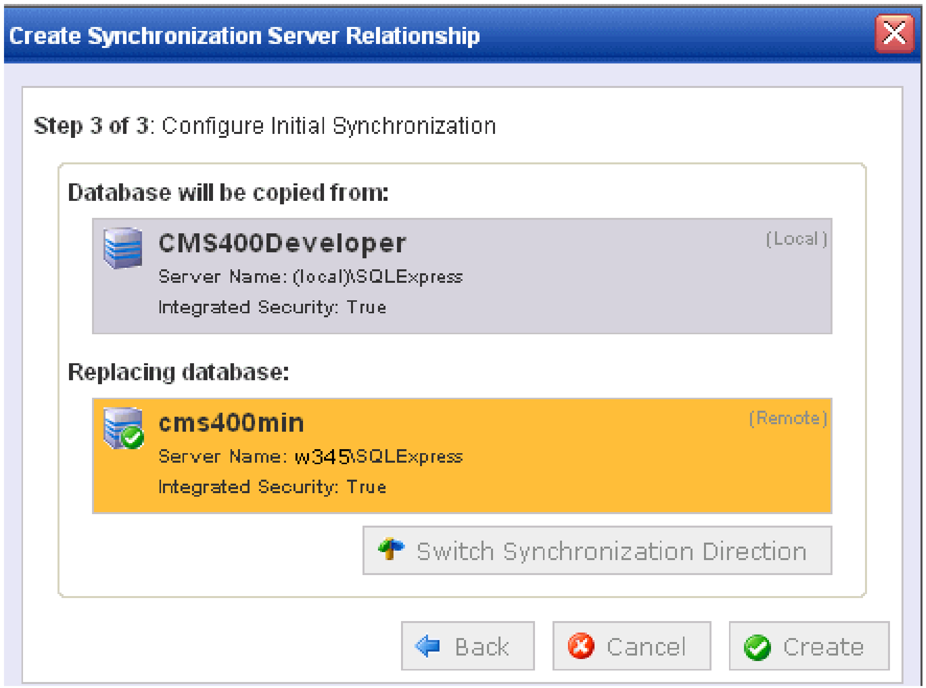
6. At the **Remote Server** field, enter the name of the remote server.
7. At the **Choose Certificate** field, the name of the remote server appears.
8. Click the **Connect** button. This action connects the local with the remote server.
9. After you connect to the remote server, a new screen appears showing its database.



10. A new screen appears, showing both servers.

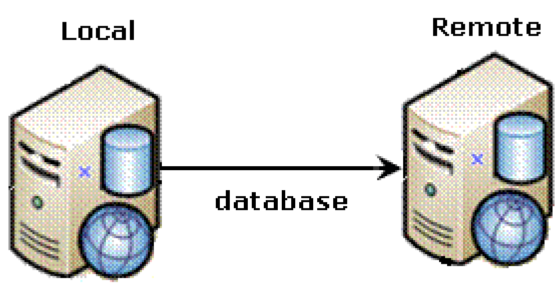


11. Click the **Switch Synchronization Direction** button.
12. Now the screen indicates that the database will be uploaded from your local server (which contains the CMS400 Developer site) to the new, remote server. See below.

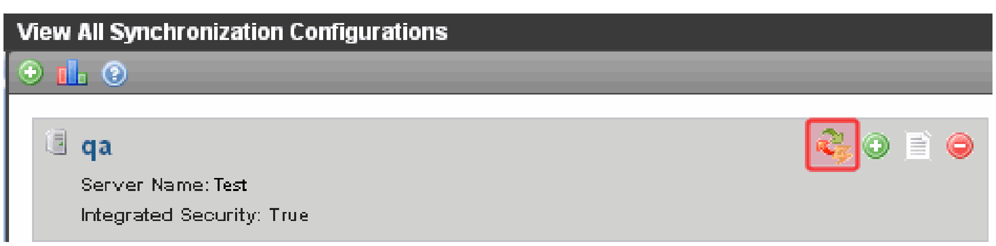


13. Click **Create**. This action connects the local and remote servers.

Part Four: Upload the Local Server's Database to the Remote Server

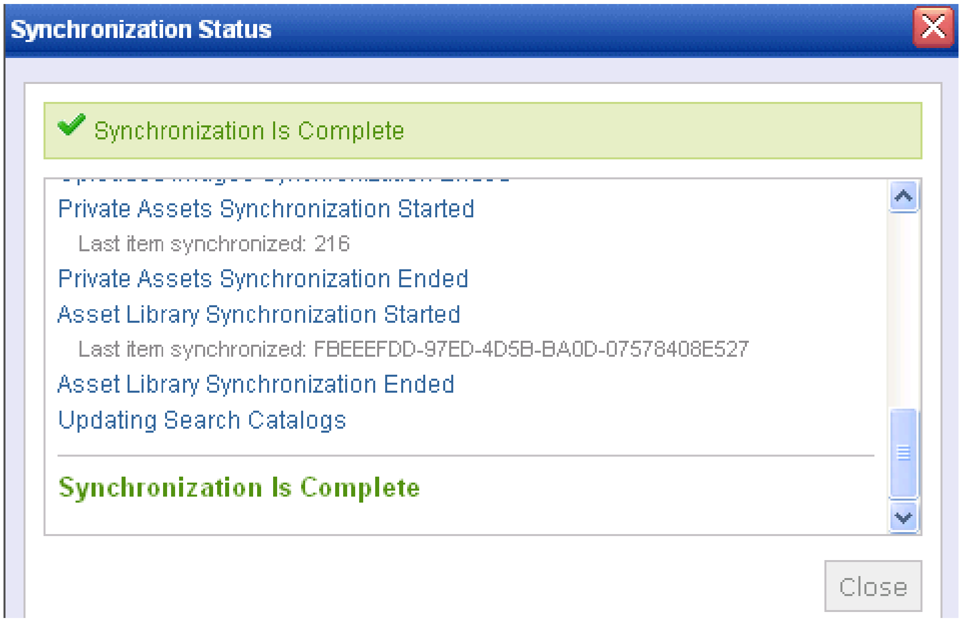


1. From the View All Synchronization Configurations screen, click the **Start Initial Sync** button.



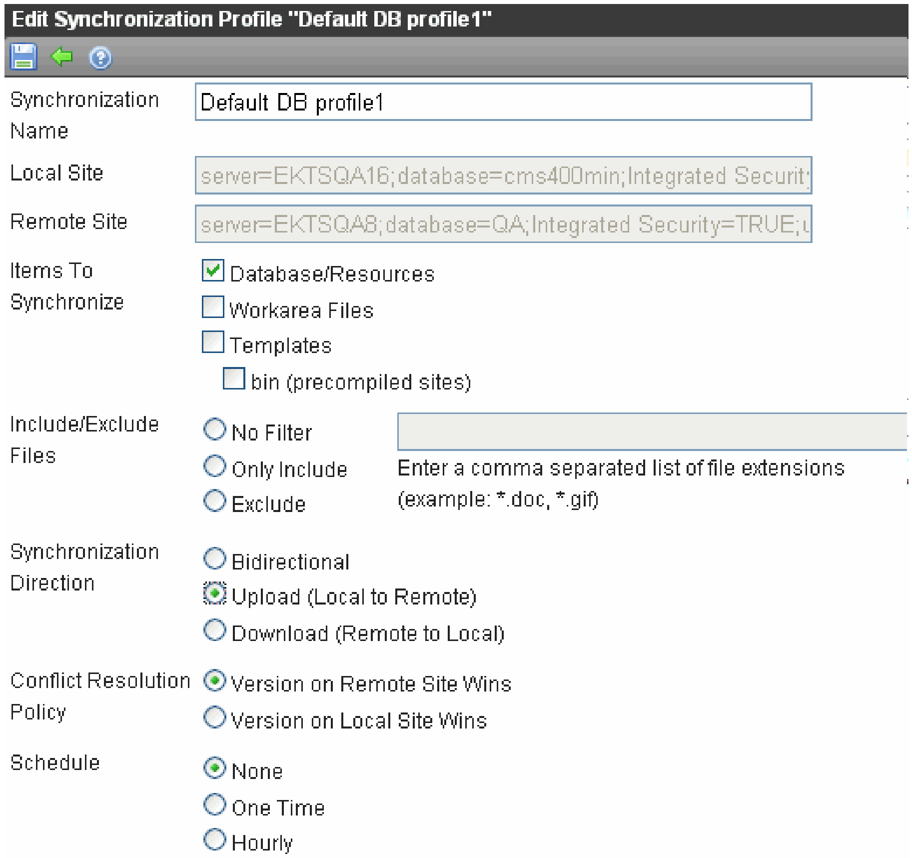
2. The initial sync uploads the local server's database to the remote server.

3. A screen tracks the progress.

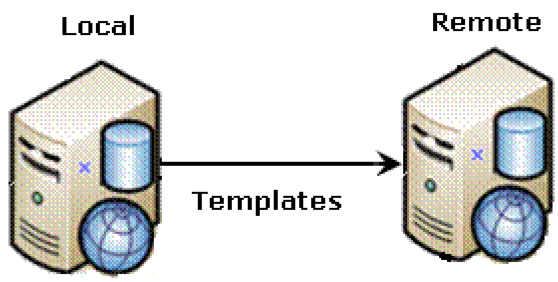


4. When the sync is finished, **Synchronization is Complete** appears.

The initial sync also creates a *default database profile*. The profile remembers information about the sync, such as source and destination databases, sync direction, and the fact that it syncs the database and resource files (see example below). You can reuse this profile to sync your database/resource files any time in the future.

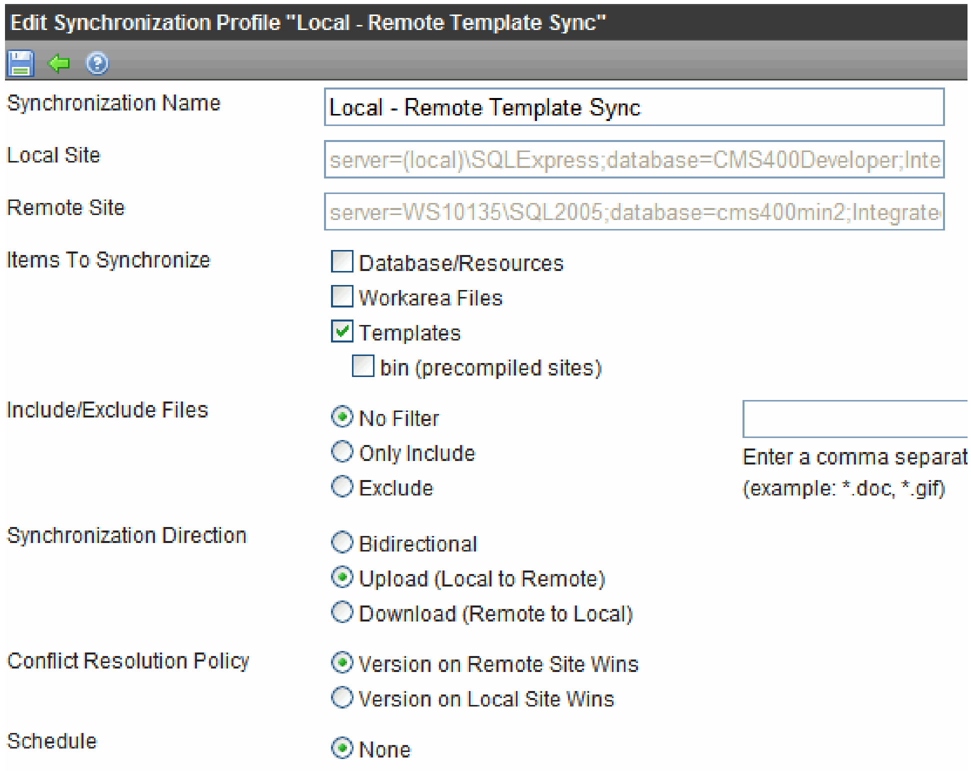


Part Five: Upload the Local Server's Templates to Remote

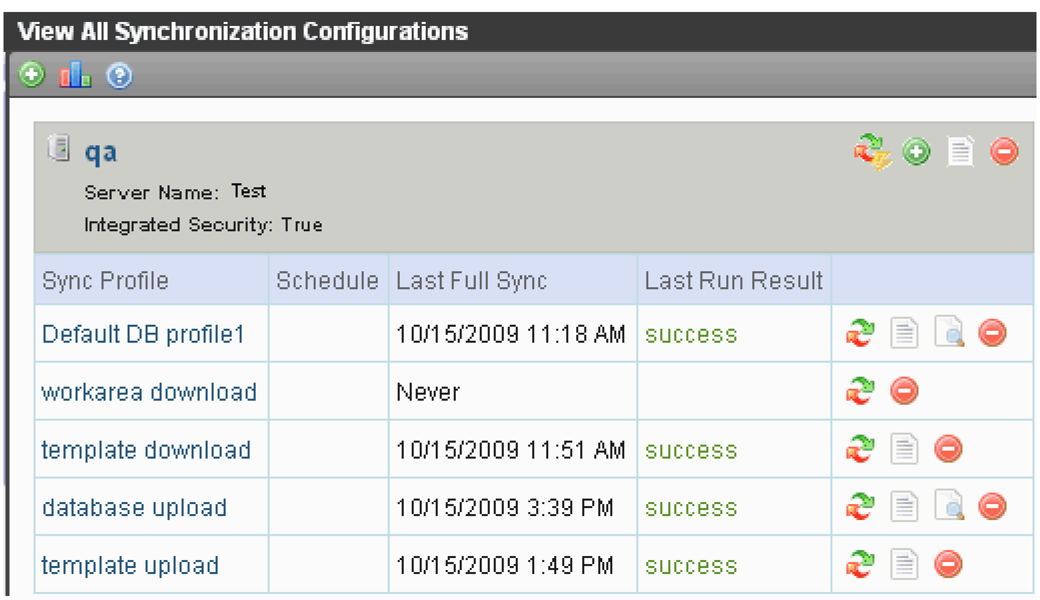


1. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button ( ).
2. The Add Synchronization Profile screen appears.
3. At the **Synchronization name** field, give this profile a name, such as Local - Remote Template Sync.
4. At the **Items to Synchronize** field, select **Templates**.
5. For **Direction**, choose **Upload**.

6. For **Schedule**, choose **None**. (See example below.)



7. Save the profile.
8. Click the Run button to the right of the template sync (circled below).

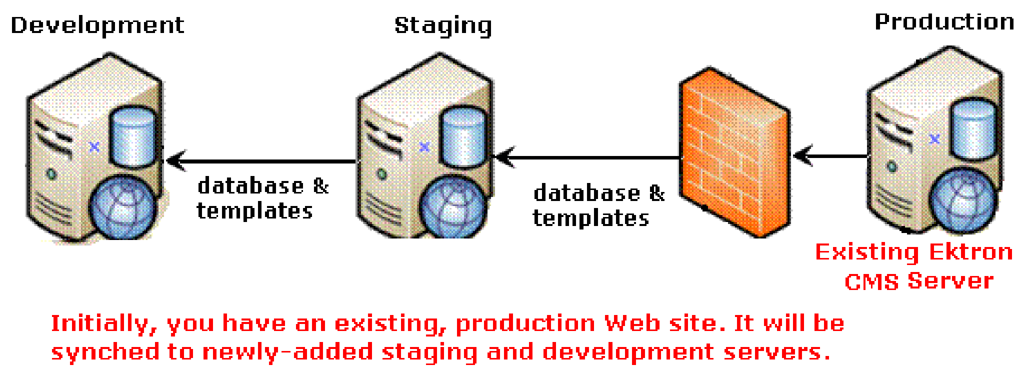


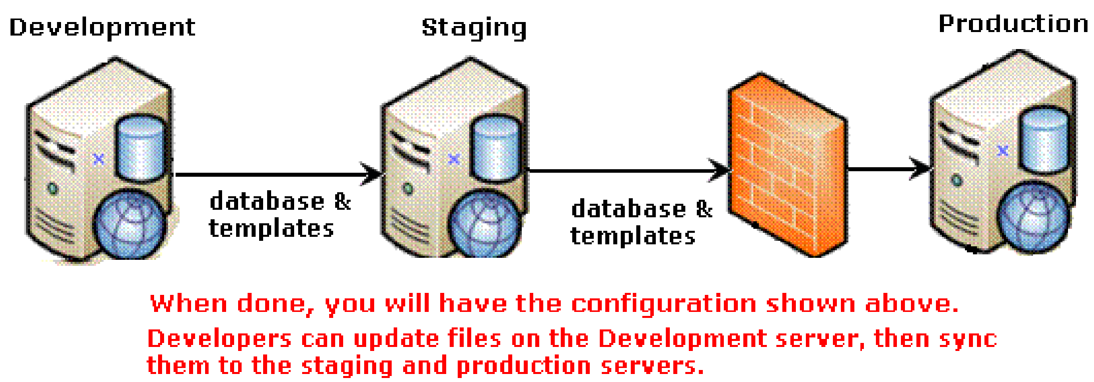
9. A screen tracks the sync's progress.
10. When the sync is complete, **Synchronization is Complete** appears.

You can reuse the template sync profile to sync templates any time in the future.

Scenario 3: Setting up a Development > Staging > Production Environment

Before





In this scenario, a version of Ektron CMS400.NET resides on one server. You will consider that your production server and use it to initialize the staging and development servers.

Here's a preview of the steps you will follow.

- "Part One: Set up a Min Site on the Staging and Development Servers" on page 18-16
- "Part Two: Generate and Copy Security Certificates" on page 18-16
- "Part Three: Connect Staging and Production Servers" on page 18-24
- "Part Four: Download the Production Server's Database to the Staging Server" on page 18-26

- "Part Five: Download the Production Server's Templates to Staging" on page 18-28
- "Part Six: Connect the Development and Staging Servers" on page 18-30
- "Part Seven: Download the Staging Server's Database to the Development Server" on page 18-32
- "Part Eight: Download the Staging Server's Templates to Development" on page 18-33

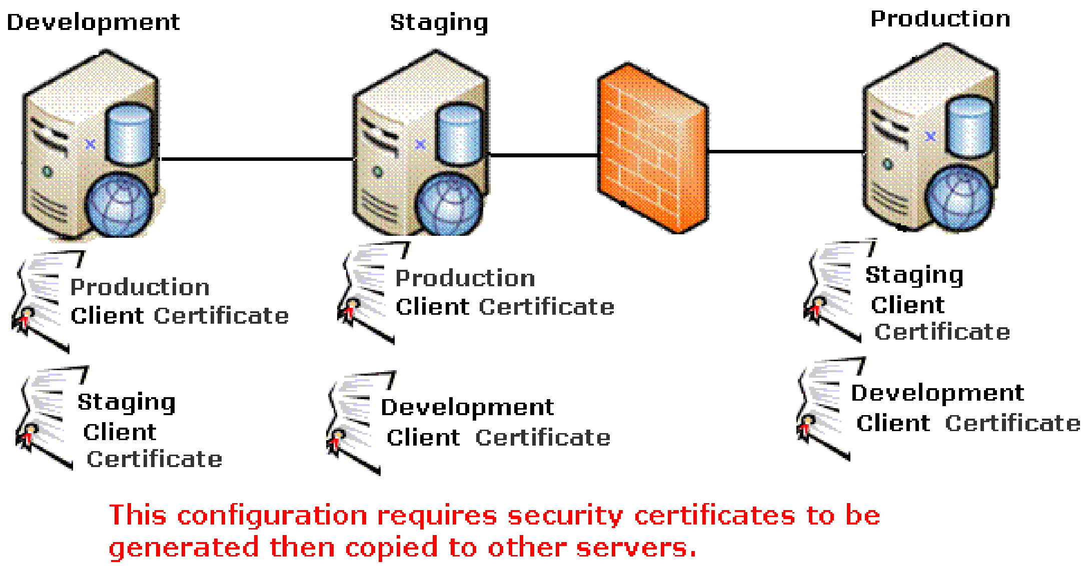
Prerequisites - See eSync Requirements

Part One: Set up a Min Site on the Staging and Development Servers

1. Upgrade your existing server to the current version of Ektron CMS400.NET if necessary.
2. Install a minimum site on the staging and development servers.
3. To do this, run the Ektron CMS400.NET base installation file (CMS400Base8x.exe) version 7.6 or higher. (For more information, see "Installing Ektron CMS400.NET" on page 1-20.)

Part Two: Generate and Copy Security Certificates

Security certificates authorize synchronization between servers. In an eSync configuration, every server needs a security certificate from every other server, as shown below.

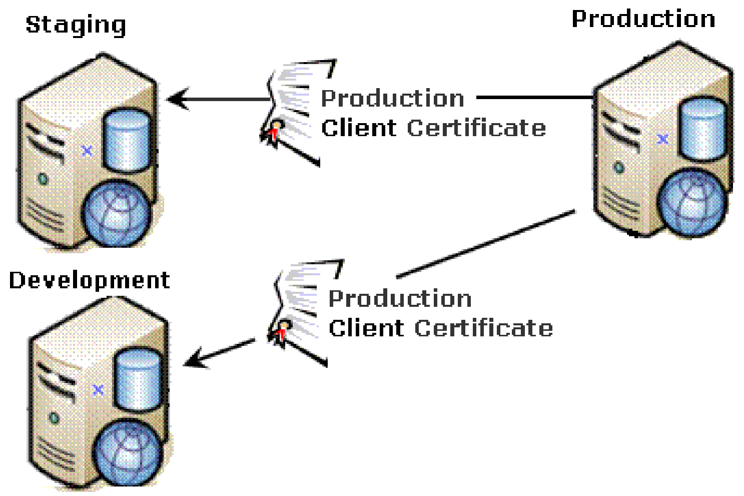


To generate and copy these certificates, follow these steps.

- "A. Generate Security Certificates on Production and Copy Them to Staging and Development" on page 18-17

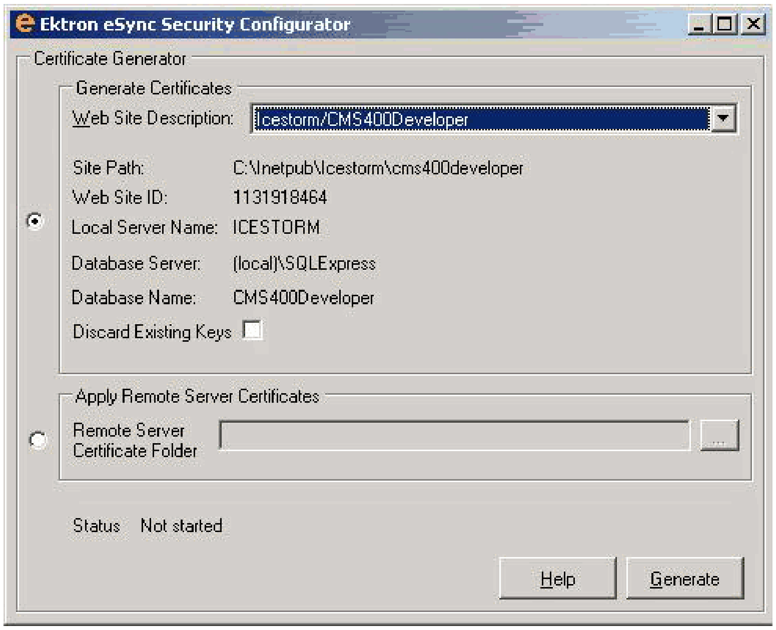
- "B. Generate Security Certificates on Staging and Copy Them to Development and Production" on page 18-19
- "C. Generate Security Certificates on Development and Copy them to Staging and Production" on page 18-22

A. Generate Security Certificates on Production and Copy Them to Staging and Development



Follow these steps to complete this procedure.

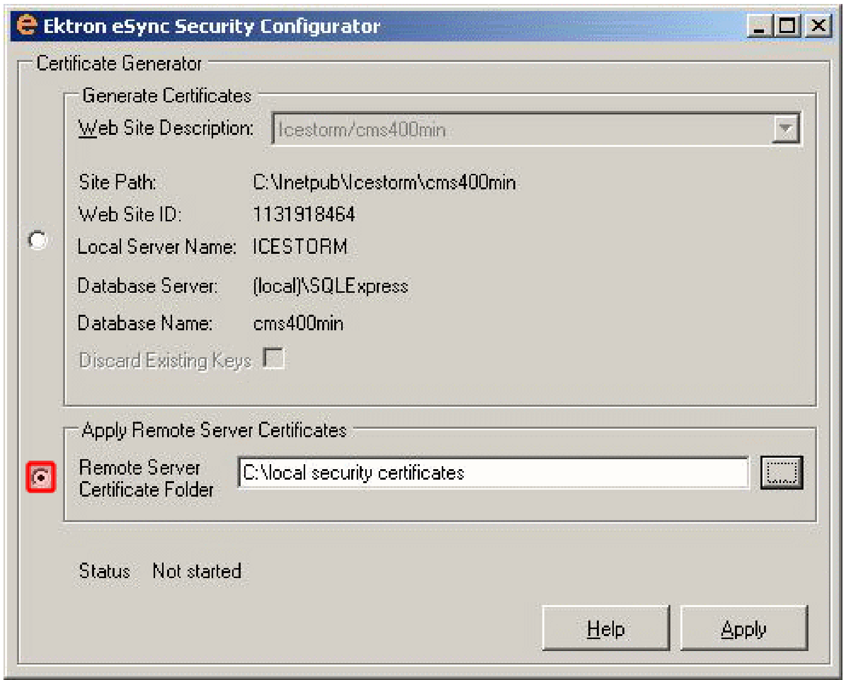
1. Sign on to the production server.
2. Click the **Windows Start Button> All programs > Ektron > CMS400 v8x > Utilities > Security Configurator**.
3. The following screen appears.



4. At the **Web Site Description** field, select the Web site on the production server.
5. Press **Generate**.
6. The certificates are created on the production server.
7. Open two Windows Explorer windows: one showing the production server's file system, and the other showing the staging server's file system.
8. In the staging server window, create a folder underneath the root folder. Name the folder **Prod security certificates**.

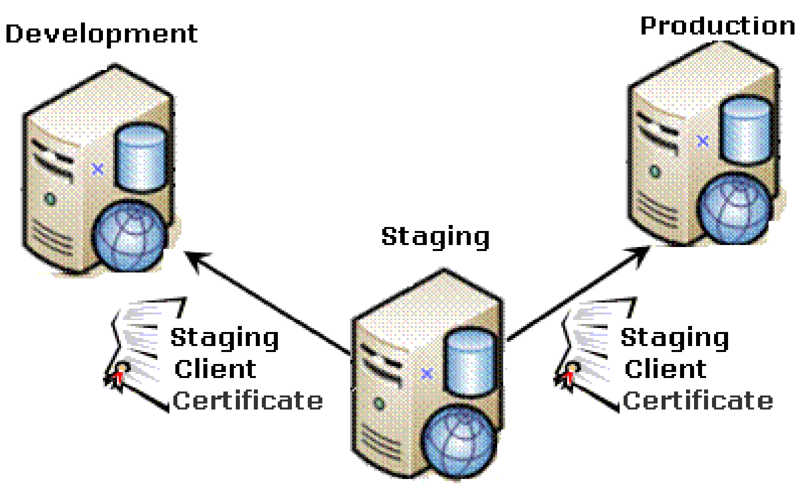
Warning! Do not create the new folder under the web root, C:\inetpub\wwwroot.

9. In the production server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400v8x\Utilities\Software\SecurityConfigurator`.
10. From that folder, copy these files.
    - *servername*_SyncClient.pfx
    - *servername*_SyncClient.pvk
    - *servername*_SyncClient.cer
    - *servername*_SyncServer.pfx
    - *servername*_SyncServer.pvk
    - *servername*_SyncServer.cer
11. Paste the files into the folder you created in Step 9. Make sure there are no other security files in the folder.
12. Close both windows you opened in Step 8.
13. After copying the security certificate files to the staging folder, you need to register and move them to the correct folders. The Security Configurator screen does this.
14. Sign on to the staging server.
15. Open the security configurator screen using this path: **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
16. The security configurator screen appears.



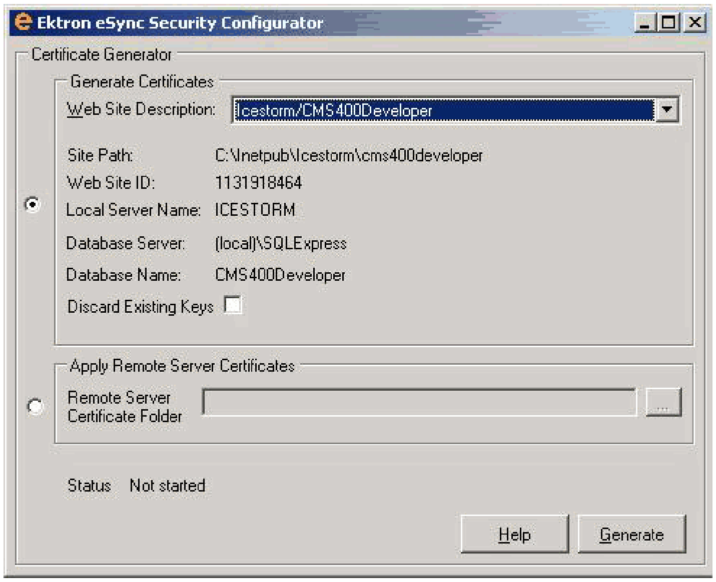
17. Click the **Apply Remote Server Certificates** button (circled above).
18. Click the browse button next to that field.
19. Browse to the folder to which you pasted the security certificates in Step 12.
20. Click the **Apply** button.
21. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the staging server.
22. Follow the same procedure to move production certificates to the development server. To do this, begin at Step 8 and follow all steps. Wherever the instructions mention a staging server, substitute the development server.

B. Generate Security Certificates on Staging and Copy Them to Development and Production



Follow these steps to complete this procedure.

1. Sign on to the staging server.
2. Click the **Windows Start Button> All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
3. The following screen appears.

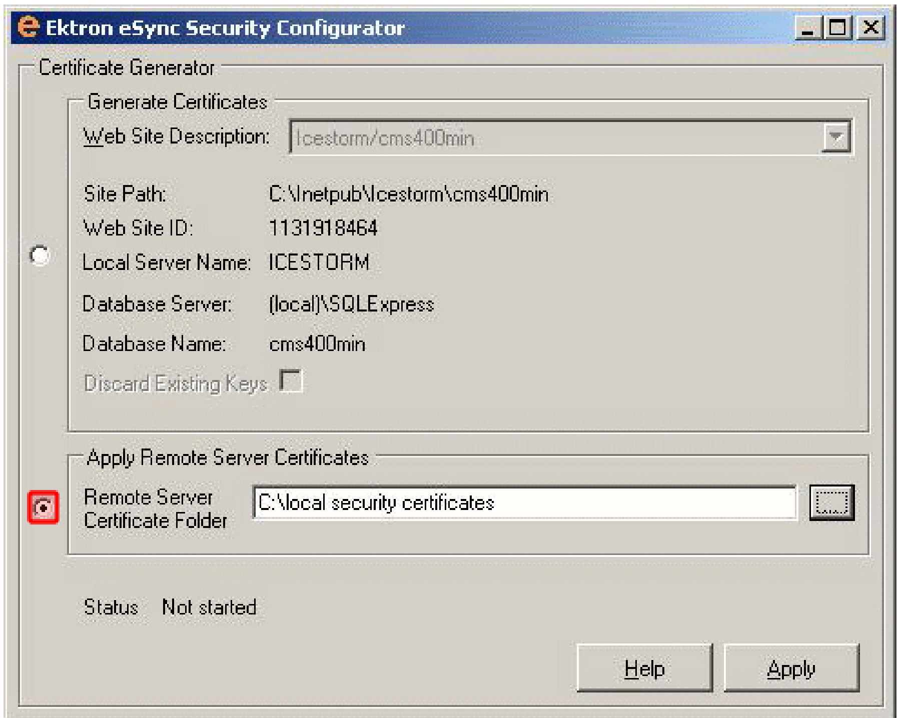


4. At the **Web Site Description** field, select the Web site on the staging server.
5. Press **Generate**.
6. The certificates are created on the staging server.
7. Open two Windows Explorer windows: one showing the staging server's file system, and the other showing the production server's file system.
8. In the production server window, create a folder underneath the root folder. Name the folder **staging security certificates**.

Warning! Do not create the new folder under the web root, C:\inetpub\wwwroot.

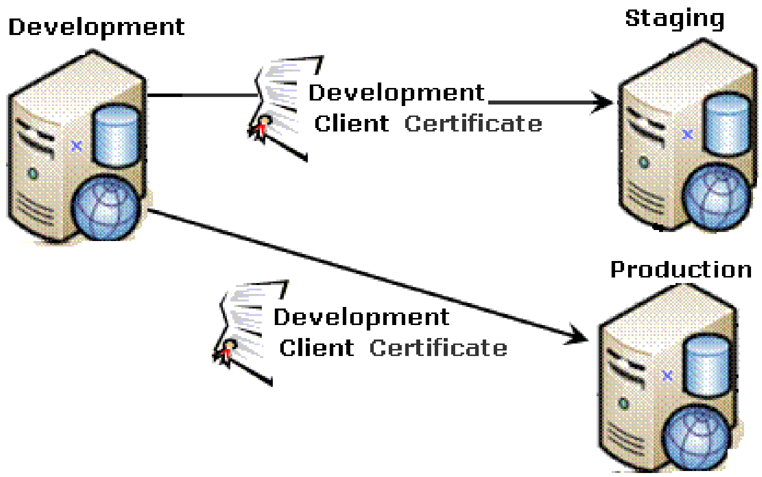
9. In the staging server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400v8x\Utilities\Software\SecurityConfigurator`.
10. From that folder, copy these files.
    - *servername*_SyncClient.pfx
    - *servername*_SyncClient.pvk
    - *servername*_SyncClient.cer
    - *servername*_SyncServer.pfx
    - *servername*_SyncServer.pvk
    - *servername*_SyncServer.cer

11. Paste the files into the folder you created in Step 9. Make sure there are no other security files in the folder.
12. Close both windows you opened in Step 8.
13. After copying the security certificate files to the production folder, you need to register and move them to the correct folders. The Security Configurator screen does this.
14. Sign on to the production server.
15. Open the security configurator screen using this path: **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
16. The security configurator screen appears.

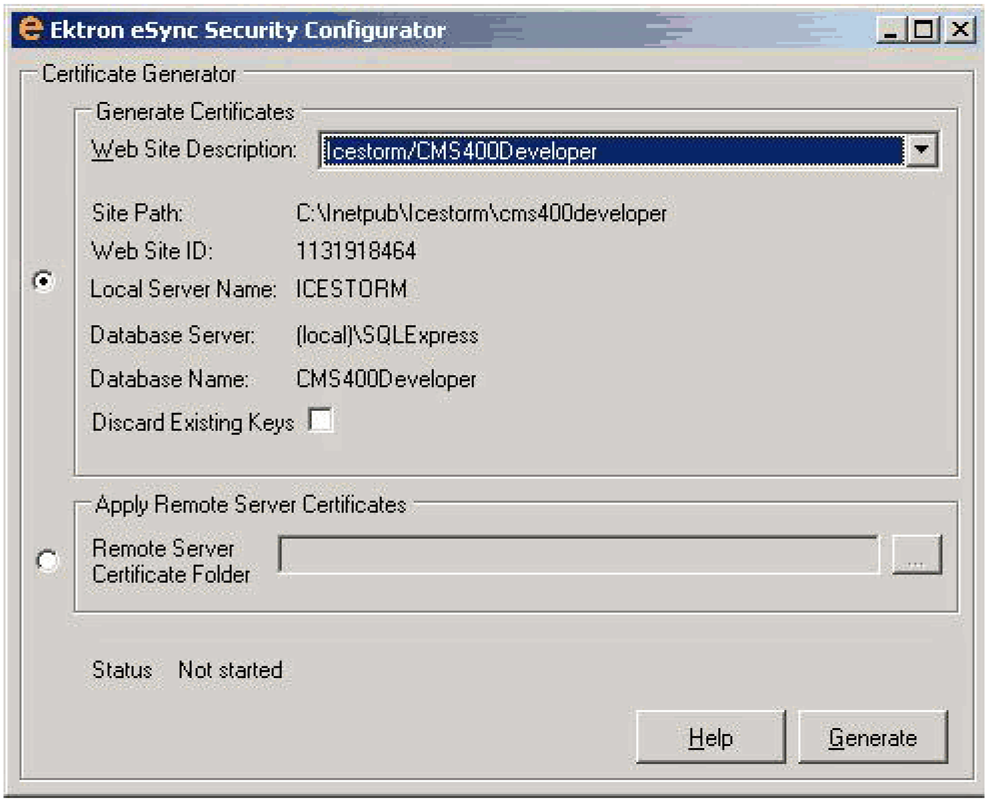


17. Click the **Apply Remote Server Certificates** button (circled above).
18. Click the browse button next to that field.
19. Browse to the folder to which you pasted the security certificates in Step 12.
20. Click the **Apply** button.
21. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the production server.
22. Follow the same procedure to move staging certificates to the development server. To do this, begin at Step 8 and follow all steps. Wherever the instructions mention a production server, substitute the development server.

C. Generate Security Certificates on Development and Copy them to Staging and Production



1. Sign on to the development server.
2. Click the **Windows Start Button> All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
3. The following screen appears.

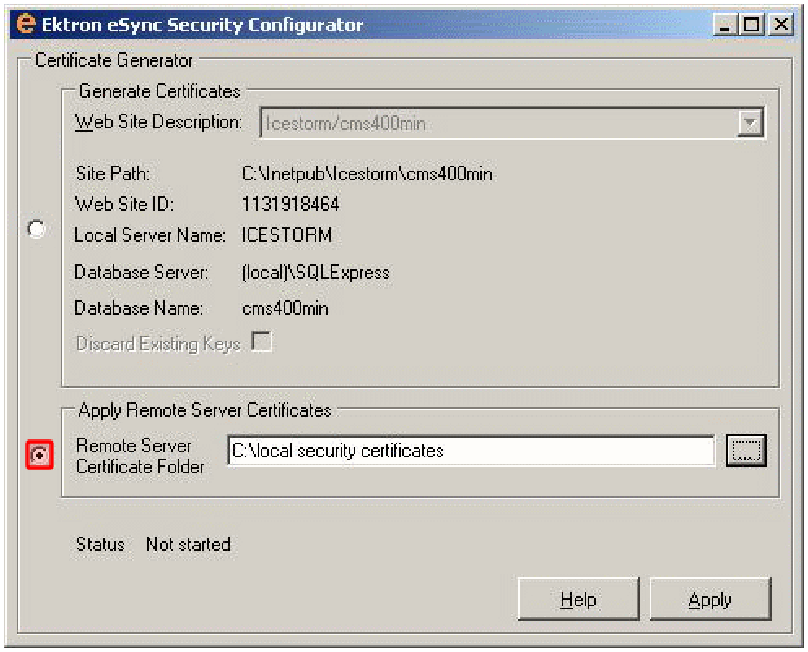


4. At the **Web Site Description** field, select the Web site on the development server.
5. Press **Generate**.

6. The certificates are created on the development server.
7. Open two Windows Explorer windows: one showing the development server's file system, and the other showing the staging server's file system.
8. In the staging server window, create a folder underneath the root folder. Name the folder **Dev security certificates**.

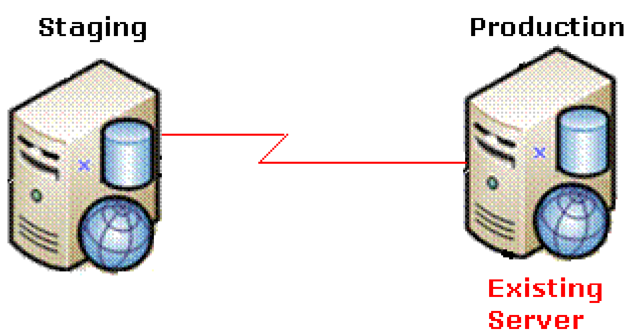
Warning! Do not create the new folder under the web root, C:\inetpub\wwwroot.

9. In the development server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400v8x\Utilities\Software\SecurityConfigurator`.
10. From that folder, copy these files.
    - *servername*_SyncClient.pfx
    - *servername*_SyncClient.pvk
    - *servername*_SyncClient.cer
    - *servername*_SyncServer.pfx
    - *servername*_SyncServer.pvk
    - *servername*_SyncServer.cer
11. Paste the files into the staging server folder you created in Step 9. Make sure there are no other security files in the folder.
12. Close both windows you opened in Step 8.
13. After copying the security certificate files to the staging folder, you need to register and move them to the correct folders. The Security Configurator screen does this.
14. Sign on to the staging server.
15. Open the security configurator screen using this path: **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v8x** > **Utilities** > **Security Configurator**.
16. The security configurator screen appears.



17. Click the **Apply Remote Server Certificates** button (circled above).
18. Click the browse button next to that field.
19. Browse to the folder you created in Step 9.
20. Click the **Apply** button.
21. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the staging server.
22. Follow the same procedure to move development certificates to the production server. To do this, begin at Step 8 and follow all steps. Wherever the instructions mention a staging server, substitute the production server.

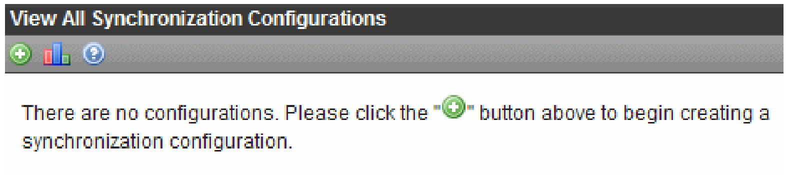
Part Three: Connect Staging and Production Servers



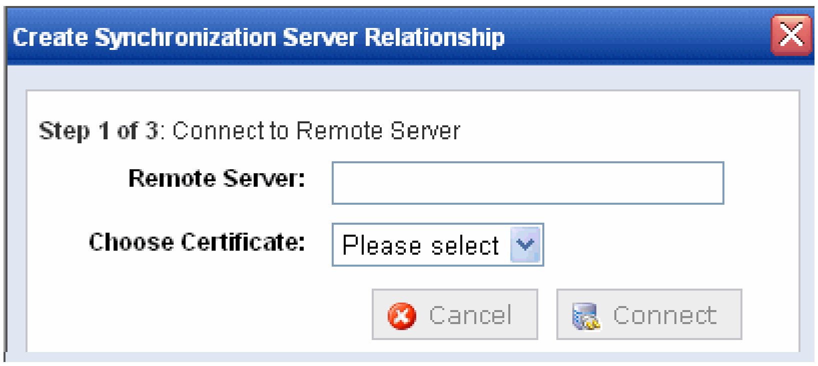
Warning! Back up your database before beginning this procedure!

1. On the staging server, sign on to Ektron CMS400.NET.
2. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Synchronization**.

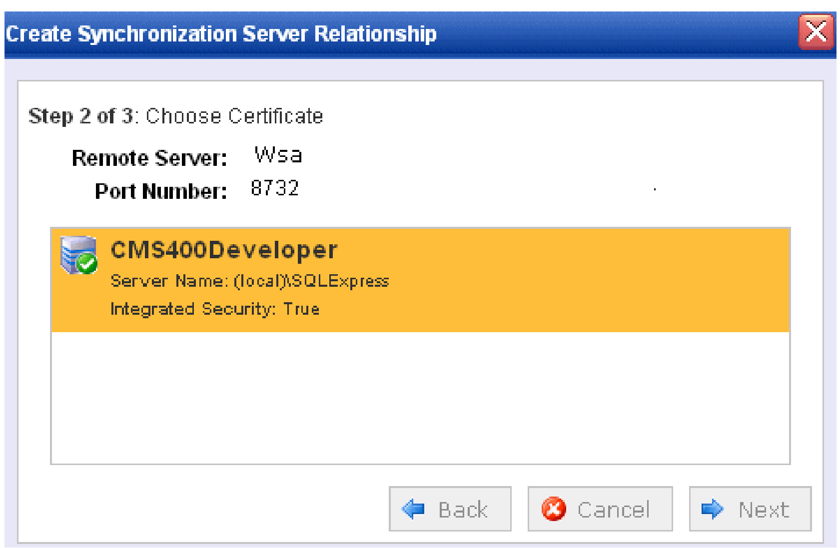
3. The View All Synchronization Configurations screen appears.



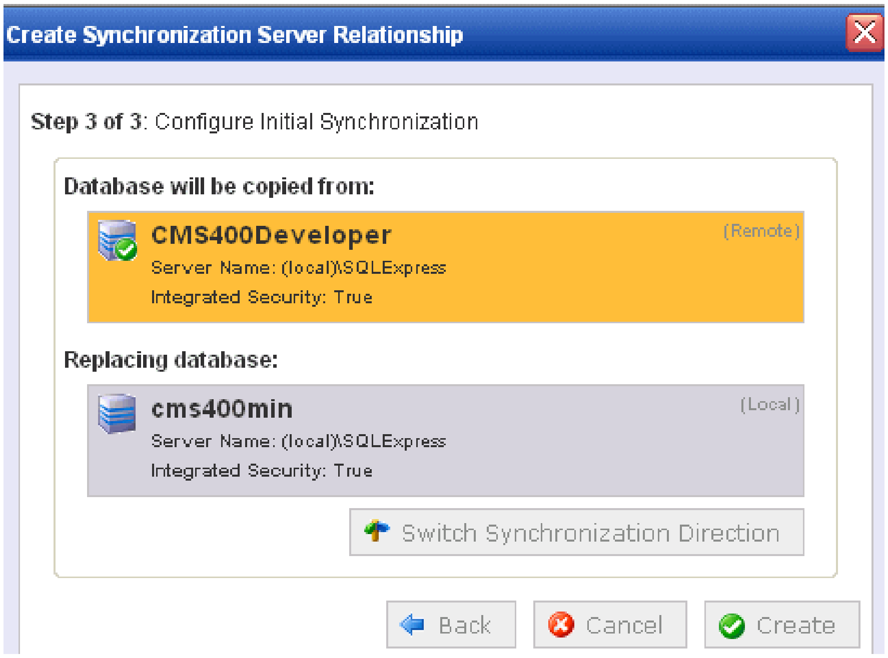
4. Click the **Add** button ( ).
5. The Create Synchronization Server Relationship screen appears.



6. At the **Remote Server** field, enter the name of the production server.
7. At the **Choose Certificate** field, the name of the production server appears.
8. Click the **Connect** button. This action connects the staging with the production server.
9. After you connect to the production server, a new screen appears showing its database.

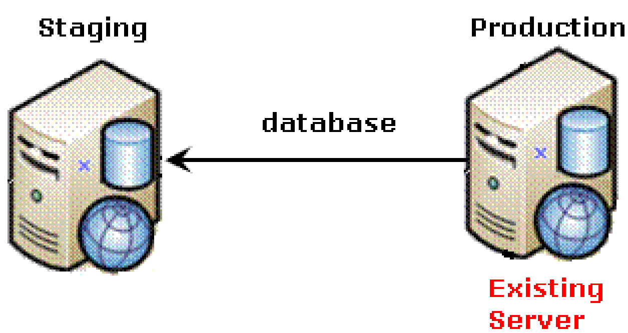


10. Click **Next**.
11. A new screen appears, showing both servers.

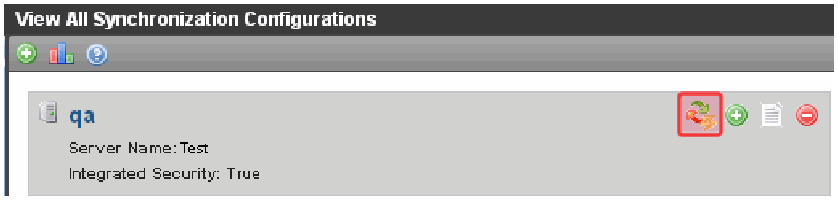


12. Click **Create**. This action connects the staging and production servers.

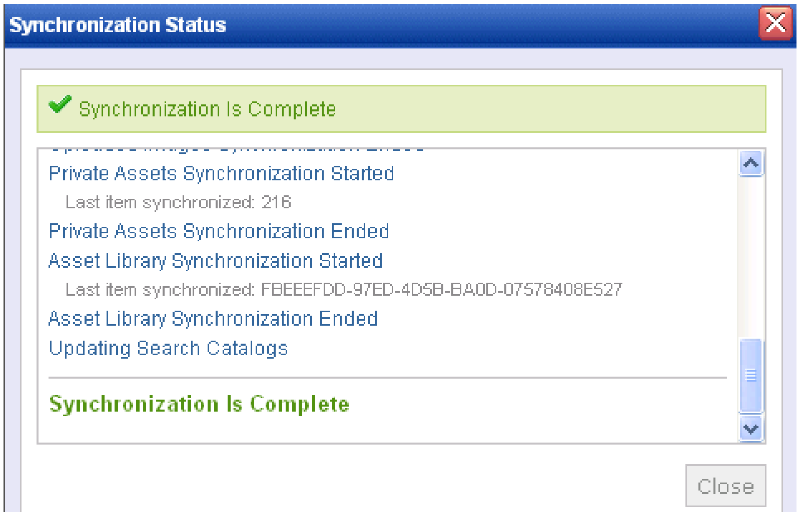
Part Four: Download the Production Server's Database to the Staging Server



1. From the View All Synchronization Configurations screen, click the **Start Initial Sync** button.

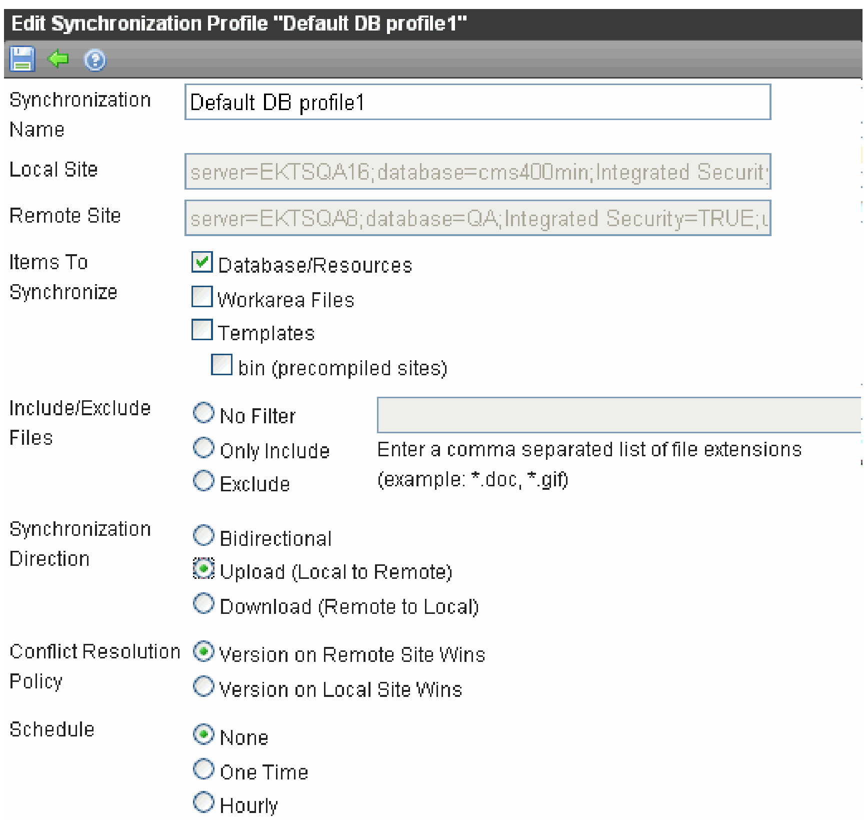


2. The initial sync downloads the production server's database to the staging server.
3. A screen tracks the sync's progress.

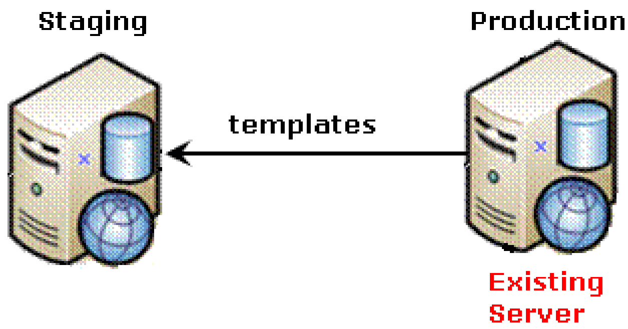


4. When the sync is complete, **Synchronization is Complete** appears.

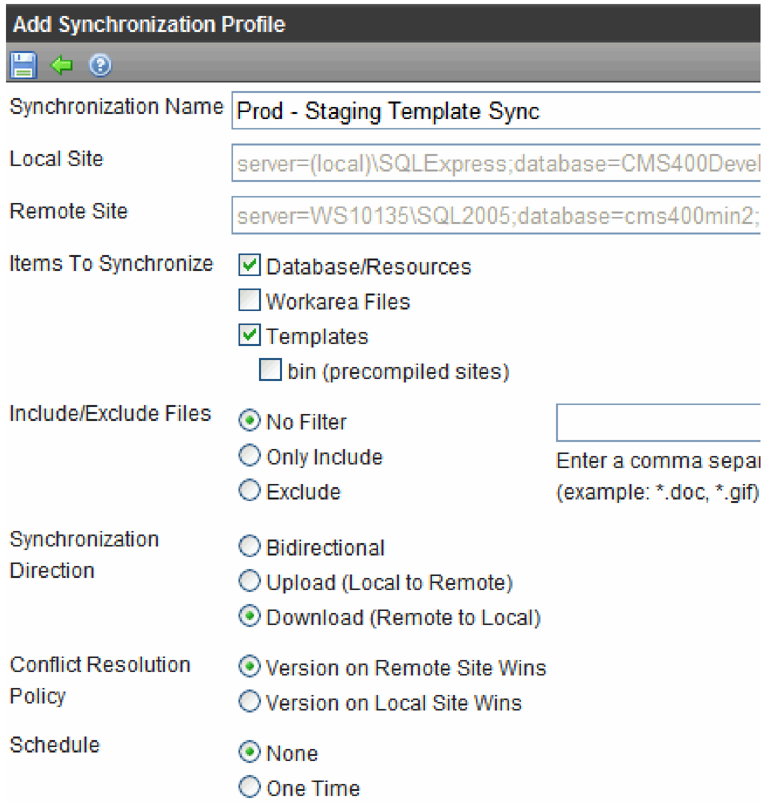
The initial sync also creates a *default database profile*. The profile remembers information about the sync, such as the source and destination databases, sync direction, and the fact that it syncs the database and resource files (see example below). You can reuse this profile to run database/resource syncs any time in the future.



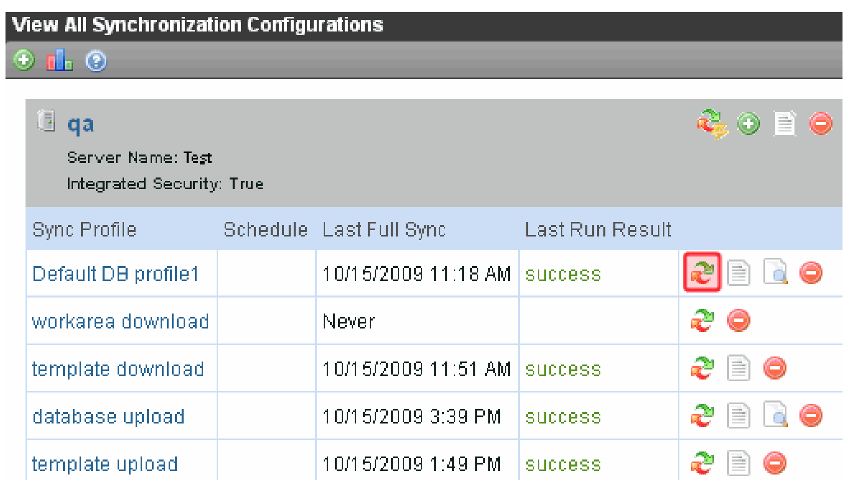
Part Five: Download the Production Server's Templates to Staging



1. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button.
2. The Add Synchronization Profile screen appears.
3. At the **Synchronization name** field, give this profile a name, such as Prod - Staging Template Sync.
4. At the **Items to Synchronize** field, select **Templates**.
5. For **Direction**, choose **Download**.
6. For **Schedule**, choose **None**. (See example below.)



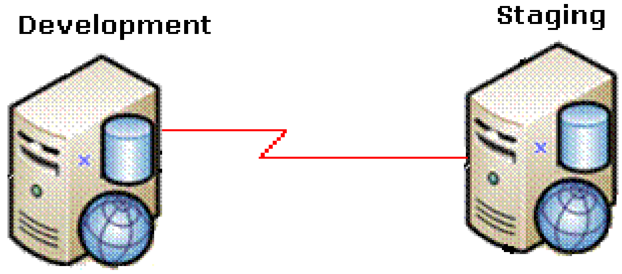
7. Save the profile.
8. Click the Run button to the right of the template sync (circled below).



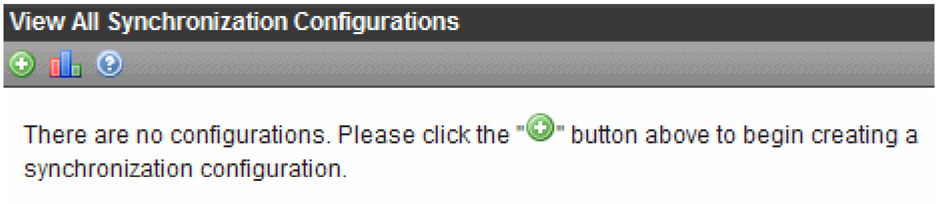
9. A screen tracks the sync's progress.
10. When the sync is complete, **Synchronization is Complete** appears.

You can reuse the template sync profile to sync templates any time in the future.

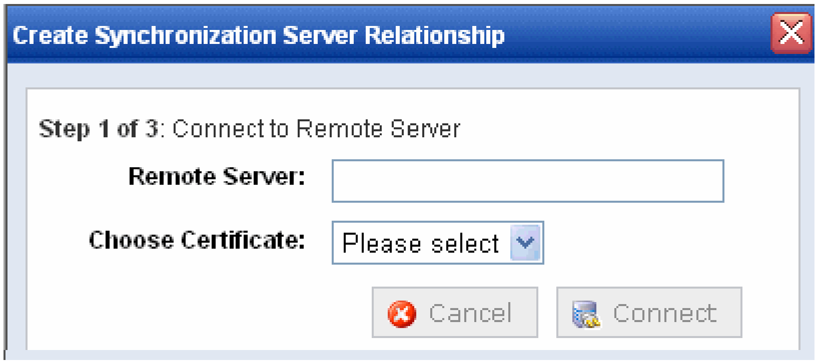
Part Six: Connect the Development and Staging Servers



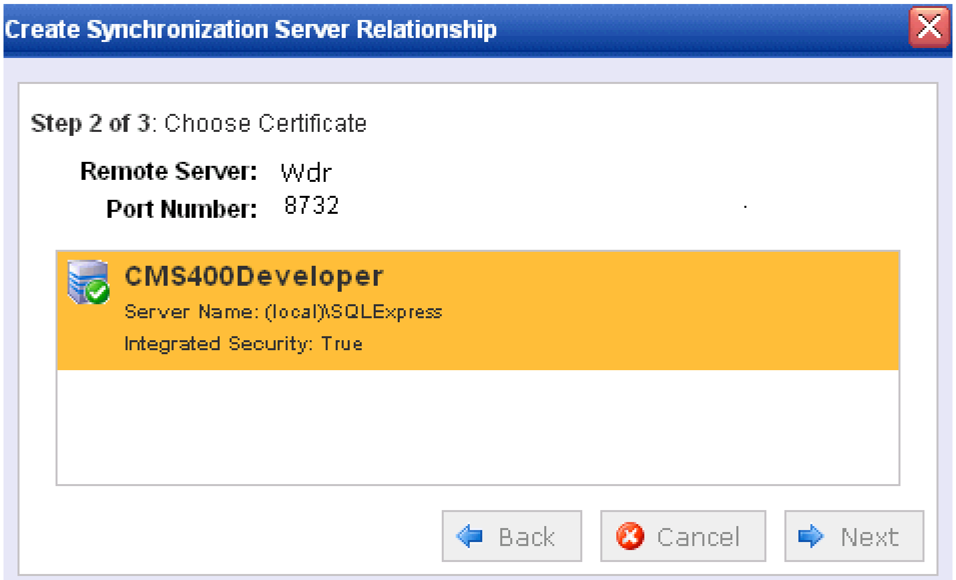
1. Sign on to Ektron CMS400.NET development server.
2. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Synchronization**.
3. The View All Synchronization Configurations screen appears.



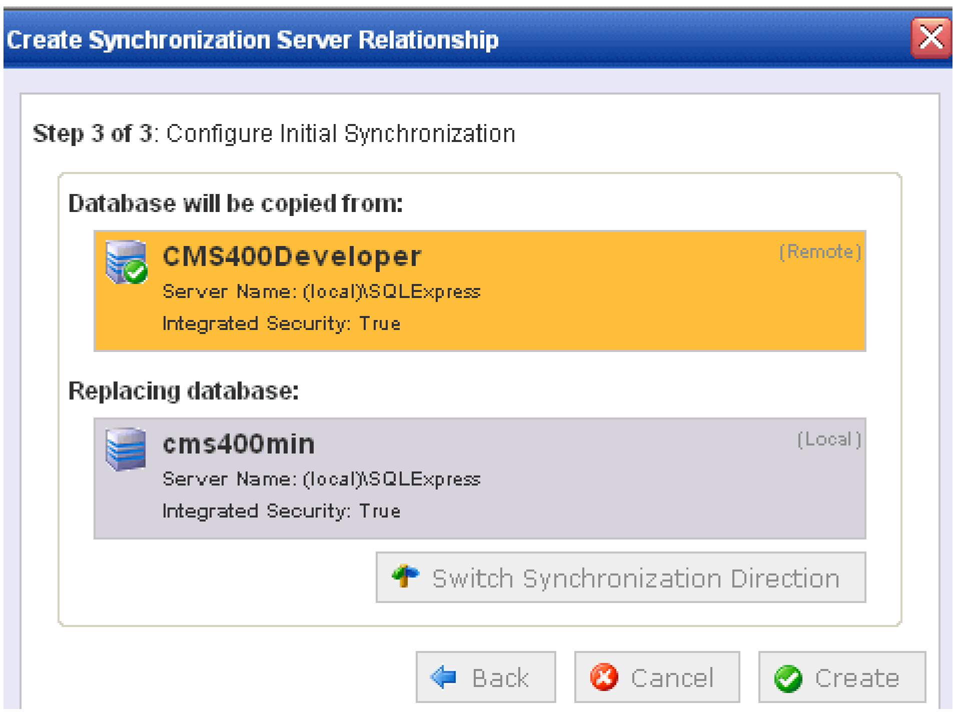
4. Click the **Add** button ( ).
5. The Create Synchronization Server Relationship screen appears.



6. At the **Remote Server** field, enter the name of the staging server.
7. At the **Choose Certificate** field, the name of the staging server appears.
8. Click the **Connect** button. This action connects the development with the staging server.
9. After you connect to the staging server, a new screen appears showing its database.

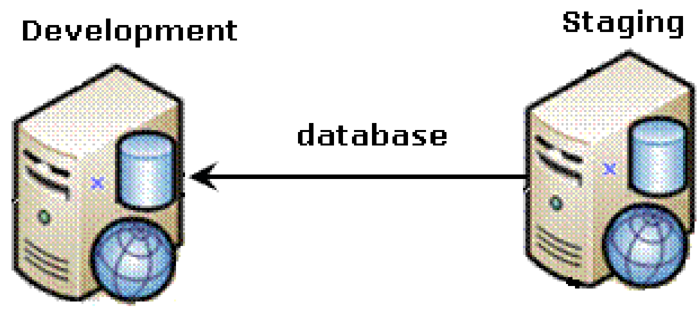


10. Click **Next**.
11. A new screen appears, showing both servers.

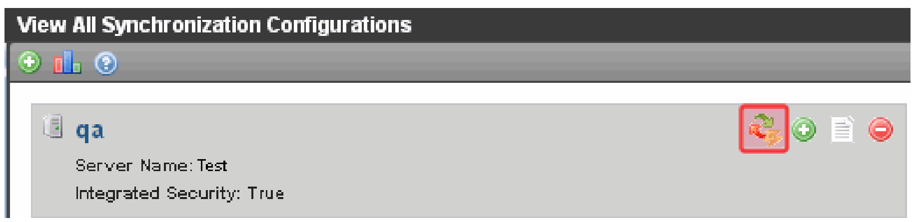


12. Click **Create**. This action connects the development and staging servers.

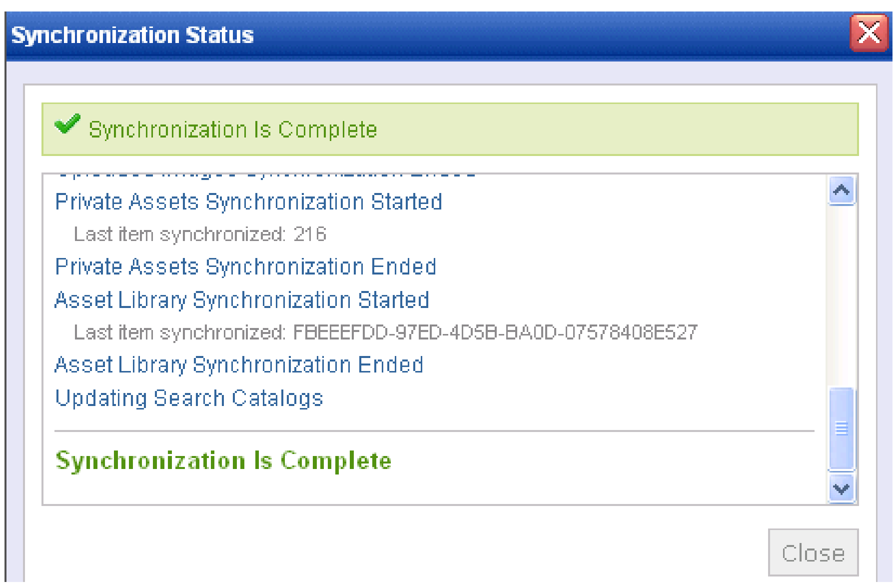
Part Seven: Download the Staging Server's Database to the Development Server



1. From the View All Synchronization Configurations screen, click the **Start Initial Sync** button.

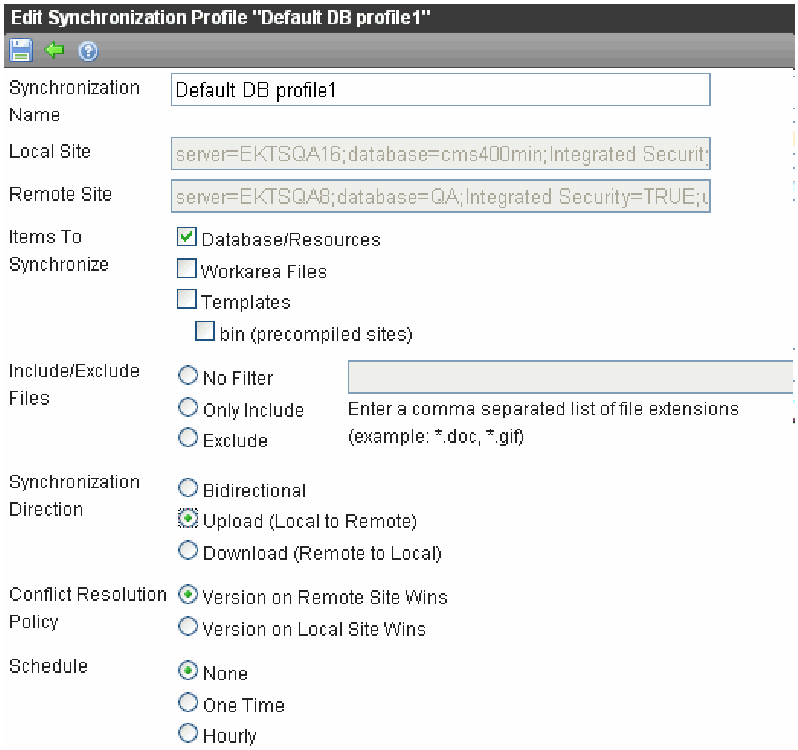


2. The initial sync downloads the staging server's database to the development server.
3. A screen tracks the sync's progress.

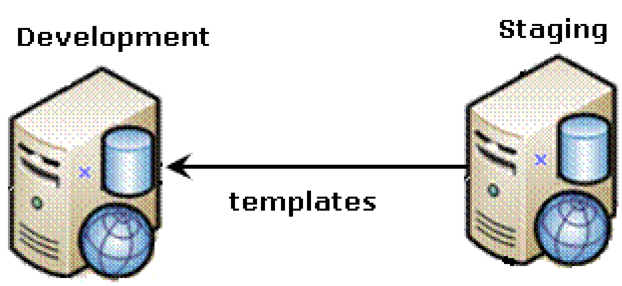


4. When the sync is complete, **Synchronization is Complete** appears.

The initial sync also creates a *default database profile*. The profile remembers information about the sync, such as the source and destination databases, sync direction, and the fact that it syncs the database and resource files (see example below). You can reuse this profile to sync the database/resources between these two servers at any time in the future.

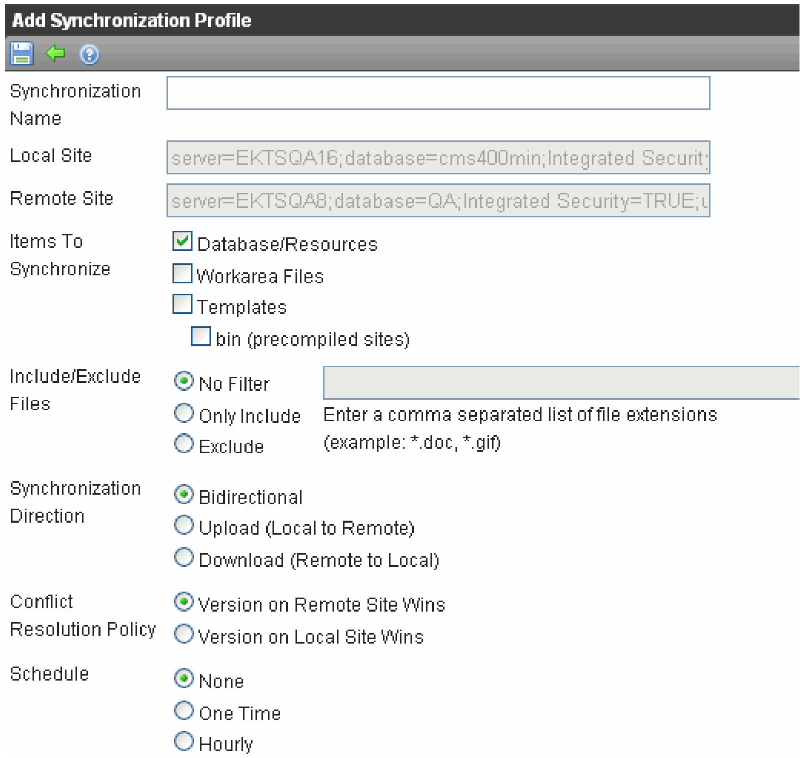


Part Eight: Download the Staging Server's Templates to Development

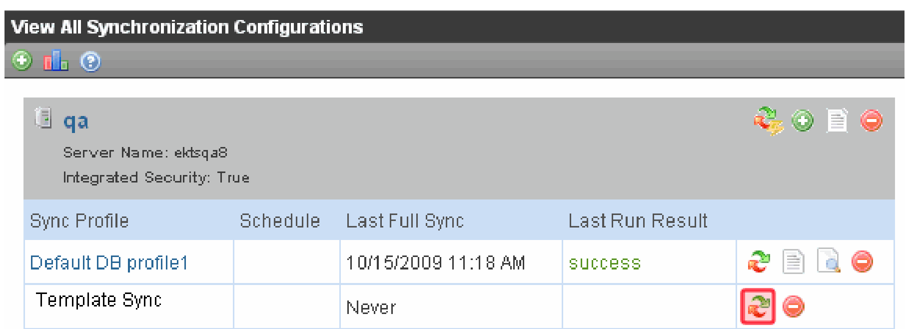


1. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button.
2. The Add Synchronization Profile screen appears.
3. At the **Synchronization name** field, give this profile a name, such as Staging-Dev Template Sync.
4. At the **Items to Synchronize** field, select **Templates**.

5. For **Direction**, choose **Download**.
6. For **Schedule**, choose **None**. (See example below.)



7. Save the screen.
8. Click the Run button to the right of the template sync (circled below).



9. A screen tracks the sync's progress.
10. When the sync is complete, **Synchronization is Complete** appears.

You can reuse the template sync profile to sync templates any time in the future.

Using eSync

This section explains the following eSync topics.

eSync Requirements

Ektron Software and Files

- Ektron CMS400.NET version 7.6 or higher

Warning! The version of Ektron CMS400.NET on every server in the sync configuration must match. You cannot upgrade nor downgrade Ektron CMS400.NET using eSync.

- An Ektron CMS400.NET base installation file (for example, cms400Base7*x*.exe). Use this file to install a second site with which you will sync your current site.
- Ektron CMS400.NET licenses that support Enterprise or Professional with eSync on every server being synched.
- Matching security certificates on every server being synched. See Also: "Managing eSync Security Certificates" on page 18-43

Microsoft Software

- Windows Server 2003 or higher; Vista Ultimate or Business
- Microsoft .NET Framework 3.5

Ektron CMS400.NET's installation checks for this version of the framework during installation/upgrade. If it's not on your server, you are asked for permission to install it.

Note: It is not a problem if your templates were created using the 2.0 Framework.

- Microsoft SQL 2005 SP2 or higher

User Permissions

- You are a member of the Administrators group or assigned the Synchronization Admin role. See Also: "Defining Roles" on page 15-32
- The user performing the sync has either a db_ddladmin or dbowner role for the SQL database

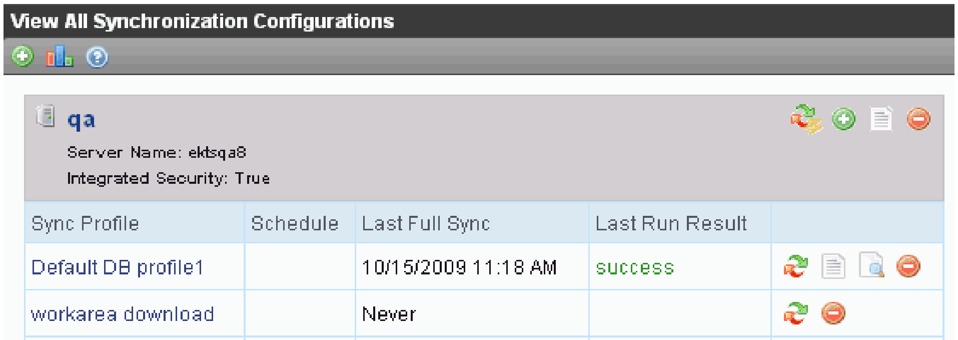
Server

The GMT time on each server's clock must be within 5 minutes of each other.

Characteristics of eSync

Easy and Flexible Setup and Usage

You administer eSync through Ektron CMS400.NET's **Workarea** > **Settings** > **Configuration** > **Synchronization** screens. The screens let you establish a sync *configuration* between two databases, then specify any number of sync *profiles* for each configuration.



Each profile lets you specify data to sync, a direction, and a schedule. You can always sync immediately by clicking the sync ( ) button.

You create profiles to sync these kinds of data.

- all content, assets, and library assets
- all Workarea folder files
- the remaining site files (with a few exceptions)
- a selection of Windows files in your site root folder and its subfolders

See Also: "Setting up eSync Profiles" on page 18-53

Individual file types can be included or excluded from the sync. In addition, you can sync Ektron CMS400.NET content or folders. See Also: "Content and Folder Sync Options" on page 18-71

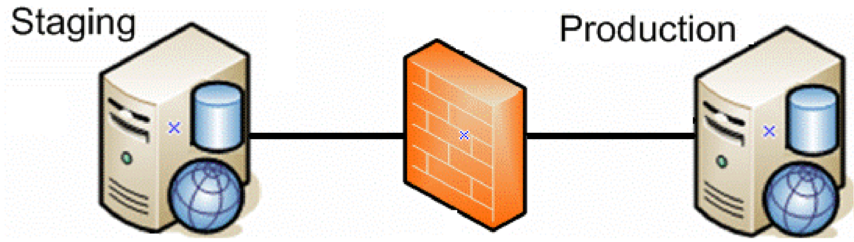
Sync Configurations

Several eSync configurations are shown below. You can synchronize any server to or from any other server with one important exception: *you cannot initiate a sync from a server outside the firewall*. You can only initiate a sync from a server inside the firewall and copy to a server outside the firewall. This is because the outside server does not know the address of servers inside the firewall. However, you can use a staging server to push and pull updated information to and from a production server.

Warning! All eSync transmissions use port 8732. This is not configurable.

Configuration 1: One Staging Server, One Production Server

This is the most basic eSync configuration, showing one staging and one production server. Each server has a database and one site.

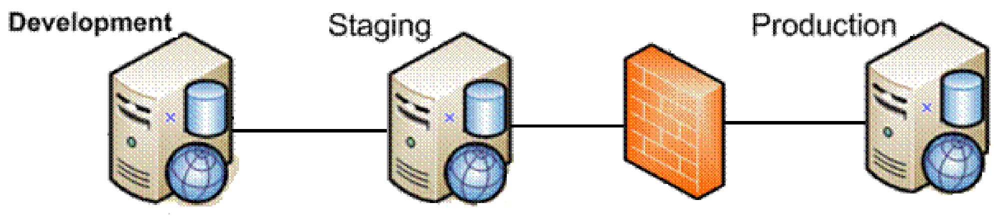


The eSync feature can automatically create a production server from your staging server. See Also: "Using eSync to Initialize a New Site" on page 18-52

For installation instructions for this configuration, see "Scenario 2: Synching an Ektron CMS400.NET Server with Another Server" on page 18-5.

Configuration 2: One Development Server, One Staging Server, One Production Server

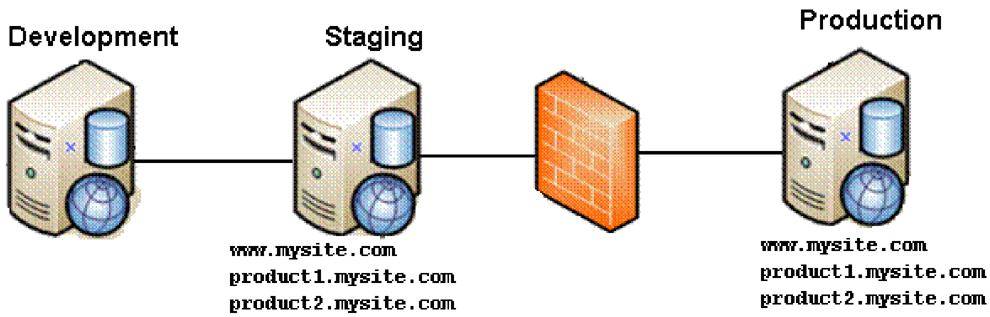
This configuration includes a development server. Developers can use it to create new features and modify existing ones. When they are done, they can sync the changes to the staging server, where the changes can be verified before being moved to production.



For installation instructions for this configuration, see "Scenario 3: Setting up a Development > Staging > Production Environment" on page 18-15.

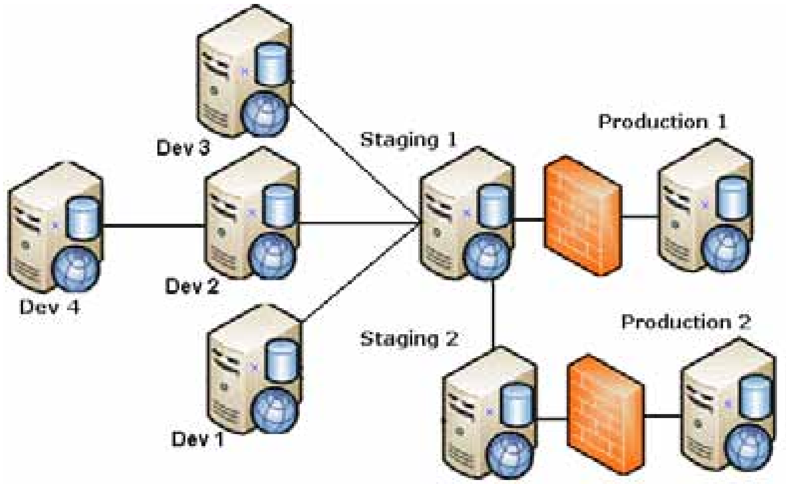
Configuration 2a: Multi-site Staging Server, Multi-site Production Server

The following configuration illustrates synching several sites on a staging server with those sites on production.



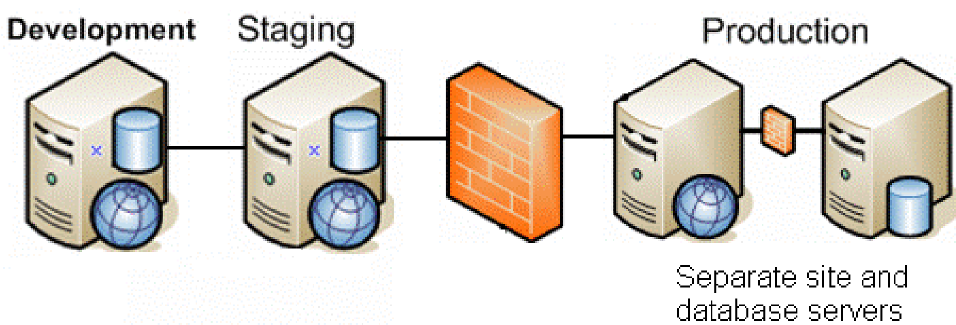
Configuration 3: Several Development Servers, One Staging Server, One Production Server

As shown in the illustration, any number of development servers can sync to each other and to your staging servers.



Configuration 4: One Development Server, One Staging Server, One Production Site Server, One Production Database Server

In this configuration supported by eSync, the production site has two servers: one for site files, and another for the database.

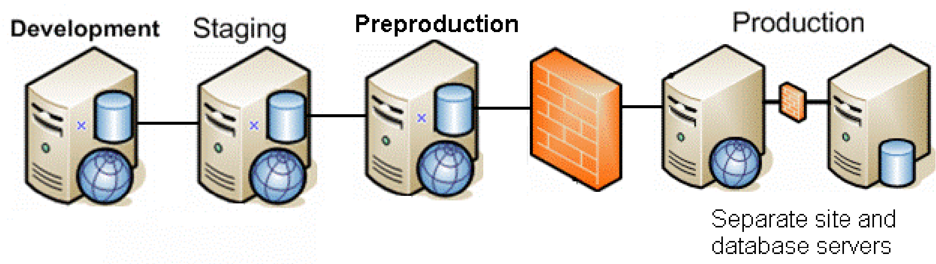


To synchronize these servers, set up several eSync profiles. One syncs the database, assets, and templates to the production database server. Use additional profiles to sync the staging server's workarea files with the production site server.

Note: When using separate site and database servers, assets are stored on the site server.

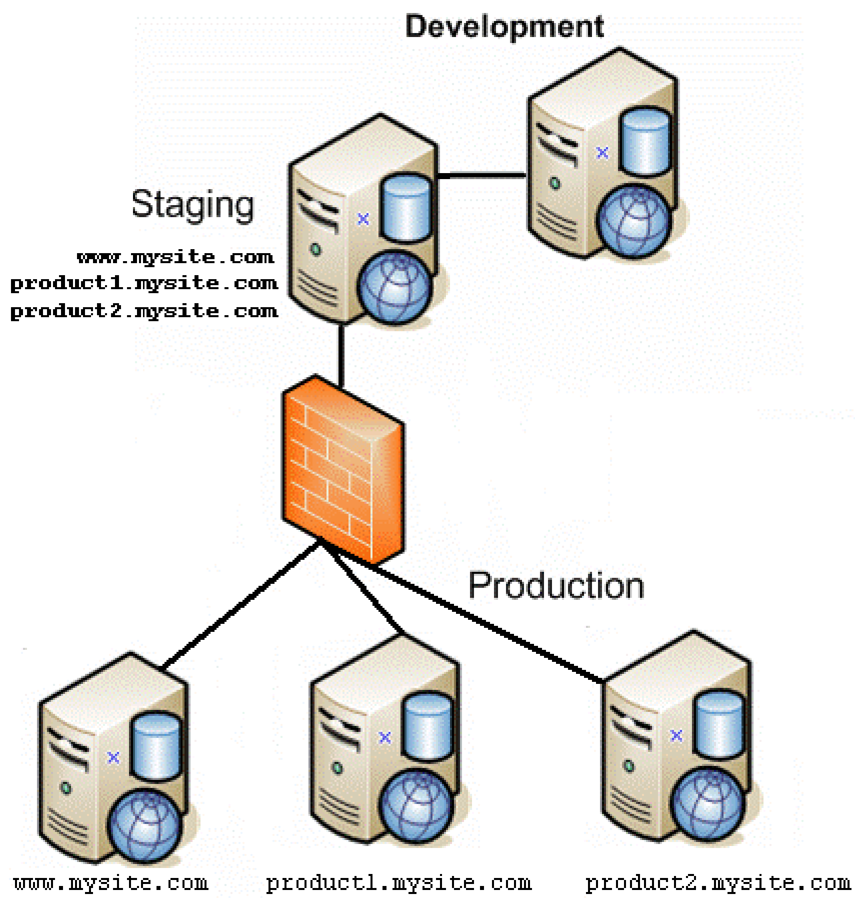
Configuration 5: Configuration 4 Plus Pre-Production Server

This eSync configuration adds an extra server between staging and production. The preproduction server can be used for review and testing of changes before they are moved to production.



Configuration 6: Multi-site Configurations, Each Site and Database on its own Production Server

In this configuration, each production server has its own database plus the site files. As an alternative, you could have a separate server for each production database, with all sites on one production server.



Note: The above configuration also supports separate site and database servers.

To synchronize this type of configuration, set up several eSync profiles, one for each site.

- Three database and template profiles
- Three Workarea profiles

The Server Number

Every server in a sync configuration is assigned a unique number. The originating server is numbered 1, the first server with which it establishes a relationship is numbered 2, etc.

The server number is in the serverinfo.xml file, located in the `c:\sync\inetpub\wwwroot\`*siteroot* folder, as shown below.

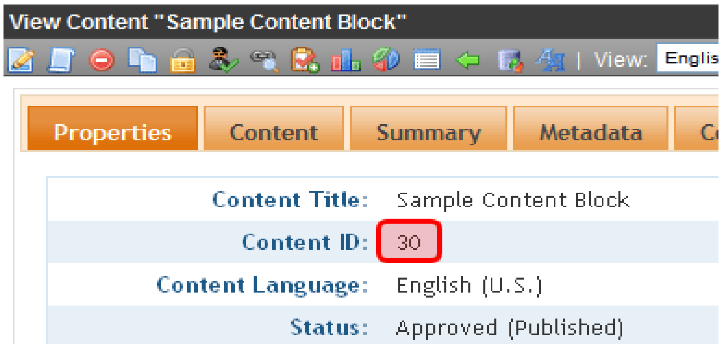
```
<SyncServerInfoList>
<SyncServerInfo IsSyncRunning="true" MaxId="2" ServerNumber="1" IsMulti-
SiteStaged="false">
<ServerId>b0cccb5a-1d45-4262-8857-79f1333696dc</ServerId>

<ServerUrl>http://localhost:8732/Ektron.Sync.Communication/SyncCommunicationScheduleService.svc</ServerUrl>
```

```
<ConnectionInfo>server=WS10080\SQLExpress;database=CMS400Developer;Integrated
Security=TRUE;user=;pwd=;</ConnectionInfo>
</SyncServerInfo>
```

</SyncServerInfoList>

Unique ID Numbering

All Ektron CMS400.NET data is assigned a unique ID number to distinguish it from similar objects. Examples are content (see illustration below), folders, menus, users, etc.



When you create a sync relationship, Ektron CMS400.NET applies to each server a new ID numbering range to ensure that, from then on, objects created on either server have a unique ID. This prevents collisions when synching between servers. For example, since membership users created on a production server have a different ID number range from those created on the staging server, eSync does not overwrite them.

To view a server's ID number range, open its serverinfo.xml file, located in the `c:\sync\inetpub\wwwroot\`*siteroot* folder, and check the MaxId value (highlighted in red below).

```
<SyncServerInfoList>
<SyncServerInfo IsSyncRunning="true" MaxId="1" ServerNumber="1" IsMulti-
SiteStaged="false">
<ServerId>b0cccb5a-1d45-4262-8857-79f1333696dc</ServerId>

<ServerUrl>http://localhost:8732/Ektron.Sync.Communication/SyncCommunicationScheduleService.svc</ServerUrl>
<ConnectionInfo>server=WS10080\SQLExpress;database=CMS400Developer;Integrated
Security=TRUE;user=;pwd=;</ConnectionInfo>
</SyncServerInfo>
```

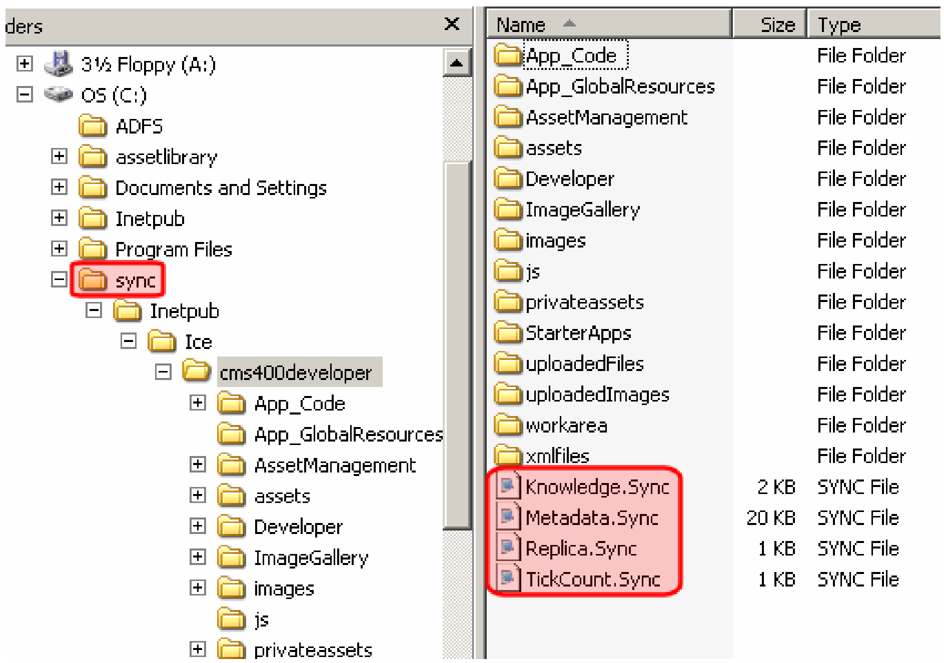
</SyncServerInfoList>

Multiply that number by 1 trillion to get the largest ID number which that server can assign. So for example, if `MaxId` = 3, possible ID numbers range from 2,000,000,000,001 to 3,000,000,000,000.

eSync Moves Changes Only

eSync only copies data that changed since the last sync. So, for example, if your site has 100 menus but only 3 changed since the last sync, it only copies three. As a result, eSync is very quick.

To track changes to Ektron CMS400.NET data between syncs, eSync sets up a `c:\sync` folder structure that mirrors your site's Windows folder structure. This structure is created on each server when sync relationships are first established.



No Ektron CMS400.NET files reside in the `\sync` folders. Instead, each folder has four .sync files that monitor changes to the Ektron CMS400.NET files in the corresponding folder.

Managing eSync Security Certificates

Ektron CMS400.NET's eSync feature uses security certificates to ensure secure communication between servers. That is, all servers in an eSync configuration must have matching, encrypted security certificates in order to establish an eSync relationship.

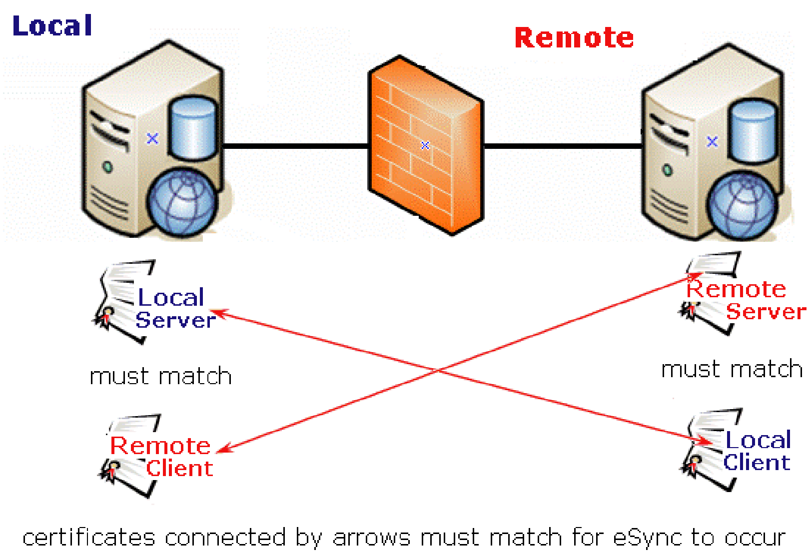
Note: If your configuration features separate database servers, you do not need to install security certificates on them. You only need to install certificates on servers that host Ektron CMS400.Net.

This section explains how to create and replace security certificates on a server through the following topics.

See Also: "Create eSync Security Certificates for a Load Balanced Cluster" on page 18-79

The Client and Server Certificates

Before you can establish an eSync relationship between servers, each server must have its own (local) security certificate *and* one from every other server in the configuration, as shown below.



As another example, if an eSync configuration consists of five servers, each server would require five security certificates: one local and four remote certificates.

Each server creates two sets of certificates: a server and a client set. Then, you copy the certificates to the other server. The local machine's *server* certificate must match a *client* certificate on the remote server, and vice versa.

Certificates are typically copied only when you first establish an eSync relationship between servers. After that, any eSync activity triggers a background check, and the user can proceed only if the certificates match.

Each certificate consists of the following files.

- Server certificate

- *servername*_SyncServer.pfx
- *servername*_SyncServer.pvk
- *servername*_SyncServer.cer

- Client certificate
  - *servername*_SyncClient.pfx
  - *servername*_SyncClient.pvk
  - *servername*_SyncClient.cer

The security certificates can apply to one site or all sites on a server. You determine this when installing them.

See Also: "Installing Security Certificates" on page 18-45

Installing Security Certificates

Prerequisite: Permission to copy and paste files between local and remote servers

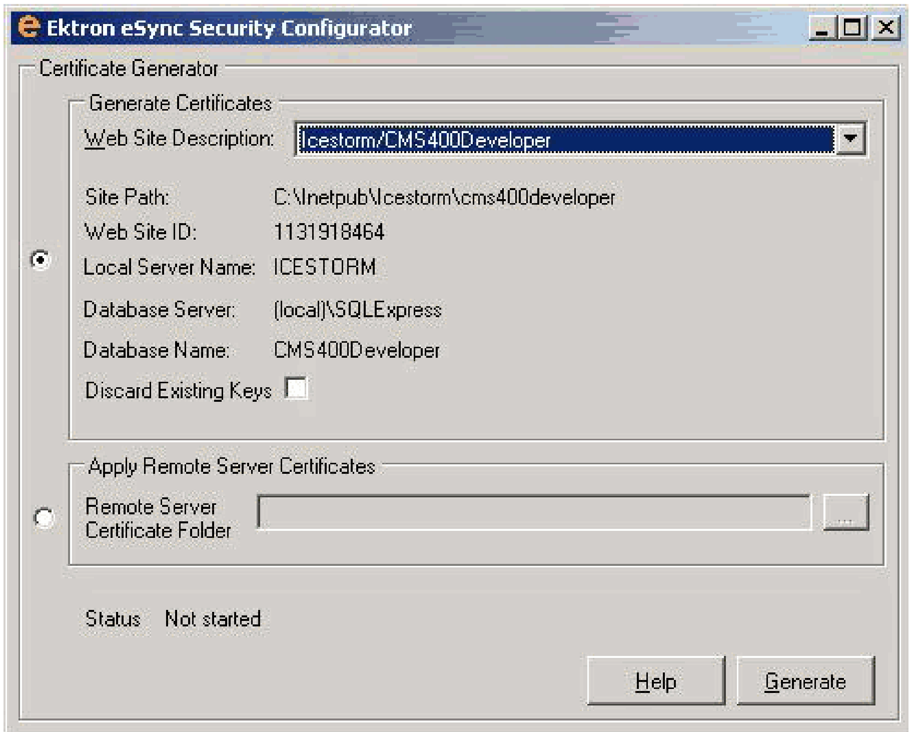
To create and place eSync security certificates in the correct locations, follow these steps.

- "Step 1: Create Security Certificates on Your Local Server" on page 18-45
- "Step 2: Create Security Certificates on the Remote Server" on page 18-47
- "Step 3: Copy Local Client Certificate to Remote Server" on page 18-48
- "Step 4: Copy Remote Client Certificate to Local Server" on page 18-49
- "Step 5: Test the Security Certificates" on page 18-50

Step 1: Create Security Certificates on Your Local Server

1. At the end of the Ektron CMS400.NET installation, you are asked if you want to install eSync security certificates. If you agree, the following screen prompts you to enter information needed to create the certificates.

Note: You can access this screen at any time screen by opening **Windows Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.



Use the following table to complete this screen.

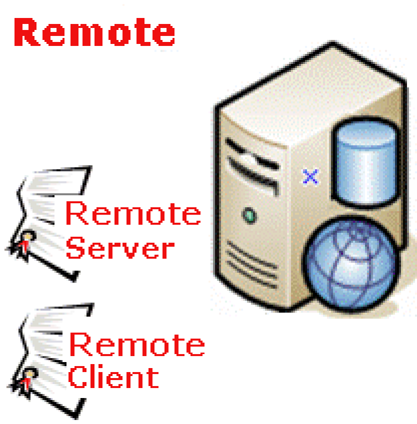
Field	Description
Generate Certificates - Use this screen area to create security certificates that must be copied to a remote server with which you want to sync.	
Web Site Description	If more than one site is set up on this server, use the pull-down list to select the Web site for which you are installing security certificates. Or, click **All** to apply the certificates to all sites on this server.
Apply Remote Server Certificates - Use this screen area to apply eSync security certificates that were copied from a remote server to your local server. See Also: "Step 3: Copy Local Client Certificate to Remote Server" on page 18-48	

2. Click **Generate**.
3. Local security certificates are created and configured (illustrated below).
   - See Illustration

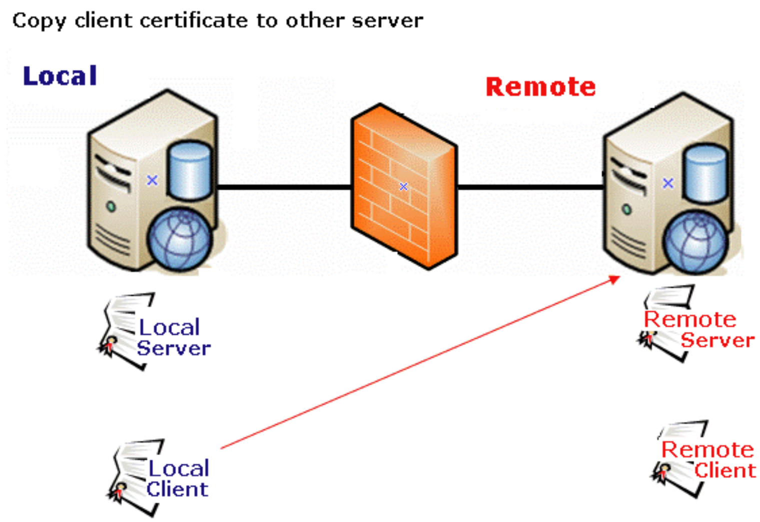
Note: Only click **OK** once. The status field at the bottom of the screen updates the status as it progresses. If you click **OK** more than once, you delay the certificates' creation.

Step 2: Create Security Certificates on the Remote Server

1. Sign on to remote server.
2. Generate security certificates for the remote server, following instructions in "Step 1: Create Security Certificates on Your Local Server" on page 18-45.
3. When you complete this procedure, remote client and server security certificates are created and configured (illustrated below).
   – See Illustration



Step 3: Copy Local Client Certificate to Remote Server



1. On the local server, open two Windows Explorer windows: one showing the local server's file system, and the other showing the remote server's file system.
2. In the remote server window, create a folder underneath the root folder. The folder name is not important.

Warning! Do not place it under the web root folder, C:\inetpub\wwwroot.

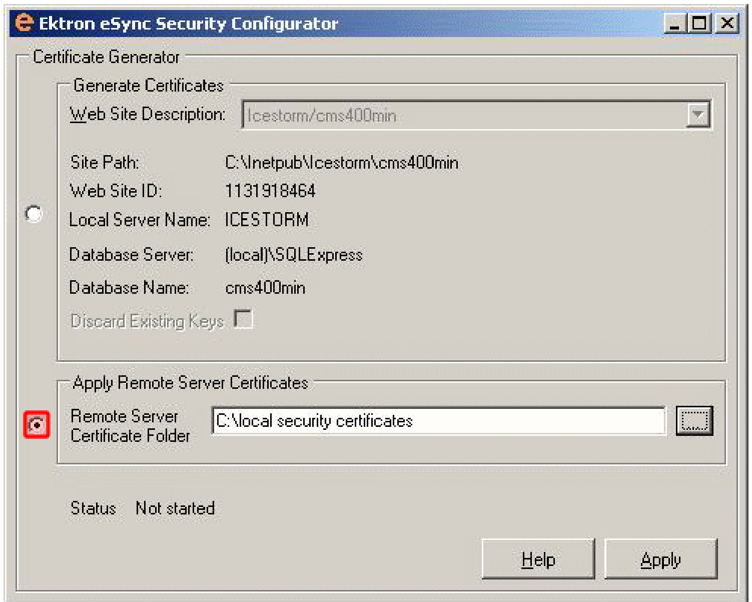
3. In the local server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
4. Copy the following files.
   - *servername*_SyncClient.pfx
   - *servername*_SyncClient.pvk
   - *servername*_SyncClient.cer
   - *servername*_SyncServer.pfx
   - *servername*_SyncServer.pvk
   - *servername*_SyncServer.cer

Note: These files were created when you completed the eSync Security Configurator Screen in Step 1.

5. Paste the files into the remote server folder that you created in Step 2. Make sure there are no other security files in the folder.

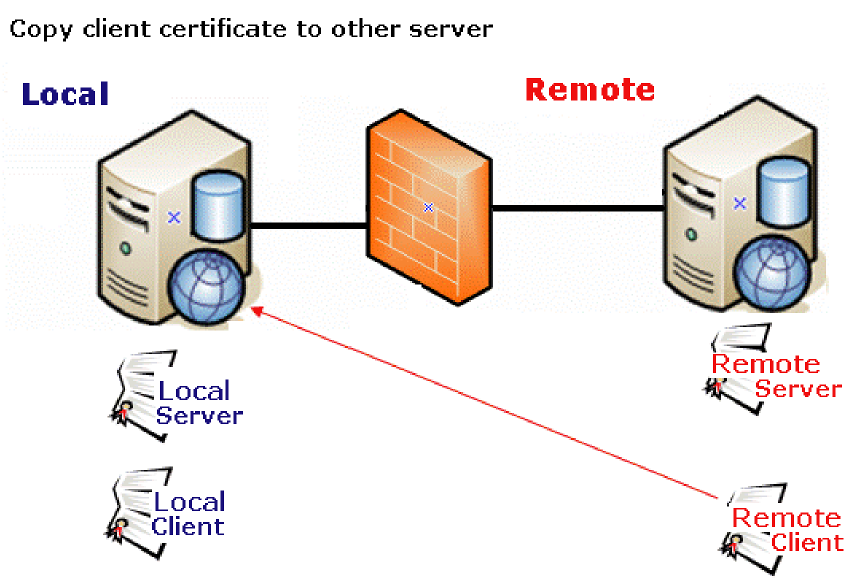
After the local server's security certificates are copied to the remote server, you need to register and move them to the correct folders. The Security Configurator screen does this.

6. On the remote server, open the security configurator screen using this path: **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v7x** > **Utilities** > **Security Configurator**.
7. The security configurator screen appears.



8. Click the **Apply Remote Server Certificates** button (circled above).
9. Click the browse button next to that field.
10. Browse to the folder to which you pasted the security certificates in Step 5.
11. Click the **Apply** button.
12. The utility copies the security certificates you pasted in Step 5 to the correct folder, and configures them for the remote server.

Step 4: Copy Remote Client Certificate to Local Server



1. Sign on to the remote server.

2. Follow the steps described in "Step 3: Copy Local Client Certificate to Remote Server" on page 18-48, except substitute remote for local.

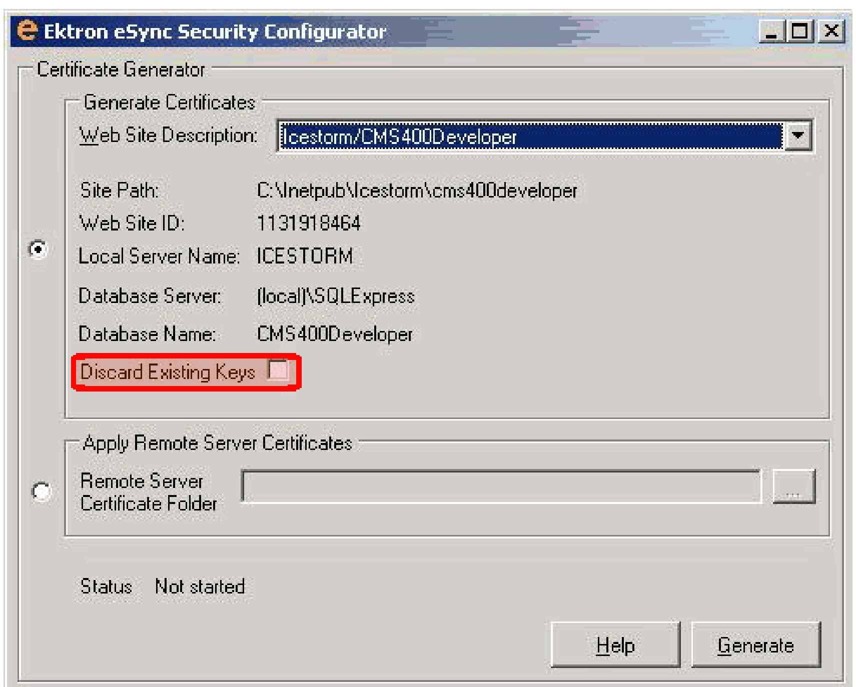
Step 5: Test the Security Certificates

1. From the local server, sign on to Ektron CMS400.NET.
2. In the Workarea, go to **Settings** > **Configuration** > **Synchronization**.
3. Click the plus sign ( ).
4. Insert the name of the **Remote Server**.
5. Select the security certificate you are testing.
6. Click **Connect**.
7. If the next screen appears, the security certificates are working properly.

Regenerating Security Certificates

Follow these steps to regenerate security certificates. You may need to do this if they stop working, or you are concerned about a security breach.

1. Access the eSync Security Configurator screen via **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v7x** > **Utilities** > **Security Configurator**.
2. Use the **Web Site** pulldown field to select a site on your server, or choose **All** sites.
3. Click the **Discard Existing Keys** checkbox (circled below).



4. Click **Generate**.

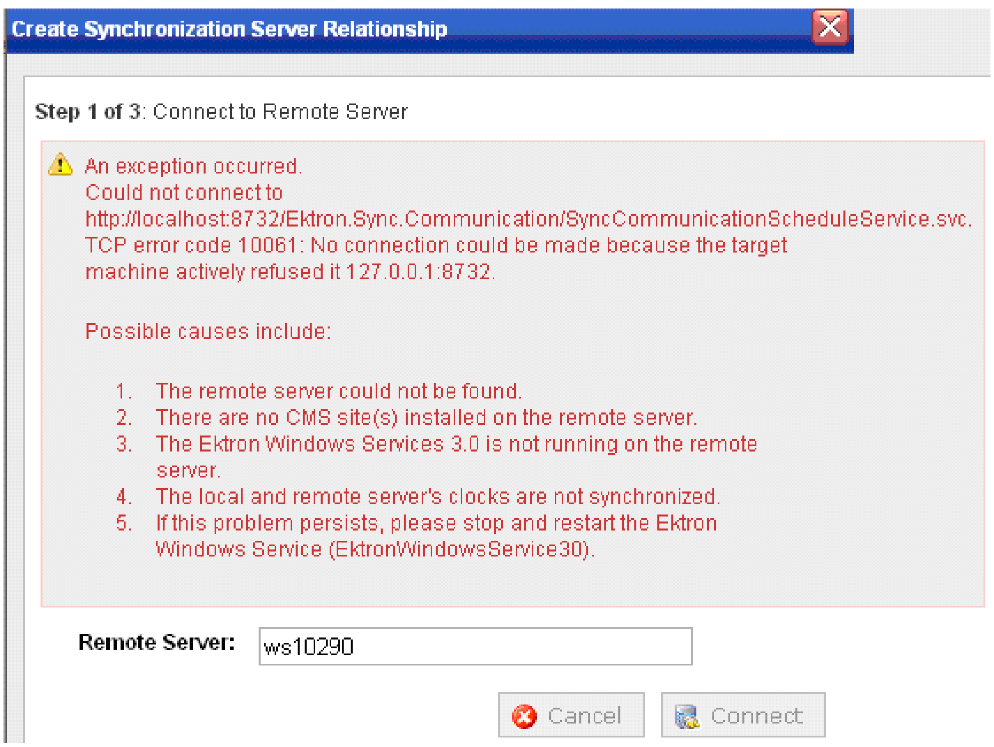
5. The existing security certificates are removed from your local server.
6. Reopen the Security Configurator screen.
7. Choose the correct Web Site, verify the other settings, and click **Generate**. See Also: "Step 1: Create Security Certificates on Your Local Server" on page 18-45
8. This action generates new security certificates on your server.
9. Copy the new certificates to all other servers in the eSync configuration. This is explained in "Step 3: Copy Local Client Certificate to Remote Server" on page 18-48.

Troubleshooting Security Certificates

- "Could Not Connect Error" on page 18-51
- "No Endpoint Error" on page 18-52

Could Not Connect Error

When trying to connect to a remote server, after selecting a security certificate, you may see the following message.

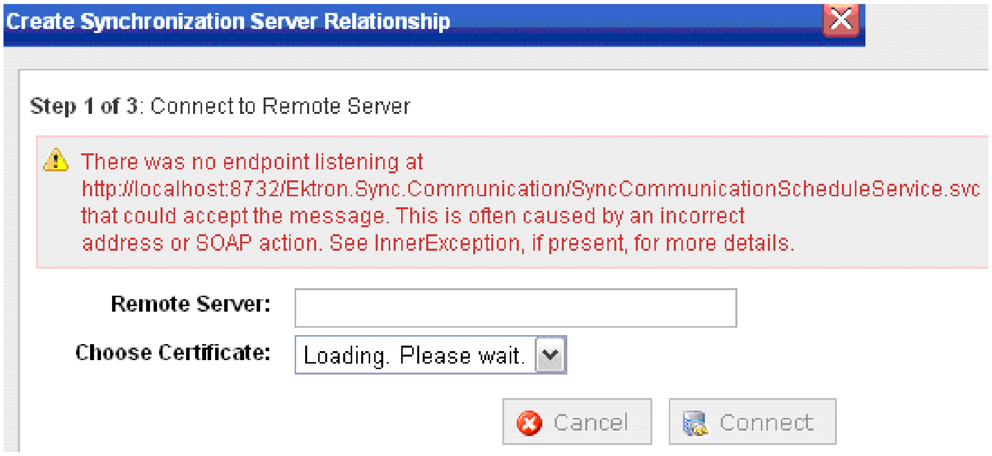


Here are some steps to resolve the problem.

- Check the Windows Event Viewer > EktronL2 log for the error. If the service is hosted but already exists, stop then start the service (do not restart).

- The certificates may be corrupted. To resolve this, see "Regenerating Security Certificates" on page 18-50.

No Endpoint Error



The above error indicates that

- the remote site may not be on the same Ektron CMS400.NET version as the local site, *or*
- the Ektron Windows Service is not started

Using eSync to Initialize a New Site

Typically, before you begin using eSync, one server hosts an Ektron CMS400.NET Web site, and you want to bring other servers into the configuration. After the servers are synchronized, one will be the *staging server* (the one on which content is created or updated, then approved). Another server, *production*, hosts your live Web site.

Warning! The names of the site and all folders *must* match on both servers. This is because paths to images, xslt files, etc. refer to a site and its folders. If the servers' site and folder names do not match, the links break.

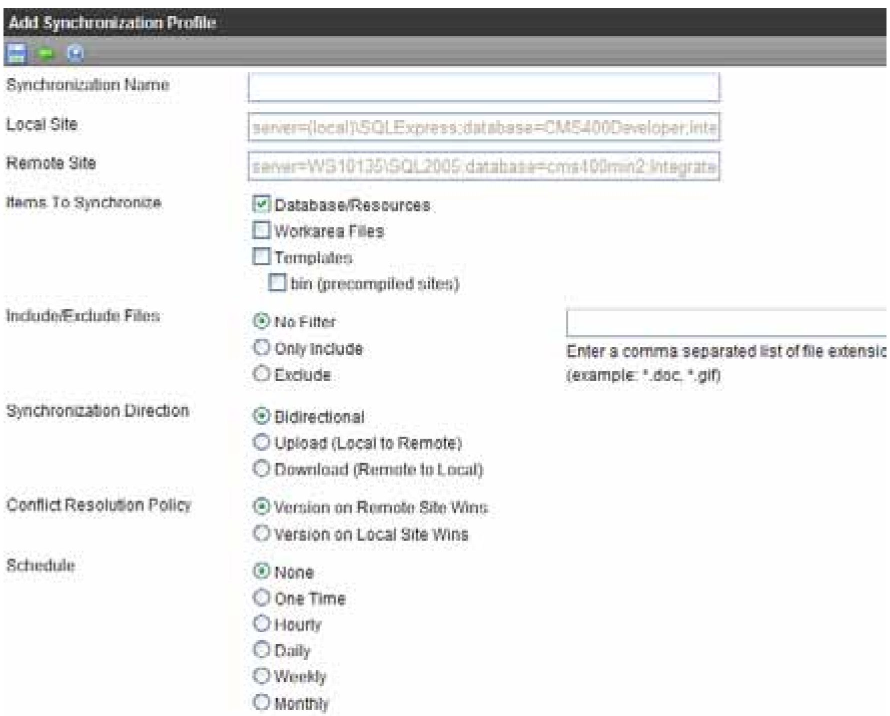
First, use eSync to initialize the new servers from the existing one. This process is described in "Setting Up eSync" on page 18-4. Afterwards, use eSync to periodically sync updated content, folders, users, menus, etc.

Setting up eSync Profiles

To minimize data entry, eSync saves your specifications about an individual eSync job in a sync *profile*. So, after you enter specifications the first time, just select the profile every subsequent time you want to sync. A profile contains information about the

- source and destination databases
- type of data being synched
- files to include/exclude
- direction
- schedule

Use the Add Synchronization Profile screen to create and update eSync profiles.

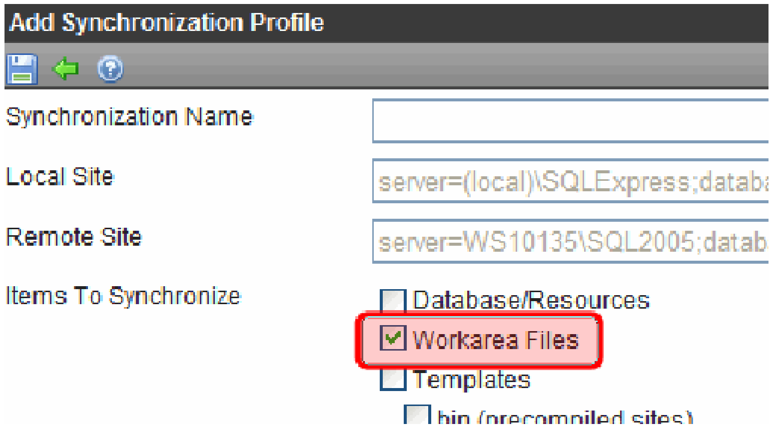


While following the steps in "Setting Up eSync" on page 18-4, you created a default database and a template profile. This section explains how to modify those profiles and create new ones.

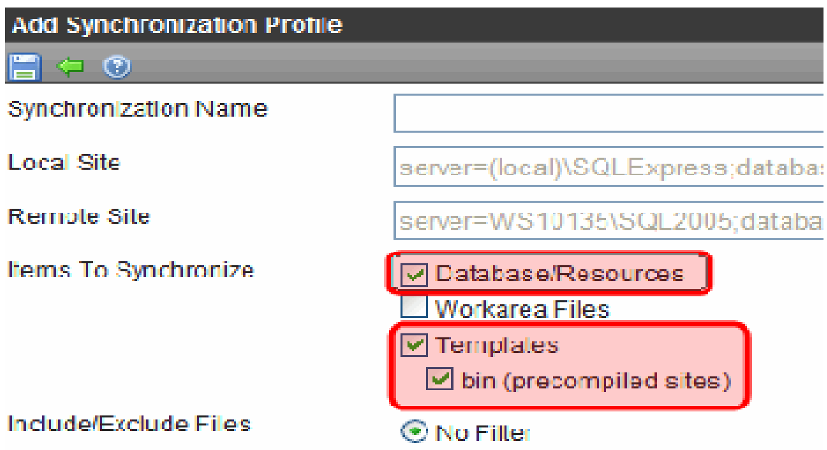
To eSync an entire Web site, you need a minimum of two profiles: one for your `web site root/Workarea` folder, and another for all other site files.

To create a profile for

- your `Workarea` folder, click **Workarea Files** under **Items to Synchronize**.



- all other site files, click **Database/Resources**, **Templates** and **Bin** under **Items to Synchronize**.



The following table explains the kinds of files synched by each category.

Items to Synchronize	Type of data synched	Exceptions	For setup instructions, see
Database/Resources	The database plus the following site root folders - assets - Privateassets - uploadedimages - uploadedfiles	See "Global File Type Exceptions" on page 18-56	"Setting up a Profile to Sync a Database and Assets" on page 18-56

Items to Synchronize	Type of data synched	Exceptions	For setup instructions, see
Workarea Files	All files in the site's `Workarea` folder other than the exceptions	Files in these folders: - ewebeditpro - help - explorer - ewebdiff - documents - foundation - resources - sync See Also: "Global File Type Exceptions" on page 18-56	"Setting up a Profile to Sync Workarea Files" on page 18-57
Templates **Warning!** If you run a template sync and **Bin** is checked, and one server is running is 32-bit mode while the other is running in 64-bit mode, users will not be able to drag and drop DMS files on the staging server.	All files in your site root folder other than the exceptions Note: If you perform an initial sync of a recently-installed min site with your staging site, the min site's templates could overwrite templates on your staging site. This is because, when two templates have the same name, the most recently modified one overwrites the other. To avoid this, rename the only template installed with the min site (login.aspx) before performing the initial template sync. You should also rename login.aspx's supporting files, such as login.aspx.vb.	Files in these folders: - workarea (covered by Workarea Files sync) - assets, privateassets, uploadedfiles, uploadedimages (covered by Database/Resources sync) - bin (covered by **Bin** checkbox, below) - app_webreferences - latestchanges - app_globalresources These files: - assetManagement.config - web.config See Also: "Global File Type Exceptions" on page 18-56	"Setting up a Profile to Sync Template and Bin Files" on page 18-59
Bin	The bin folder		

You can also set up a profile that syncs Windows folders. See Also: "Synchronizing Windows Files" on page 18-62

Global File Type Exceptions

The following file types are *not* synched by default.

- .config files
- .txt files
- .sln files

Note: Ektron CMS400.NET creates a large number of .txt files to support the search functionality.

However, you can add these file types to a sync profile via the **Include/Exclude Files** field. See Also: "At the Include/Exclude files field, include files not normally synched, or exclude files that are synched by default. " on page 18-58

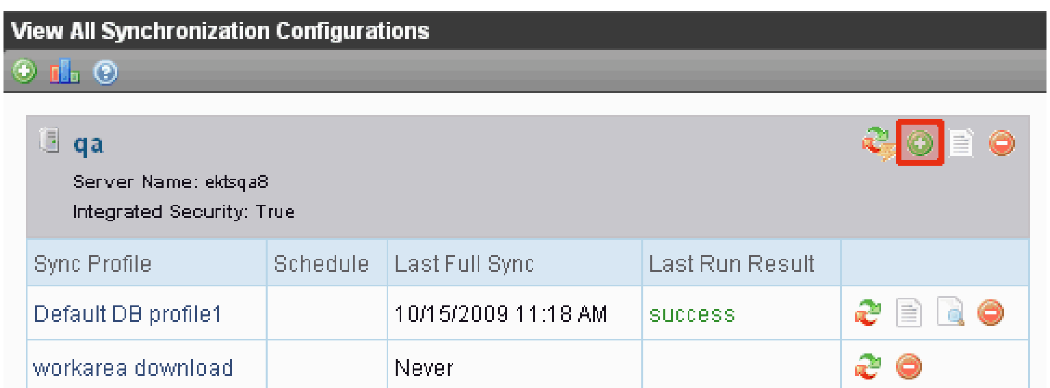
Setting up a Profile to Sync a Database and Assets

To set up a profile to sync an Ektron CMS400.NET database and its assets, follow these steps.

Prerequisite

- You created a Sync configuration and ran an initial sync. See Also: "Setting Up eSync" on page 18-4

1. Go to the **Settings** > **Configuration** > **Synchronization** screen.
2. If you are eligible to add a profile to a configuration, **Add Sync Profile** appears, as shown below.



3. Click the **Add Sync Profile** button. The Add Synchronization Profile screen appears.
4. At the **Synchronization name** field, enter a name for this profile.
5. At the **Items to Synchronize** field, select **database and assets**.

6. At the **Synchronization Direction** field, select the direction of the data copy that will occur. Your choices are:

- **Bidirectional** (that is, both directions). Changed data on either server is updated on the other. If the same data (for example, a membership user profile) is updated on both servers, the conflict resolution policy determines the outcome. See Also: "Bidirectional Sync" on page 18-61; "Conflict Resolution Policy" on page 18-62

Note: If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

- **Upload** - the database and assets are copied from the local server (the one to which you signed on) to the remote server (specified at the Remote Site field above). Items on the remote server are overwritten.

- **Download** - the database and assets are copied from the remote server to the local server. Items on the local server are overwritten.

7. At the **Conflict Resolution Policy field**, decide what to do if Synchronization Direction is Bidirectional, and the data has changed on both servers since the last sync. Your choices are.

   - **Version on Remote Site Wins** - the remote version overwrites the local version

   - **Version on Local Site Wins** - the local version overwrites the remote version

8. If desired, select a schedule for when the sync will run automatically. The choices are

   - **None** - Don't set up a schedule. Run this sync profile as needed via the Sync Profile screen's **Start Now** button.

   - **One Time** - you specify a start time and date

   - **Hourly** - you specify a start date and time. eSync begins on the start date and time, then runs every hour at that time.

   - **Daily** - you specify a start time and date; this sync profile will run every day at this time

   - **Weekly** - you specify a start time, date, and day. After the start date, this sync profile will run this day every week at this time.

   - **Monthly** - you specify a start time and date (numbers 1 through 31). After the start date, this sync profile will run this day every month at this time.

Warning! You cannot schedule more than one sync to begin at the same time.

Note: While the following options let you schedule a sync profile, you can sync at any time by accessing the Sync Profile and clicking the Sync button ( ). See Also: "Running a Sync" on page 18-64

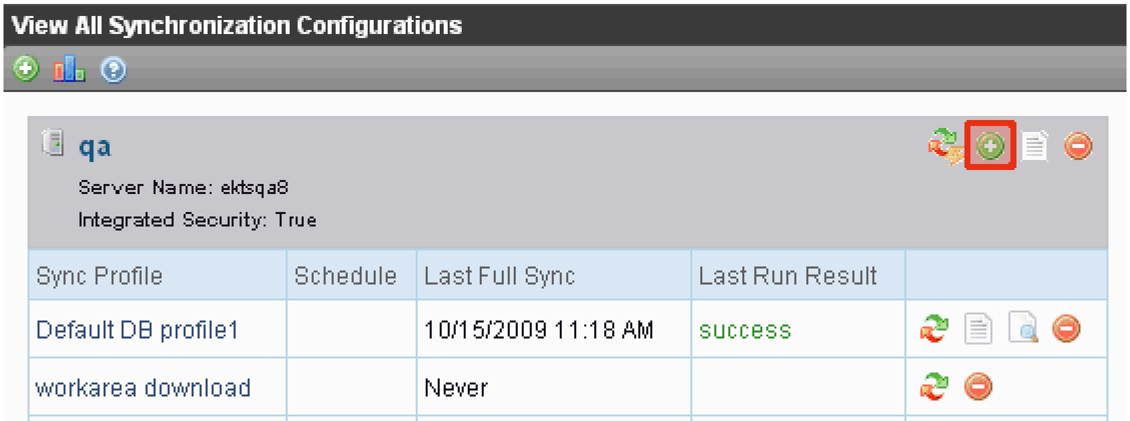
Note: If you enter a date greater than 28, the sync will not run in a month that does not include that date. For example, if you enter 31, the sync will not run in February, April, June, September, and November.

Setting up a Profile to Sync Workarea Files

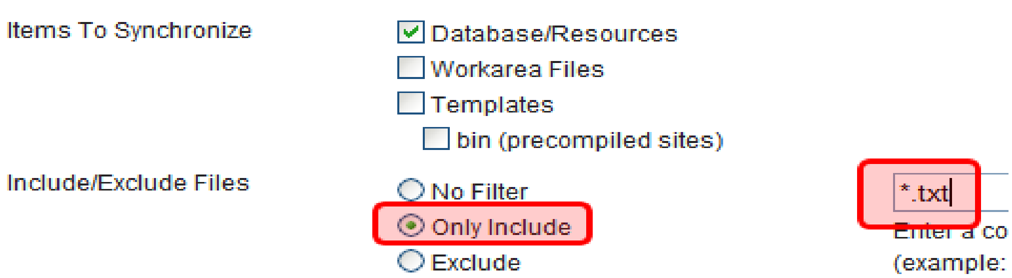
Prerequisite

- You created a Sync configuration and ran an initial sync. See Also: "Setting Up eSync" on page 18-4

1. Go to the **Settings** > **Configuration** > **Synchronization** screen.
2. If you are eligible to add a profile to a configuration, **Add Sync Profile** appears on the right side, as shown below.



3. Click the **Add Sync Profile** button. The Add Synchronization Profile screen appears.
4. At the Synchronization name field, enter a name for this profile.
5. At the **Items to Synchronize** field, select **Workarea files**.
6. At the **Include/Exclude** files field, include files not normally synched, or exclude files that are synched by default.
7. For example, .txt files are not normally included in a sync, but you want to copy several on your staging server to the production server. In this case, check **Include** and enter ***.txt** into the adjacent field (illustrated below). If you do, only files with that extension are synched.



8. As an example of the **Exclude** option, assume you do not want to sync Flash (.swf) files. If you check the **Exclude** button, and enter .swf into the text field, eSync ignores them.

Note: By default, eSync ignores .config and .txt files.

9. At the **Synchronization Direction** field, select the direction of the data copy that will occur. Your choices are:

- **Bidirectional** (that is, both directions). Changed data on either server is updated on the other. If the same data (for example, a membership user profile) is updated on both servers, the conflict resolution policy determines the outcome. See Also: "Bidirectional Sync" on page 18-61; "Conflict Resolution Policy" on page 18-62

Note: If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

- **Upload** - if the file on the local server was modified more recently than the one on the remote server, the local file replaces the remote. Otherwise, nothing happens.
- **Download** - if the file on the remote server was modified more recently than the one on the local server, the remote file replaces the local. Otherwise, nothing happens.

10. At the **Conflict Resolution Policy field**, decide what to do if Synchronization Direction is Bidirectional, and the data has changed on both servers since the last sync. Your choices are.
    - **Version on Remote Site Wins** - the remote version overwrites the local version
    - **Version on Local Site Wins** - the local version overwrites the remote version
11. If desired, select a schedule for when the sync will run automatically. The choices are
    - **None** - Don't set up a schedule. Run this sync profile as needed via the Sync Profile screen's **Start Now** button.
    - **One Time** - you specify a start time and date
    - **Hourly** - you specify a start date and time. eSync begins on the start date and time, then runs every hour at that time.
    - **Daily** - you specify a start time and date; this sync profile will run every day at this time
    - **Weekly** - you specify a start time, date, and day. After the start date, this sync profile will run this day every week at this time.
    - **Monthly** - you specify a start time and date (numbers 1 through 31). After the start date, this sync profile will run this day every month at this time.

Warning! You cannot schedule more than one sync to begin at the same time.

Note: While the following options let you schedule a sync profile, you can sync at any time by accessing the Sync Profile and clicking the Sync button ( ). See Also: "Running a Sync" on page 18-64

Note: If you enter a date greater than 28, the sync will not run in a month that does not include that date. For example, if you enter 31, the sync will not run in February, April, June, September, and November.

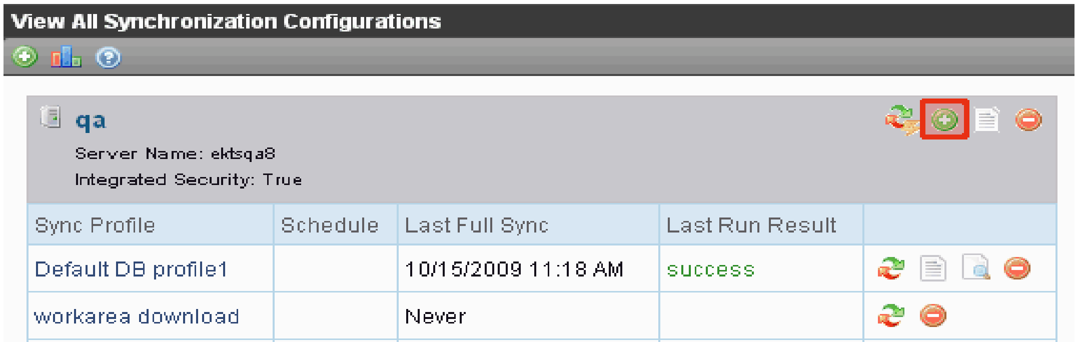
Setting up a Profile to Sync Template and Bin Files

Prerequisite

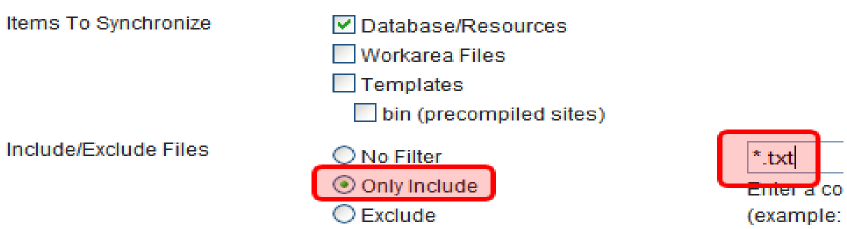
- You created an eSync configuration and ran an initial sync. See Also: "Setting Up eSync" on page 18-4

1. Go to the **Settings** > **Configuration** > **Synchronization** screen.

2. If you are eligible to add a profile to a configuration, **Add Sync Profile** appears, as shown below.



3. Click the **Add Sync Profile** button. The Add Synchronization Profile screen appears.
4. At the **Synchronization name** field, enter a name for this profile.
5. At the **Items to Synchronize** field, select **Templates** and **Bin**.
6. At the **Include/Exclude Files** field, include files not normally synched, or exclude files that are synched by default. For example, .txt files are not normally included in a sync, but you want to copy several on your staging server to the production server. In this case, check **Include** and enter ***.txt** into the adjacent field (illustrated below). If you do, only files with that extension are synched.



7. As an example of the **Exclude** option, assume you do not want to sync Flash (.swf) files. If you check the **Exclude** button, and enter .swf into the text field, eSync ignores them.

Note: By default, eSync ignores .config and .txt files.

8. At the **Synchronization Direction** field, select the direction of the data copy that will occur. Your choices are:

   - **Bidirectional** (that is, both directions). Changed data on either server is updated on the other. If the same data (for example, a membership user profile) is updated on both servers, the conflict resolution policy determines the outcome. See Also: "Bidirectional Sync" on page 18-61; "Conflict Resolution Policy" on page 18-62

Note: If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

   - **Upload** - if the file on the local server was modified more recently than the one on the remote server, the local file replaces the remote. Otherwise, nothing happens.
   - **Download** - if the file on the remote server was modified more recently than the one on the local server, the remote file replaces the local. Otherwise, nothing happens.

9. At the **Conflict Resolution Policy field**, decide what to do if Synchronization Direction is Bidirectional, and the data has changed on both servers since the last sync. Your choices are.
   - **Version on Remote Site Wins** - the remote version overwrites the local version
   - **Version on Local Site Wins** - the local version overwrites the remote version
10. If desired, select a schedule for when the sync will run automatically. The choices are
    - **None** - Don't set up a schedule. Run this sync profile as needed via the Sync Profile screen's **Start Now** button.
    - **One Time** - you specify a start time and date
    - **Hourly** - you specify a start date and time. eSync begins on the start date and time, then runs every hour at that time.
    - **Daily** - you specify a start time and date; this sync profile will run every day at this time
    - **Weekly** - you specify a start time, date, and day. After the start date, this sync profile will run this day every week at this time.
    - **Monthly** - you specify a start time and date (numbers 1 through 31). After the start date, this sync profile will run this day every month at this time.

Warning! You cannot schedule more than one sync to begin at the same time.

Note: While the following options let you schedule a sync profile, you can sync at any time by accessing the Sync Profile and clicking the Sync button ( ). See Also: "Running a Sync" on page 18-64

Note: If you enter a date greater than 28, the sync will not run in a month that does not include that date. For example, if you enter 31, the sync will not run in February, April, June, September, and November.

Bidirectional Sync

Although most CMS data is created and updated on the staging server, certain types of data are collected on the production server. This information can be viewed and edited on the staging server. Here are some examples:

- membership users
- content ratings data
- forum and blog posts
- community folders

When you set up a sync profile to copy this kind of data (maintained in the database), you typically would choose **Bidirectional** as the direction. In this case, if a membership user creates or updates his profile on the production server, those changes are transmitted to staging.

On the other hand, if your administrator needs to change that membership user's information, the next eSync transfers that from staging to production.

If changes are made to the same file on both servers since the last sync, your conflict resolution policy determines which data is saved. See Also: "Conflict Resolution Policy" on page 18-62

Note: The first time you run a sync for templates or Workarea files, the sync is bidirectional, regardless of the direction you specify on the Synchronization Direction screen.

Conflict Resolution Policy

If you are using bidirectional synchronization (See Also: "Bidirectional Sync" on page 18-61), and the same item changed on both servers since the last sync, eSync must decide which version should be kept, and which version overwritten.

Note: If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

Use the **Conflict Resolution Policy** field to determine which version ends up on both servers after synchronization. The following choices are available.

- **Version on Remote Site Wins** - the remote version overwrites the local version
- **Version on Local Site Wins** - the local version overwrites the remote version

Synchronizing Windows Files

As an alternative to selecting a type of data to sync (using the **File types** radio button), you can sync individual Windows files. For example, you updated a few template files and their related .css files on the staging server, and now want to update the production server without moving everything else.

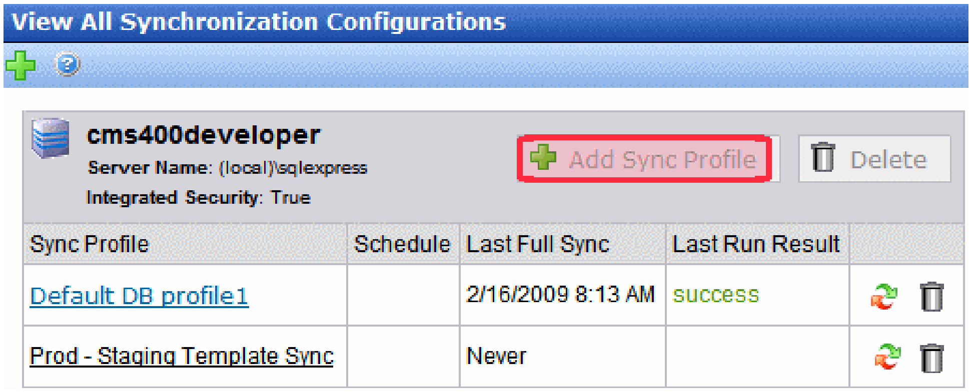
Note: If you create new HTML content and insert a Library image into it, then sync just that content, the image is not inserted into the destination library nor is it searchable from the destination site. To remedy this problem, perform a database/ resources sync.

Unlike the full sync, you cannot schedule a Windows file sync. Instead, you select files then sync immediately.

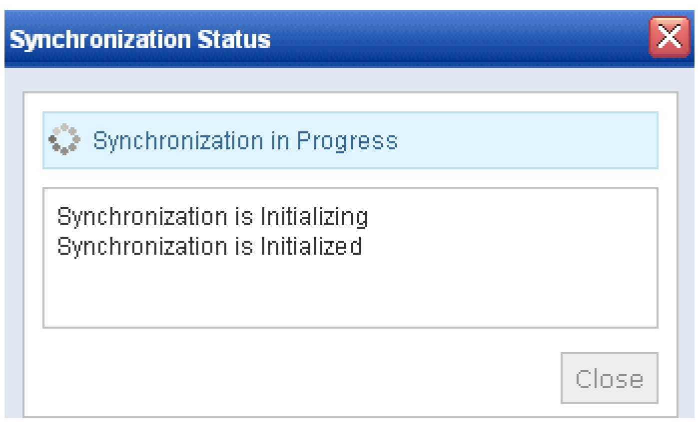
Like the profile sync, the local file replaces the corresponding remote one *only if* the local file was modified more recently than the one on the remote server. Otherwise, nothing happens.

To synchronize Windows files, follow these steps.

1. Create a sync configuration between the two servers whose files you want to sync. See "Setting Up eSync" on page 18-4.
2. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button (see below).



3. Complete the fields on the screen except for **Schedule**, which the file sync ignores. See "Setting up a Profile to Sync Workarea Files" on page 18-57.
4. Save the profile.
5. From the View All Synchronization Configurations screen, click the profile then the Synchronize files button ( ).
6. All folders in your Ektron CMS400.NET site root folder appear. Open folders as needed, and check all files to be synched.
7. Click the Sync now button ( ).
8. A dialog tracks the sync's progress, and notifies you when it is completed.



Optional Steps before Running a Sync

You may want to adjust the web.config and db.config settings before running a Sync. The following topics explain eSync features that you control via the .config files.

- "Content and Folder Sync Options" on page 18-71

- "Using eSync with Web Alerts" on page 18-87
- "Using eSync with eCommerce" on page 18-88
- "Force Initial Sync" on page 18-65
- "Backing up the Destination Server During an eSync" on page 18-67

Running a Sync

Warning! The names of the site and all folders *must* match on both servers. This is because paths to images, xslt files, etc. refer to a site and its folders. If the servers' site and folder names do not match, the links break.

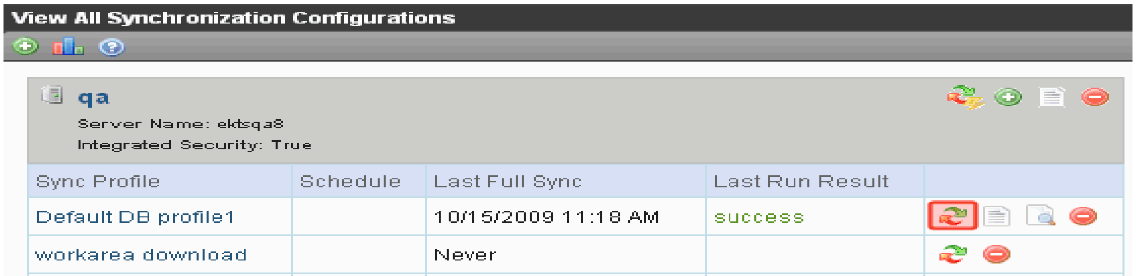
Warning! You cannot run two eSyncs simultaneously.

Prerequisites

- "eSync Requirements" on page 18-35
- You created an eSync configuration and profile. See "Setting Up eSync" on page 18-4.
- You are not signed on to a production server that is outside the firewall. This is because you cannot sync *from* a production server outside the firewall to other servers - you can only sync *to* this production server.

As mentioned in "Setting up eSync Profiles" on page 18-53, you can set up eSync to run on a schedule. However, you can also sync at any time. Follow these steps to sync a profile immediately.

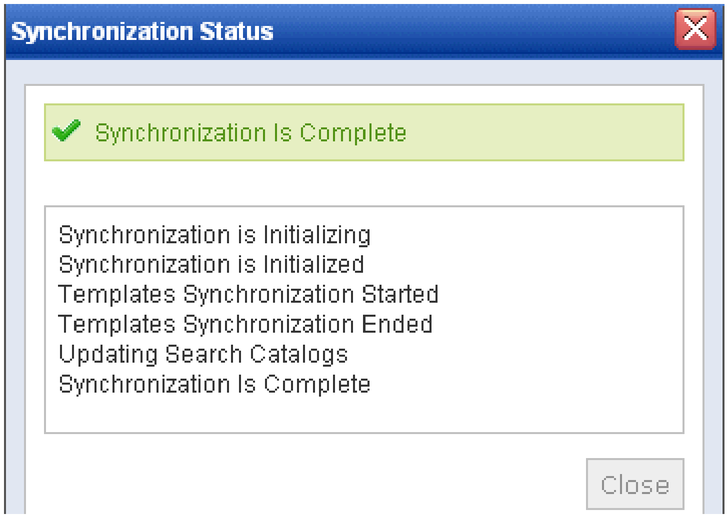
1. Go to the **Settings** > **Configuration** > **Synchronization** screen.
2. If a profile is ready for you to sync, a sync button appears in the right column, as circled below.



3. Click the sync button ( ).

Note: If another sync is running, you are notified. You cannot begin a new sync until the current one finishes.

4. A screen monitors the sync's progress.



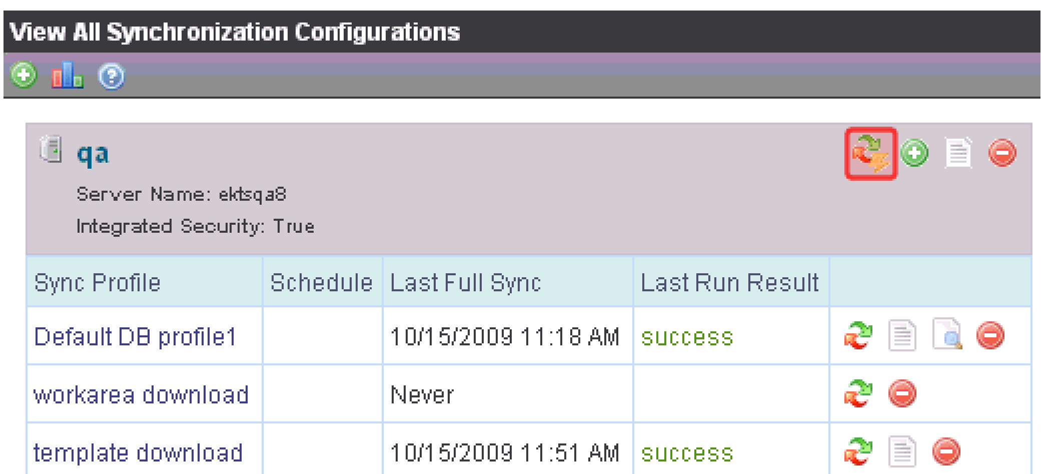
5. The screen indicates when the sync is complete.

Note: You can close the window and reopen it at any time by clicking the sync button ( ). If you do, the sync's current status appears.

Warning! If you performed a database sync and the site being synched uses URL aliasing, you must go to its URL Aliasing Configuration screen and click the Refresh button ( ) to update its aliasing information.

Force Initial Sync

Use the Force Initial Sync button to reinitialize a server that was previously initialized.



Here's a scenario in which you would want to use Force Initial Sync.

1. You initialized a test server from your current Ektron CMS400.NET server.
2. You experimented on the test server by adding new content, deleting content, etc.

3. You no longer want the test server's database. Instead, you want to reinitialize the test server from the Ektron CMS400.NET server.

To accomplish step 3, use the Force Initial Sync button. The button only appears when all prerequisites are present. See Also: "Force Initial Sync Prerequisites" on page 18-66

TECHNICAL NOTE

Note: The Force Initial Sync procedure ignores the following checks that are normally made prior to synching:

Note: * the destination database is smaller than the source database

Note: * the site has not been previously staged

Force Initial Sync Prerequisites

In order to use the Force Initial Sync feature, these conditions must exist.

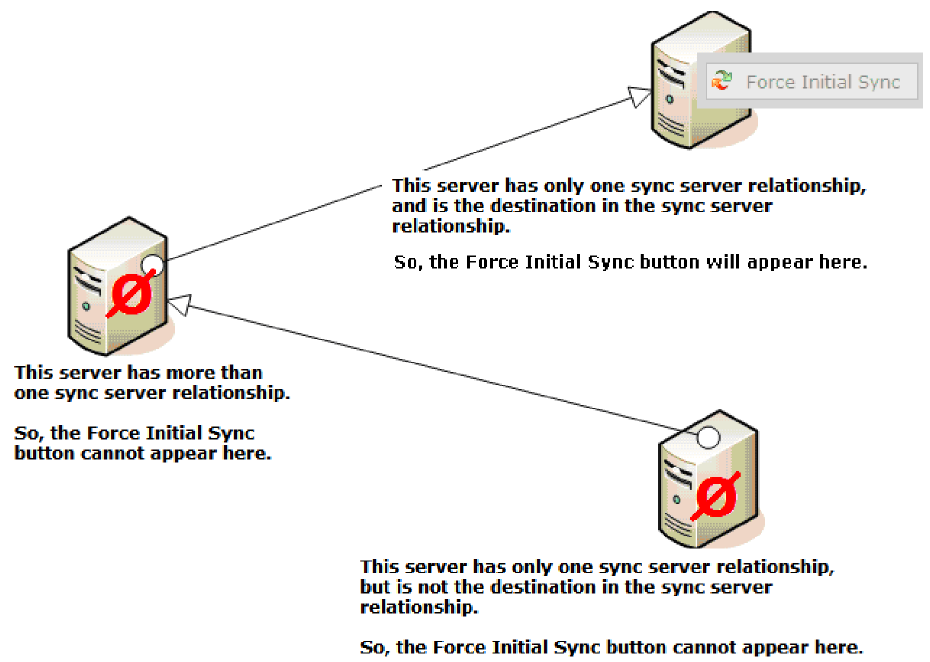
- The server's web.config file's `ek_ForceReInit` property is set to `true`.

Note: If the `ForceReInit` property is set to `false`, and you click the Force Initial Sync button, you are informed that you need to change the property to `true` if you want to force an initial sync.

- The site to which you are signed on is not part of a multi-site configuration.
- The server has only one sync server relationship.
- The server is the *destination* in the sync server relationship. In other words, the server must be on the download side of the relationship.

The following image illustrates the last two conditions.

Conditions for Force Initial Sync button



Backing up the Destination Server During an eSync

You can create a backup of the destination server's database. If you do and problems occur during the sync, the database is automatically restored to its state prior to beginning the backup.

You can specify the backup to occur on the initial sync only, or every time you sync.

Note: No backup is made when you sync a folder or content. SeeAlso" />"Content and Folder Sync Options" on page 18-71

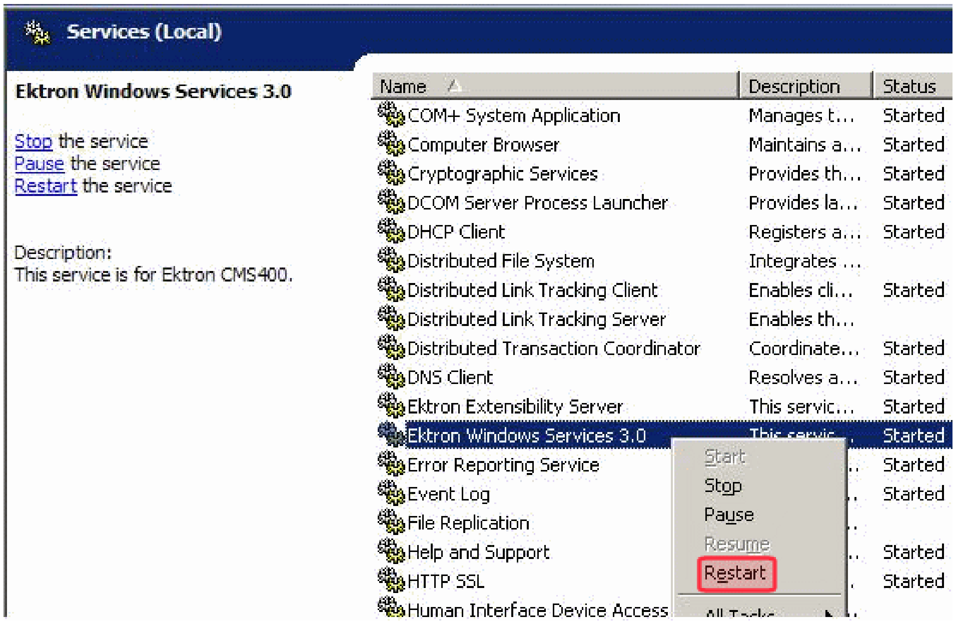
Setting up the Destination Database Backup

To set up the database backup, follow these steps.

1. Open
   `C:\Program Files\Ektron\EktronWindowsServcie30\dbsync.config`.
2. Find the following line (near the top).
```
<DatabaseRuntime name="EktronDbSync" logPath="C:\Program
Files\Ektron\EktronWindowsService30\Database\">
```
3. Add the following properties to that tag

- `device` - Following `device`, enter the path to the backup file. Ektron recommends using `C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Backup\`.
- `backupOption` - possible values
  - 1 - backup on initial sync only
  - 2 - backup every time you run a sync

4. The line should now look something like this:
```
<DatabaseRuntime name="EktronDbSync" device="C:\Program Files\Microsoft SQL
Server\MSSQL.1\MSSQL\Backup\" backupOption="1" logPath="C:\Program
Files\Ektron\EktronWindowsService30\Database\">
```
5. Save the file.
6. Restart the Ektron Windows Service.



Once this is set up, a backup file is created either after the initial sync (if `backupOption="1"`) or after every sync (if `backupOption="2"`).

Here is the file's format: `[dbname][yyyy][mm][dd][hh][mm][ss][mmm].[product].bak`

For example: `cms400min20090216075946765.esync.bak`.

– See "Setting Up eSync" on page 18-4

Reviewing Resolved Collisions

To verify the accuracy of the data being synchronized, eSync checks for and resolves the following *matching* items

- user names
- folder names
- metadata definitions
- messages

For example, on the staging server, a user creates a folder directly under the root folder called `Marketing`, and a user on the production server does the same.

NOTES

Note: * In order for folders to match, they must have the same name *and* folder path.

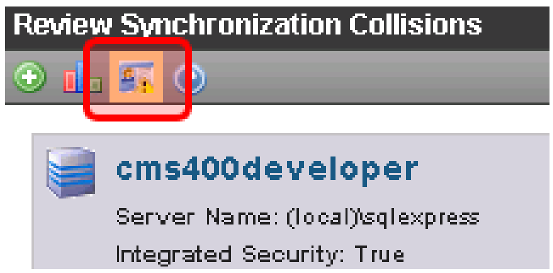
Note: * Both CMS and membership users are included.

This problem only occurs if the matching items were both entered since the last synchronization.

Although matching items have different ID numbers, users cannot tell them apart. So, eSync appends the ID number to the more recently-created one to distinguish it from the other. For example, `Marketing` becomes `Marketing11329`.

The Review Resolved Collisions Button

To help track these changes, the View All Synchronization Configurations screen has a button () that appears only after such a collision is resolved.



The server on which the button appears is explained below.

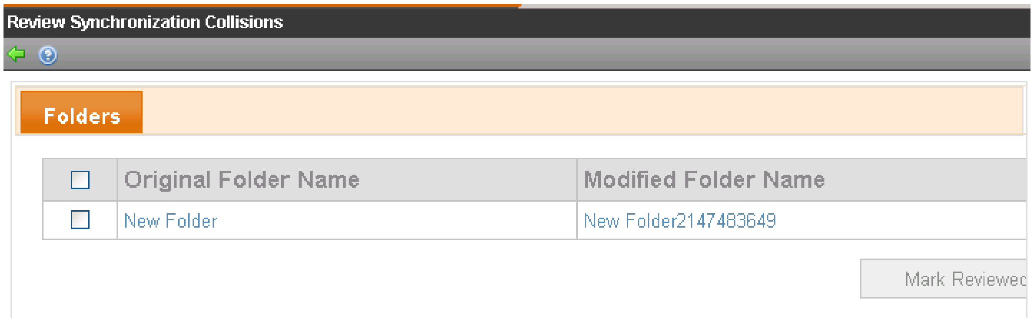
eSync Direction	Collision Resolution Information Appears on this Server
download	local
upload	remote

When you click this button, the Review Synchronization Collisions screen appears, showing the original and changed items.

The Review Synchronization Collisions Screen

This screen shows how collisions between matching items were resolved. See Also: "Reviewing Resolved Collisions" on page 18-68

Each type of resolved collision appears on its own tab.



After noting these changes, you can click the box to the left of each change, then click the **Mark Reviewed** button to remove it from the screen. Alternatively, you can click the box in the header row to select all.

The **Users** tab has an additional button, **Mark Reviewed and Email**. Use it to remove the user from the screen and send an email to him/her (using the address from the Add/Edit User screen's **E-Mail Address** field). The email text is below.

```
lbl sync collision email subject = Your username has been changed
lbl sync collision email body = For security purposes, your username has been changed.
Your new username is {0}. You will need to use this new username the next time you
login. Thank you.
```

Note: You can change the text in the resource file. To learn about editing it, see "Procedure for Translating Workarea Strings" on page 946.

Synching Custom Database Tables

You can use eSync to synchronize a custom SQL database table. To do so, follow these steps.

1. Add a new, empty table to the target SQL database.
2. On the server that hosts the source database, navigate to C:\Program Files\Ektron\EktronWindowsService30.
3. Open the DbSync.config file.
4. Find the section that begins <Release version="7.6.6.
5. Within the 7.6.<Groups> tag, you see these names:

```
<add name="default" scope="ektron"
<add name="folder" scope="ektron"
<add name="content" scope="ektron"
<add name="folderrecursive" scope="ektron"
<add name="workflow" scope="workflow"
<add name="custom" scope="custom" schema=""/>
```

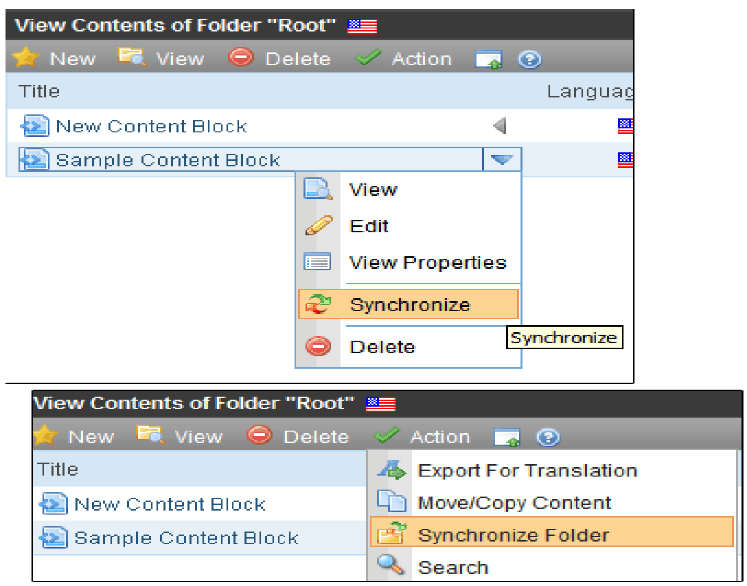
6. Enter your custom table schema within the last line's schema="" tag.

Note: Follow the pattern of the existing schemata when adding yours.

7. Save DbSync.config.
8. Sign on the source server.
9. Follow steps 1 through 7 on that server.
10. Restart the Ektron Windows Service on both servers.
11. Run a DB sync from local to remote (local win).

Content and Folder Sync Options

Members of the Administrators group or those assigned to the Synchronization Admin role can sync individual content items and Ektron CMS400.NET folders using context menu options, as shown below.



See Also:

- "Prerequisites for Content/Folder Sync" on page 18-72
- "Enabling the Content and Folder Level Sync" on page 18-73
- "Using Content and Folder Level Sync" on page 18-73
- "Synching a Content Item" on page 18-74
- "Synching a Folder" on page 18-76

Prerequisites for Content/Folder Sync

See Also: "eSync Requirements" on page 18-35

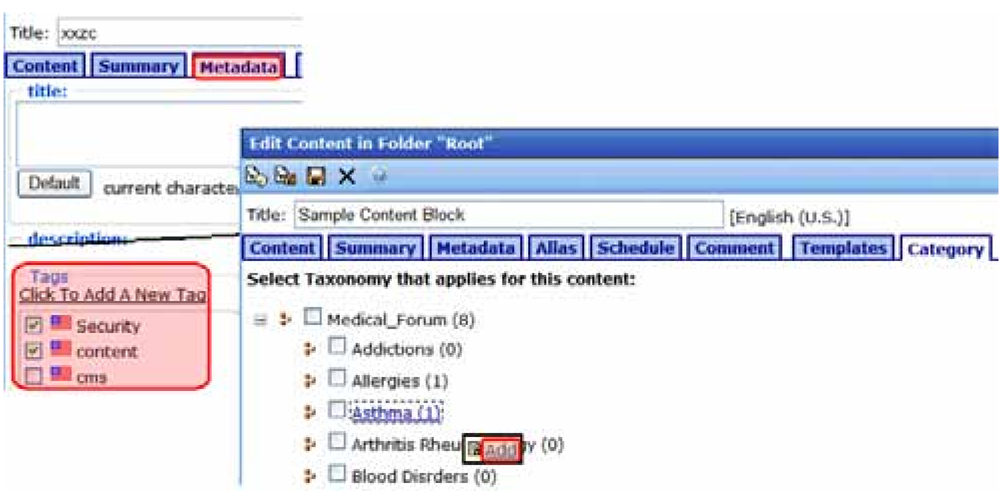
- You are a member of the Administrators group or assigned to the Synchronization Admin role
- Content/folder sync is enabled in web.config. See "Enabling the Content and Folder Level Sync" on page 18-73.
- The server has a sync configuration whose initial sync has been run
- *Existing folders*: folder information has not been updated since the last database sync using the selected profile.

If any folder property is changed (for example, a new metadata value is assigned), a database sync must be run before you can synchronize content in that folder and the folder itself.

Furthermore, any child folder (and its content) that inherits that property from the parent folder can only be synchronized after the next database sync.

- N*ew folders*: a database sync must be run before you can synchronize content in the new folder and the folder itself
- C*ontent*: No new *tags* or *taxonomy categories* have been added since the last time the selected profile was synched. If either event has occurred, a database sync must be run before you can synchronize that content. You must also run a database sync for all other profiles that use those tags or taxonomy.

The following graphic illustrates adding new tags and a taxonomy category to content.



- For a folder sync, the content is not a blog or forum post. For a content sync, the content is not a forum post.

Enabling the Content and Folder Level Sync

To set up the content and folder Synchronize options, follow these steps.

1. Log on to the server on which content editors will sync content and folders.
2. Open Windows Explorer > your site root folder > the web.config file.
3. Go to the following area.

```
<eSyncSettings>
<!-- enables or disables eSync feature -->
<add key="eSyncEnabled" value="false"/>
</eSyncSettings>
```

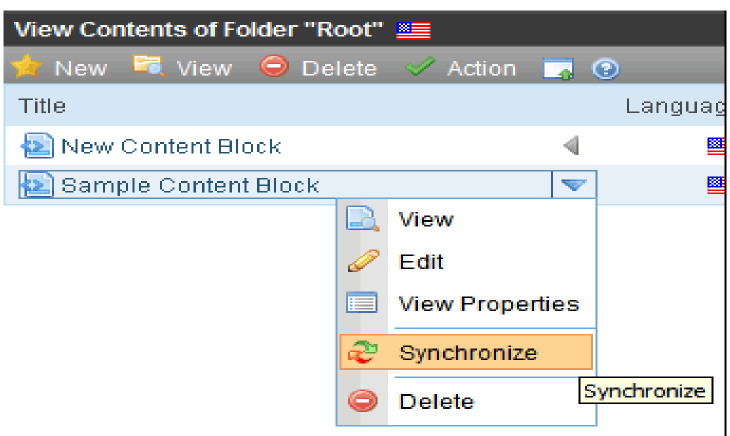
4. Set the value of `eSyncEnabled` to `true`.
5. Save web.config.

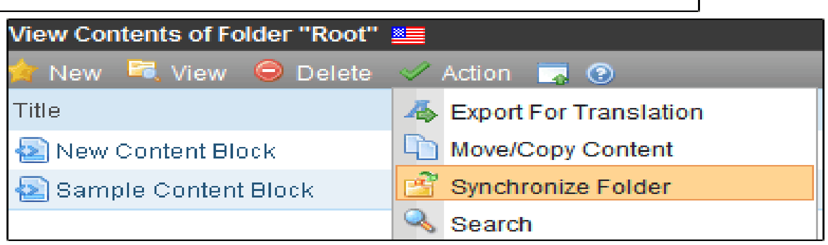
Using Content and Folder Level Sync

You would typically use eSync in the following manner.

1. Create, update, and get content approved on a staging server.
2. Synchronize content blocks or an Ektron CMS400.NET folder with the production server.

The eSync feature is available if you see **Synchronize** menu options (shown below) on Approved content or a folder.





Synching a Content Item

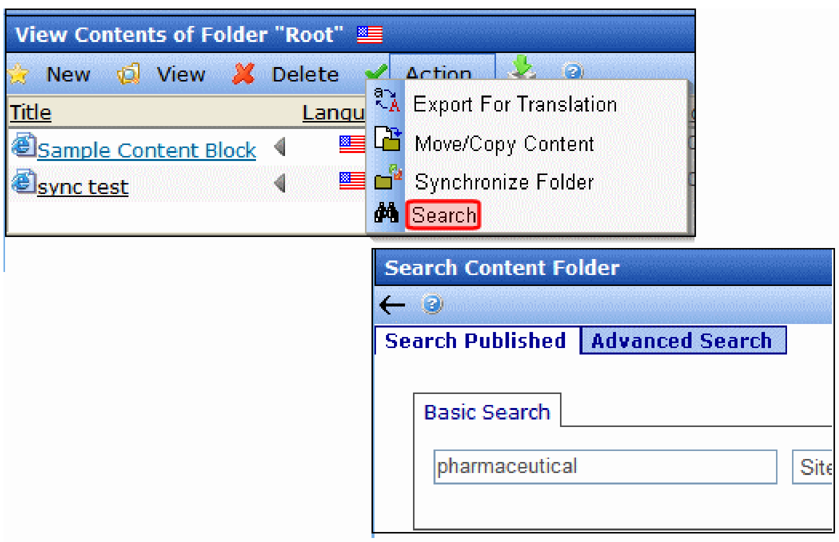
Content sync copies a selected content item to another computer. The sync also copies library resources within that content, such as images and quicklinks.

Only Approved content can be synchronized. See Also: "Prerequisites for Content/Folder Sync" on page 18-72

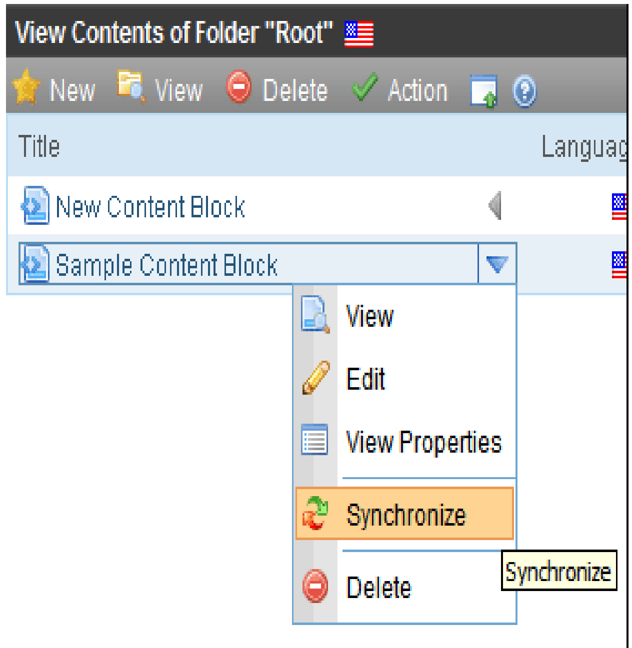
To sync a content item, follow these steps.

1. Navigate to the content. You can

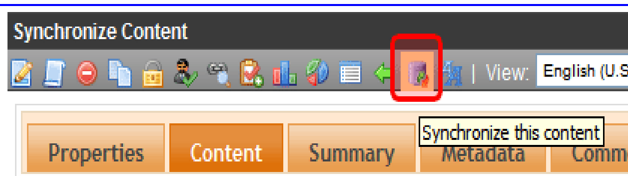
- go to the Web page that displays it
- sign into the Ektron CMS400.NET Workarea and
  - navigate to its folder, or
  - use the Search to find it (see below)



2. Click the arrow to the right of the content to see its dropdown menu.

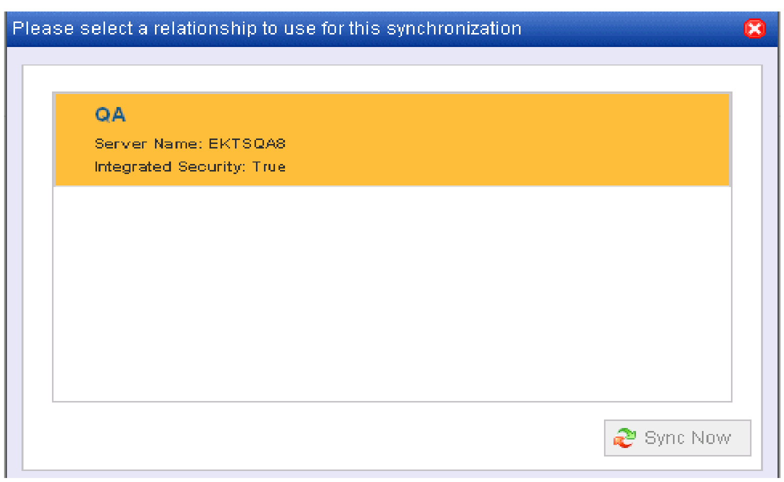


Note: A Synchronize button (shown below) is also available from the View Content screen.



Note:

3. Click **Synchronize**.
4. All relationships with at least one Database profile whose direction is **Upload** or **Bidirectional** appear. Select the appropriate one. See Also: "Setting up eSync Profiles" on page 18-53



5. Click **Sync Now**.

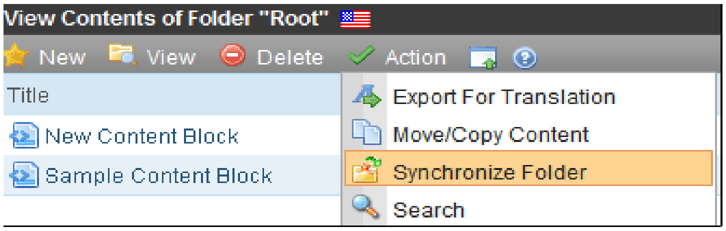
6. The content is synchronized with the selected database.

Synching a Folder

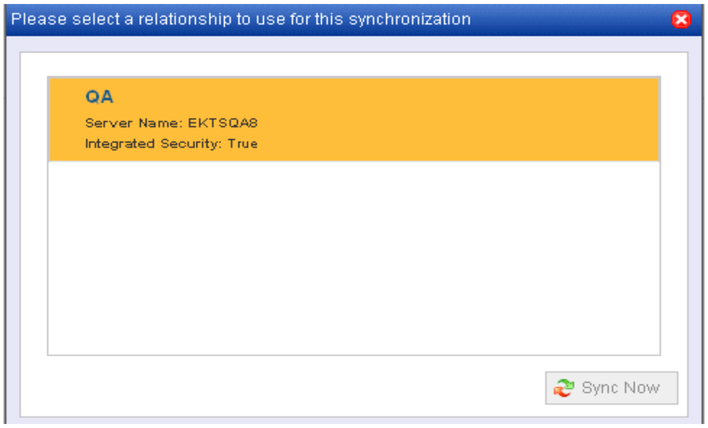
The folder sync updates all content in a folder with another computer. It does not affect content in folders underneath the selected folder. See Also: "Prerequisites for Content/Folder Sync" on page 18-72

To sync a folder, follow these steps.

1. Navigate to the folder.
2. Click **Action** > **Synchronize Folder**.



3. A screen asks you to select a sync relationship.



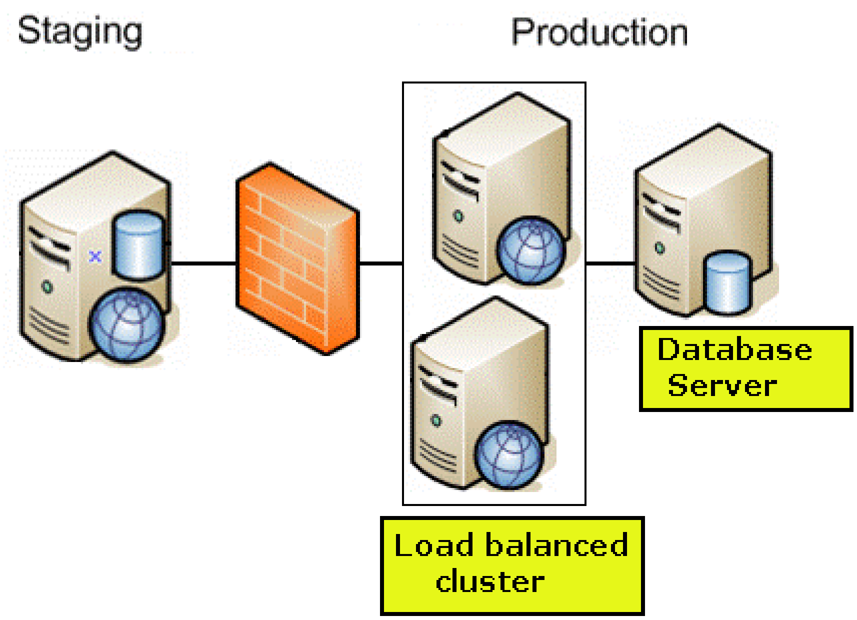
4. Click the **Start Sync** button.
5. All content in the folder is synched with the selected database.

eSync in a Load Balanced Environment

Ektron CMS400.NET supports a load-balanced environment, in which several servers share your Web site's processing load. This feature is explained in "Load Balancing Support" on page 123.

If your site uses load balancing, you can set up eSync such that, after one server in a load balance cluster is synchronized, the other servers will be automatically synchronized. Note that if a separate database server is outside the load balance cluster (as shown below), eSync only synchronizes documents and files used by the search among the clustered servers. It does not touch the database.

A typical load balanced cluster is below.



Warning! Ektron's eSync feature does not synchronize all databases in a SQL database cluster. If you have such a configuration, it is your responsibility to ensure that eSync updates all the databases.

Warning! In a load balanced environment, only update templates on the staging server. Do not update them on the production server and assume they will be synchronized with the staging server.

Warning! Assume your load balanced cluster consists of two staging servers (S1 and S2) and two production servers (P1 and P2).
If you add/modify/delete a file on S1, to get the file to S2, you must run either a download sync on S2, or an upload sync on S1, or a bidirectional sync from either server. If you run a download sync on S2, you also need to run an upload sync to push the file to P2, which will then Load Balance with P1.
The best way to make sure that the added/modified/deleted file is changed on all servers is to initiate the sync from the server on which the file was changed. In this example, since you changed the file on S1, if you initiate a sync from S1, it will be automatically updated on S2, P1, and P2.

Prerequisites

- The connection string on all servers in the cluster match
- You *must* initiate eSync relationships, and the actual synchronization, from a staging server

- If your staging servers are clustered, you must remove one from the cluster before you can sync

Follow these steps to set up this capability.

- "Install a Min Site on Every Server in the Cluster" on page 18-78
- "Update the Assetmanagement.config File" on page 18-78
- "Update the Ektron Windows Service Config File" on page 18-78
- "Create eSync Security Certificates for a Load Balanced Cluster" on page 18-79

Install a Min Site on Every Server in the Cluster

1. Upgrade each server to the same version of Ektron CMS400.NET. If Ektron CMS400.NET is already installed to one server, you can install a minimum site on the other servers.
2. To do this, run the Ektron CMS400.NET base installation file (CMS400Base8x.exe). For more information, see the Ektron CMS400.NET Setup manual.
3. If the current site with which you will sync is precompiled, you must also precompile all min sites.

Update the Assetmanagement.config File

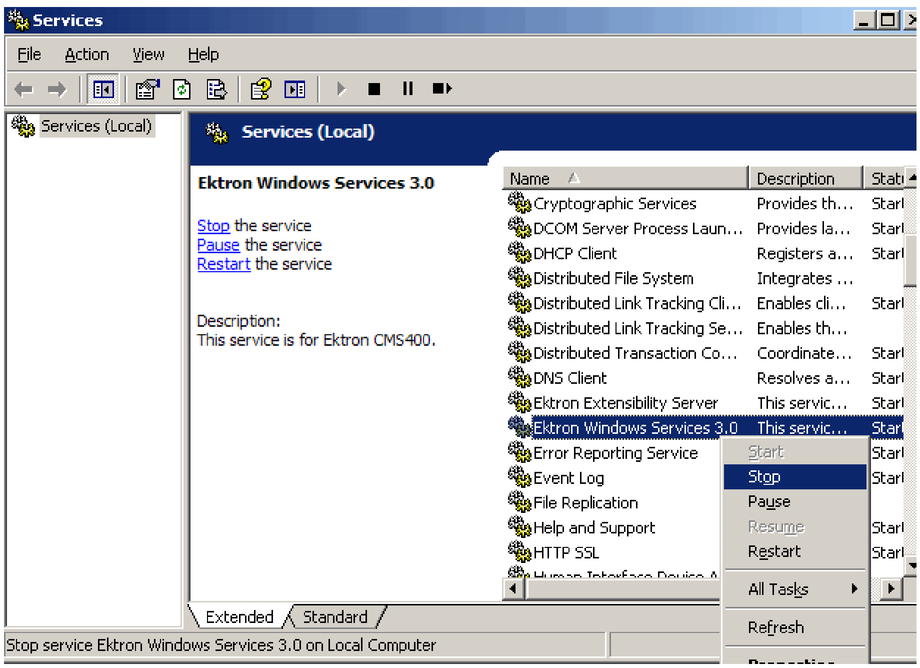
1. Sign on to the first server in your load balanced cluster.
2. In the site root folder, open `site root\assetmanagement.config`.
3. Change the value of `LoadBalanced` to **1** and save.
4. Do this on every server in the cluster.

Update the Ektron Windows Service Config File

1. Sign on to the first server in your load balanced cluster.
2. Open `C:\ProgramFiles\Ektron\EktronWindowsService30\Ektron.ASM.EktronServices30.exe.Config`.
3. Change the value of `LoadBalanced` to **1** and save.
4. Do this on every server in the cluster.

```
<?xml version="1.0"?>
<configuration>
        <configSections>
                <section name="channelPoolSettings" type="Ektron.FileSync.Framework.Channe
                <section name="loggingConfiguration" type="Ektron.ASM.Logging.Configuratic
                <section name="EktronDataConfiguration" type="Ektron.ASM.Data.Configuratic
                <section name="EktronServiceConfiguration" type="Ektron.ASM.EktronServices
                <section name="exceptionHandling" type="Ektron.ASM.ExceptionHandling.Conf
                <section name="siteDbStrings" type="Ektron.FileSync.Common.DataConfigurat
                <section name="syncSettings" type="Ektron.DbSync.Common.SyncConfig,Ektron.
                <!-- Add ektron.serviceModel section handler -->
                <section name="ektron.serviceModel"
                        type="Ektron.FileSync.Common.Sync.Section, Ektron.FileSyr
                <sectionGroup name="applicationSettings" type="System.Configuration.Applic
                        <section name="Ektron.ASM.EktronServices.Properties.Settings" type
                </sectionGroup>
                <section name="microsoft.web.services3" type="Microsoft.Web.Services3.Conf
                <sectionGroup name="userSettings" type="System.Configuration.UserSettingsG
                        <section name="Ektron.ASM.EktronServices.Properties.Settings" type
                </sectionGroup>
        </configSections>
        <appSettings>
                <!-- Sets the time of the day when configuration information is reset-->
                <!-- Config timer as hours:minutes:seconds AM:PM-->
                <add key="updateTime" value="11:59:00 PM"/>
                <add key="HttpServicePort" value="6079"/>
                <add key="PdfGenerator" value="http://pdf.ektron.com/pdfgeneratorservice.a
                <add key="MetaDataUpdateTime" value="30"/>
                <add key="LoadBalanced" value="0"/>
        <add key="LoadBalServerCount" value="2"/>
                <add key="GenerateAutoSummary" value="1"/>
                <add key="BestBetsFolder" value="bestbets"/>
                <add key="UsersFolder" value="users"/>
                <add key="UserGroupsFolder" value="communitygroups"/>
    <add key="ServerCommunicationKey" value=""/>
                <add key="defaultDbSyncClientBinding" value ="wsHttpBinding ISyncServiceC
```

5. **Stop** and then **Start** the Ektron Windows Service on every server in the cluster.



Create eSync Security Certificates for a Load Balanced Cluster

You should be familiar with eSync security certificates before beginning this procedure. If you are not, read the following section: "Managing eSync Security Certificates" on page 18-43.

Assume the load balance cluster has three servers: `mach1`, `mach2`, and `mach3`.

This procedure has two major parts.

- Generating Security Certificates on `mach1`.
- Applying Security Certificates to `mach2` and `mach3`

Generate Security Certificates on mach1

In the first nine steps, you copy `mach1`'s security certificate files, then paste them into the same folder, and rename them beginning with `mach2` and `mach3`.

1. Sign on to `mach1` and generate security certificates. To do this, click the Windows **Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
2. The security configurator screen appears.
3. See "Use the following table to complete this screen." on page 18-46.
4. Click **Generate Certificates** then click **OK**. This action creates security certificates on `mach1`.
5. On `mach1`, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
6. Copy the following files.
   - *mach1*_SyncClient.pfx
   - *mach1*_SyncClient.pvk
   - *mach1*_SyncClient.cer
   - *mach1*_SyncServer.pfx
   - *mach1*_SyncServer.pvk
   - *mach1*_SyncServer.cer
7. Paste them into the same folder.
8. Rename each file according to the following pattern: `mach2`*_file name.* (This assumes the second server in your load balance cluster is `mach2`*.)*
9. Repeat steps 7 and 8 for every server in your load balance cluster. So the number of certificate files in the folder is 6 x the number of servers.
10. Copy all security certificate files to the following `mach1` folder: `C:\Program Files\Ektron\EktronWindowsService30`.
11. Stop and start the Ektron Windows Service.

In the second part of this procedure, you

- open the Ektron.ASM.EktronServices30.exe.config file
- copy `mach1`'s certificate's key value
- create new keys, and apply `mach1`'s encoded value to them

So, when you finish, the affected part of the file looks like this:

```
<add key="mach1_SyncClient.cer" encodedValue="MIIB7TCCAVag....
<add key="mach2_SyncClient.cer" encodedValue="MIIB7TCCAVag....
<add key="mach3_SyncClient.cer" encodedValue="MIIB7TCCAVag....
```

Note: The encodedvalue above is abbreviated to fit the page.

12. Open the following file:

```
C:\Program Files\Ektron\CMS400v7x\Uti-
lities\EWSUpdates\3.0\Ektron.ASM.EktronServices30.exe.config
```

13. Find the `<publickCertKeys>` element.
14. Following that line is the encoded certificate value for `mach1`, which looks something like this.

<add key="mach1_SyncClient.cer" encodedValue="MIIB7TCCAVag....

Note: The encodedvalue above is abbreviated to fit the page.

15. Copy the entire `<add key>` element, including the value, into the Notepad file.
16. Open a text processing application like Notepad.
17. Into the Notepad file, paste the text you copied in Step 13 three times.
18. Change the second line's `add key` value to `mach2_SyncClient.cer`.
19. Change the third line's `add key` value to `mach3_SyncClient.cer`.
20. Copy the second and third lines of the Notepad file (the lines you just changed).
21. Return to the `Ektron.ASM.EktronServices30.exe.config` file.
22. Locate the `<add key>` element.
23. Place the cursor directly below that line.
24. Paste the text you copied in Step 18.
25. Save the `Ektron.ASM.EktronServices30.exe.config` file.

Apply Security Certificates to mach2 and mach3

1. On the local server, open two Windows Explorer windows: one showing the `mach1`'s file system, and the other showing the `mach2`'s file system.
2. In the `mach1` window, open `C:\Program Files\Ektron\EktronWindowsService30`.
3. Copy all security certificate files in that folder.
4. In the `mach2` window, open the following folder: `C:\Program Files\Ektron\EktronWindowsService30`.
5. Paste all security certificate files you copied in Step 3 to that folder.
6. Stop and start the Ektron Windows Service.

7. In the `mach2` window, create a folder underneath the root folder. Name it **Ektron Security Certificates**.

Warning! Do not place it under the web root folder, `C:\inetpub\wwwroot`.

8. Return to the `mach1` window, which is still open to the following folder: `C:\Program Files\Ektron\EktronWindowsService30`.

9. Copy the following files.

Warning! Copy - *do not move* - the files from the `mach1` folder.

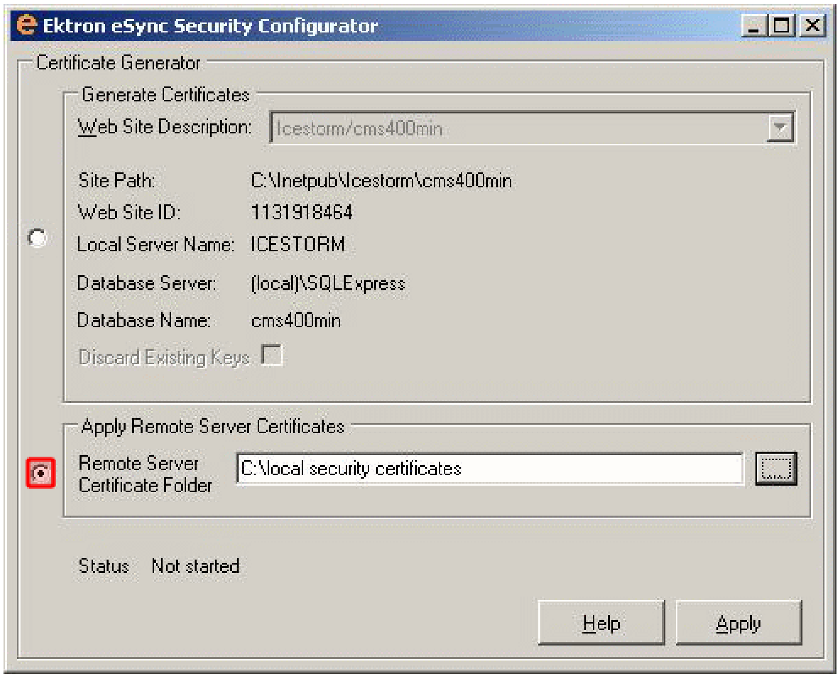
- *mach2*_SyncClient.pfx
- *mach2*_SyncClient.pvk
- *mach2*_SyncClient.cer
- *mach2*_SyncServer.pfx
- *mach2*_SyncServer.pvk
- *mach2*_SyncServer.cer

10. Paste the files into the `mach2` folder you created in Step 6. Make sure there are no other security files in the folder.

Next, you need to register and move the files to the correct folders. The Security Configurator screen does this.

11. On `mach2`, open the security configurator screen using this path: **Windows Start Button** > **All programs** > **Ektron** > **CMS400 v7x** > **Utilities** > **Security Configurator**.

12. The security configurator screen appears.



13. Click the **Apply Remote Server Certificates** button (circled above).
14. Click the browse button next to that field.
15. Browse to the folder to which you pasted the security certificates in Step 9.
16. Click the **OK** button.
17. The utility copies the security certificates you pasted in Step 9 to the correct folder, and configures them for the remote server.
18. Repeat the above steps for every server in the load balance cluster. Note that the files to be copied will start with the server name you're currently setting up.

Setting Up and Running eSync

You set up and run eSync in a load balanced environment the same way you run it normally. See these sections for details.

- "Using eSync to Initialize a New Site" on page 18-52
- "Setting up eSync Profiles" on page 18-53
- "Optional Steps before Running a Sync" on page 18-63
- "Running a Sync" on page 18-64

Note: If your first load balanced sync fails, you must run the Search Config Utility on the load balanced server in order for search to work. See Also: "Automatically Recreating a Catalog" on page 396

Using eSync in a Multi-site Environment

If you want to use eSync in a multi-site environment, you *must* do so before the initial synchronization of a configuration. That is, you cannot set up a eSync configuration in a single-site environment and then later change to multi-site. You can set up a new configuration at any time.

See Also:

- "Limitations on using eSync in a Multi-site Environment" on page 18-84
- "Setting up eSync in a Multi-Site Environment" on page 18-84

Limitations on using eSync in a Multi-site Environment

- In a multi-site environment, you cannot create a staging site from a production site (as described in ”"Using eSync to Initialize a New Site" on page 18-52). You must first create all sites on the staging server, then set up production sites with which they will sync.
- If you want to sync templates between sites in a multi-site configuration, you *must* sign on to the site that has the templates that need to be synched. For example, your configuration consists of a main site and two multi-sites (A & B) on staging and production. If you want to sync site A’s templates, you must sign on to site A on the staging server, then use its Workarea screens to sync its templates to site A on the production server.
- When using eSync, each site in a multi-site configuration must be created separately in IIS. In other words, you cannot set up several sites under one IIS site and successfully use eSync.

Setting up eSync in a Multi-Site Environment

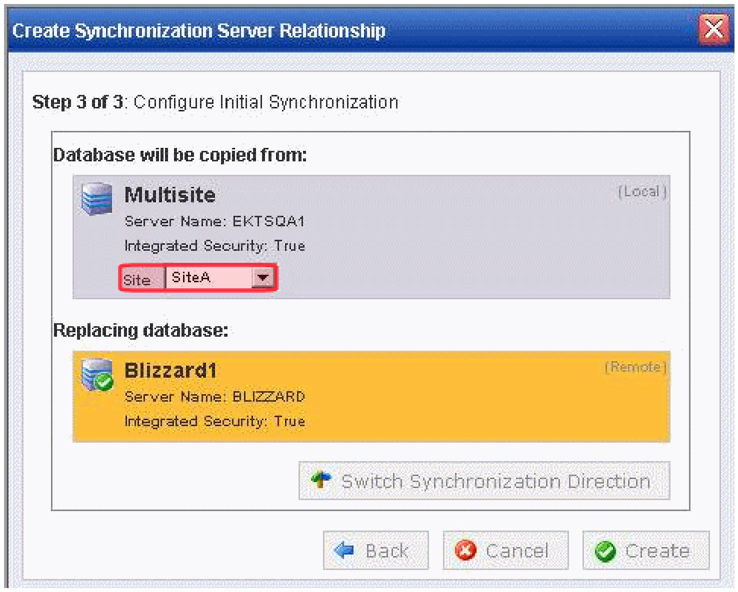
To set up eSync in a multi-site environment, follow these steps.

Warning! Back up your database before beginning this procedure!

1. Set up all sites on the staging server, following the instructions in the Ektron CMS400.NET Administrator Manual section “Multi-Site Support”.
2. Install an Ektron CMS400.NET min site on each production server that will host a site. To do this, run the Ektron CMS400.NET base installation file, version 7.6 or higher. (For more information, see the Ektron CMS400.NET Setup manual.)
3. Install security certificates between the staging server and all production servers. This procedure is described in "Managing eSync Security Certificates" on page 18-43.
4. Sign on to the staging server.
5. In the Ektron CMS400.NET Workarea, go to **Settings** > **Configuration** > **Synchronization**.
6. The View All Synchronization Configurations screen appears.
7. Click the **Add** button ( ).
8. The Create Synchronization Server Relationship screen appears.

Note: If you see the following error, **The system cannot find the file specified**, you must set up security certificates. See Also: "Managing eSync Security Certificates" on page 18-43

Because the staging server is multi-site, the screen’s staging server area has a **Site** pulldown field (circled below), which lets you select a site.



9. Use the following table to complete the screen.

Warning! The first time you sync a Ektron CMS400.NET Web site, all of its data is overwritten. Make sure that no important information resides on the production server before beginning the first sync.

Field	Description
Remote Server	Select a production server by choosing the path to the site's physical location on the remote server.
Port Number	Use this field to indicate to the local service the port on which the remote service runs. By default, port 8732 appears. If you want to change the service port, you must ■ change it in this field ■ open the `C:\Program Files\Ektron\EktronWindowsService30` ■ `\Ektron.ASM.EktronServices30.exe.config` file, ■ and replace every occurrence of `localhost:8732` with `localhost:` followed by the new port number.
Choose Certificate	If you selected a single server above, its name appears here. Proceed to the next step. If you selected a domain or IP address above, click the dropdown arrow to view all servers whose client security certificates reside on this server. Then, select the server with which you want to set up an eSync relationship.

10. Click the **Connect** button.

After you connect to the production server, all eligible databases on it appear. The top one has a green check mark, indicating it is selected by default.

11. Click the database with which you want to sync. When you do, a green check mark appears on it, and its background color changes.
12. Click **Next**.
13. A new screen appears, showing both servers and allowing you to change the direction of the initial database copy. Make sure you are copying from staging to production.
14. When you are satisfied, click **Create**. This sets up the server configuration but does not launch the initial sync.
15. The View All Synchronization Configurations screen appears with the new configuration.

    If you are ready to overwrite the production database with the staging one, click **Start Initial Sync**.
16. A confirmation screen appears.
17. A screen monitors the sync’s progress.
18. The initial sync creates a default profile, which appears on the View All Synchronization Configurations screen.
19. Set up and launch sync profiles to sync workarea files and templates on the staging server with those on the production server. (This is described in "Setting up eSync Profiles" on page 18-53 and "Running a Sync" on page 18-64.) For synchronization direction, choose **Upload**.

Setting up Staging Multi-sites

By default, if you sign on to a staging server then insert library items (images, quicklinks, etc.) into content, the path to those items includes the production server.

For example, your server setup includes two multi-sites: sales.ektron.com and support.ektron.com.

Note: The multi-site names are defined in the site’s folder properties screen’s Production Domain field, as described in ”See "Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET" on page 19-31.

So, any library links in the sales.ektron.com site’s content look like this: http://sales.ektron.com/template?id=id number.

However, you may wish to change library links so they refer to the staging server. This would help you verify that the linked items exist on the staging server.

To change library links so they refer to your staging server, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to Settings > Configuration > Setup.

2. Click the Edit button( ).

3. Check the This is a Staging Server check box.

4. Save the screen.

5. Go to Content > the staging site folder.

6. Click View > Folder Properties.

7. Click the Edit button( ).

8. Scroll down to the section labeled Multi-Site Domain Configuration:

9. In the Staging Domain field, enter the URL of your staging server

10. Save the screen.

From now on, when a user signs on to the staging server and works with library links, the links include the staging server instead of the production server.

Using eSync with Web Alerts

The Web Alert feature enables Ektron CMS400.NET to generate email for a list of registered users whenever new content appears on your site, or existing content is updated. For more information, see "Web Alert Feature" on page 75.

In an eSync environment, you need to determine which servers send Web Alerts. For example, Web Alerts should probably not be generated when content is published on a *staging* server, but you would want them when content is published on a *production* server.

To determine if a server generates Web alerts, use the following property of each Web site's web.config file.

```
<add key="ek_DisableWebAlerts" ..... />
```

Set the property's value to **true** to suppress Web Alerts on a server.

Set the property's value to **false** to generate Web Alerts to on a server.

Also, the server clock on the download side of the eSync relationship must be exactly the same time as or slightly ahead of the clock on the sending server.

eSync and Integrated Search Folders

In a multi-site environment, Integrated Search folders on the source server are not synched with the destination server. See Also: ”Using the Integrated Search” on page 435; ”Setting Up eSync” on page 319

Using eSync with eCommerce

When using eSync with an eCommerce site, you will want to prevent orders from being processed on your staging server. This is to prevent orders from being processed twice.

For example, a customer on your production site purchases a product. If the staging server and production server are synced before the credit card is processed, the potential exists for the customer’s credit card to be charged twice; once from the production server and again from the staging server.

To prevent orders from being processed on your staging server, edit your staging site’s web.config file. Next, set the following property to true.

```
<add key="ek_ecom_OrderProcessingDisabled" value="true" />
```

Once the property is set to true, you cannot process or edit orders from the Workarea’s View Order screen on the staging server. Also, if you try to create an order from the staging server’s Web site, you receive the following message.

“***We're sorry, an error occurred while processing your request. Please try again later...***”

It is important to note that all other eSync functions still work properly. For example, when you create catalog entries on a staging server and perform a sync, the entries will be moved to the production server. This key only affects the processing of orders.

Using eSync with Notifications

When using eSync with Notifications, any new agents are not synched. This means that you must manually add new agents to each server in your configuration.

Once the agent exists on all servers in your configuration, eSync keeps them updated. For example, assume a membership user logs into the production server and updates his profile’s **Activities** tab by changing the activities a custom agent will perform. eSync will sync those changes with the staging server.

See Also: "Adding an Agent" on page 16-170

eSync Troubleshooting

Symptom	Cause	Possible Solutions
Synchronization has failed There was no endpoint listening at http://alphatest:8732/ Ektron.Sync.Communication/ SyncCommunicationScheduleService.svc that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.	One server in the configuration cannot resolve the address of the other server. This may be due to security restrictions or because the Ektron Windows service is off.	- Modify the hostname of the other server so that it can be found. - Restart the Windows service - Reconfigure security
The identity check failed for the outgoing message. The expected identity is *xxx* for the *xxx* target endpoint.	Local site can't communicate with service	1. Load the security configuration utility: `C:\Program Files\Ektron\CMS400V7x\utilities\software\securityconfigurator\securityconfigurator.exe.` 2. Select the web site that is failing. 3. Click **OK**. This recopies client certificates to the site and updates web.config to use them.
No viable CMS sites were found on the remote server specified. Please check the remote server and try again.	No Ektron CMS400.NET site exists on the remote server.	Install an Ektron CMS400.NET min site on the remote server.

Chapter 19

Administering Ektron CMS400.NET

Modifying the Application Setup Screen

In the setup section of the configuration folder, you can enter or edit information for the Ektron CMS400.NET Web site including:

- License keys
- Default language
- Ssummary sizes
- Email notification
- Physical library folders on file server
- Builtin user information
- Editor options
- Work page size settings

You must complete this before any user can access your Ektron CMS400.NET Web site.

- "Viewing Application Setup Information" on page 19-2
- "Updating Setup Information" on page 19-3
- "Enabling WebImageFX" on page 19-10
- "Enabling CMS to Create File System Folders" on page 19-10
- "BuiltIn User" on page 19-11
- "BuiltIn User" on page 19-11

Note: Only members of the Administrator User Group can view and edit the Application Setup screen.

Viewing Application Setup Information

To view Ektron CMS400.NET setup information, follow these steps.

1. Access the Workarea. See Also: "Accessing the Workarea" on page 4-3
2. Click **Settings** > **Configuration** > **Setup**.

3. The Application Setup screen is displayed. For more information, see "Fields on the Application Setup Screen: General Tab" on page 19-3.

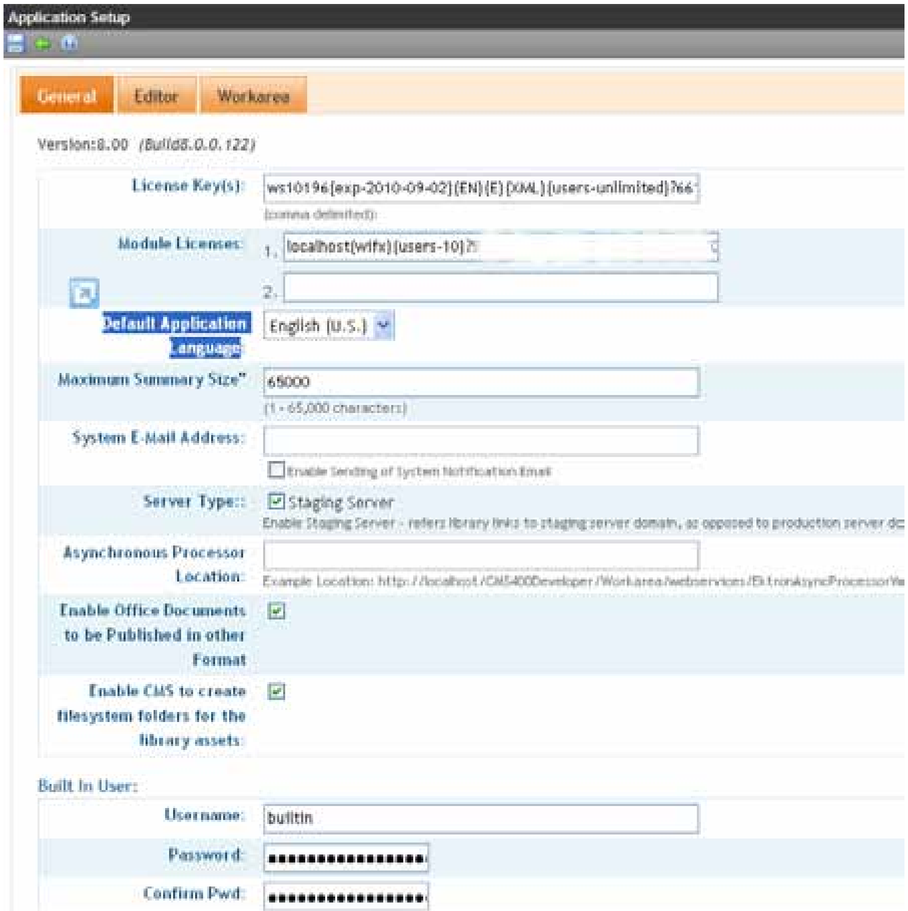
Updating Setup Information

To update setup information, follow these steps.

1. Access the Application Setup screen, as described in "Viewing Application Setup Information" on page 19-2.
2. Click the Edit button ( ).
3. The Application Setup screen appears with the General Tab first showing. Update the fields as needed. The following tables explain the fields.

- "Fields on the Application Setup Screen: General Tab" on page 19-3
- "Fields on the Application Setup Screen: Editor Tab" on page 19-6
- "Fields on the Application Setup Screen: Workarea Tab" on page 19-7

Fields on the Application Setup Screen: General Tab

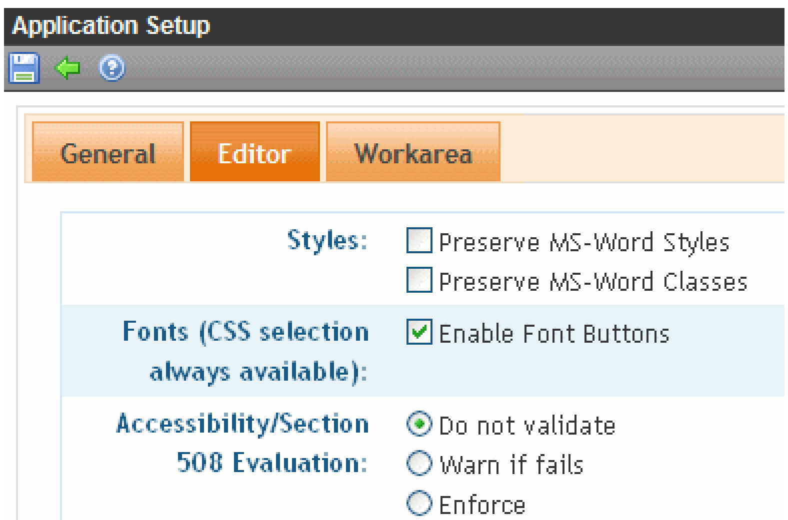


Field (General Tab)	Description
Version	This number shows the Ektron CMS400.NET version and build numbers. This number is important to know if you place a call to Ektron Support.
License Key(s)	Enter the license key sent to you from Ektron via email into this field.
Module Licenses	Enter the license key for WebImageFX that was sent to you via email. See "Enabling WebImageFX" on page 19-10 for more information.

<table>
<tr><th>Field (General Tab)</th><th>Description</th></tr>
<tr><td>Default Application Language</td><td>Select a default language for Ektron CMS400.NET.
How a User’s Application Language Affects His Use of Ektron CMS400.NET
This user’s language determines the screens and messages that appear in Ektron CMS400.NET.
How the System Default Language Relates to a User’s Language Setting
In the user profile, you can set each user’s language. You can set any user’s language to system default. Each user whose language is set to system default uses the language assigned here.
Note: Do not confuse this default application language with the ek_ DefaultContentLanguage variable in web.config. For more information on that variable, see "The Default Language" on page 14-7.</td></tr>
<tr><td>Maximum Summary Size</td><td>In characters, limit the size of each summary by specifying a maximum size. If a user’s changes to a summary result in exceeding this limit, the user is told to reduce the summary before he can save it.
It cannot exceed 65,000 characters.</td></tr>
<tr><td>System E-mail Address</td><td>Enter a valid email address. This address will appear in the From field in the notification emails.</td></tr>
<tr><td>Server Type:
Staging Server</td><td>Check this box if you want your library links to refer to the staging server domain, as opposed to the production server domain. This would help you verify that the linked items exist on the staging server. See Also: "Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET" on page 19-31
Warning! Important! Checking this box disables the Web Alerts feature on your server.</td></tr>
<tr><td>Asynchronous Processor Location</td><td>If your site uses the Web Alerts feature, enter or update the location of the asynchronous processor Web Services file. The default location i s “[none specified].” See Also: "Setting Up the Message Queue and Asynchronous Processor" on page 20-6</td></tr>
<tr><td>Enable Office documents to be published in other format</td><td>Check the box to allow Ektron CMS400.NET to render Office documents in PDF format. When a checked, PDF generation is available for individual folders.
See Also: "PDF Generation" on page 7-454</td></tr>
<tr><td>Enable CMS to create file system folders for library assets</td><td>Check the box if you want to create physical folders on your file system server that match the Ektron CMS400.NET library folder tree. See Also: "Enabling CMS to Create File System Folders" on page 19-10</td></tr>
</table>

Field (General Tab)	Description
Built - in User	Edit the username and/or password for the built in user. By default, the username and password combination is **builtin/builtin**. **Warning!** Important! Ektron strongly urges you to change the default password assigned to the builtin user. An opportunity to do this is presented during installation. See Also: "BuiltIn User" on page 19-11
Editor Tab	

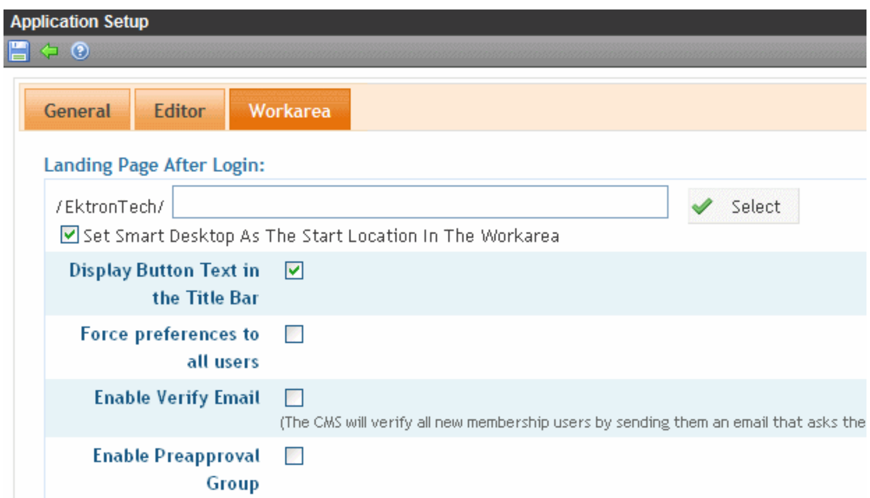
Fields on the Application Setup Screen: Editor Tab



Field (Editor tab)	Description
Preserve MS-Word Styles	When content from MS Word is cut and pasted into the editor, the editor, by default, removes some MS Word styles. Checking this box prevents the editor from removing them. Note: Ektron does *not* recommend enabling this feature.
Preserve MS-Word Classes	Similar to styles, when content from MS-Word is cut and pasted into the editor, the editor, by default, removes some MS-Word classes. Checking this box prevents the editor from removing them.

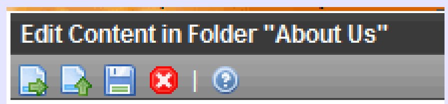
Field (Editor tab)	Description
Enable Font Buttons	This option displays the following font-related buttons on the editor toolbar: ▪ Font Face ▪ Font Size ▪ Font Color ▪ Font Background Color See Also: "Enable Font Buttons" on page 19-12;"Font Manager" on page 19-43
Accessibility/Section 508 Evaluation	If your editor is eWebEditPro+XML: Dialogs that Allow Input of Accessibility Information If your editor is **eWebEdit400:** "Setting up and Customizing Accessibility Validation" on page 7-683

Fields on the Application Setup Screen: Workarea Tab



Field (Editor tab)	Description
The following fields change ▪ whether button text appears in the title bar	

Field (Editor tab)	Description
	■ the default Web page after sign-in ■ the default Workarea page The default values are automatically applied to all new users, and to all existing users when you upgrade. Normally, you can modify these values for any user via the Edit User screen. But, you can force these values on all users, removing the ability to personalize them.
Landing Page After Login	If you want one page in your Web site to appear after users sign in, enter the URL to that page. You can click **Select Page** to browse to the landing page. The last published version of the page appears. If the page has never been published, nothing appears. By default, the page from which the user logged in reappears.
Set Smart Desktop as Start Location in the Workarea	If you want the Smart Desktop to appear as soon as users enter the Workarea, click this box. See Also: "Personalizing the Smart Desktop" on page 4-4 By default, the user sees the Smart Desktop after sign in. If you leave this check box blank, when you enter the Workarea, you go to the folder of the content specified at the **Landing Page after login** field.
Workarea Page Size Width	If desired, change the width of the screen in which Ektron CMS400.NET appears. The width in pixels must be between 400 and 2400. This field accommodates users who have larger monitors and/or prefer a higher resolution, such as 1280 x 1024. The default value for this setting is 790.
Height	If desired, you can change the height of the screen in which Ektron CMS400.NET appears. The height in pixels must be between 300 and 1800. This field accommodates users who have larger monitors and/or prefer a higher resolution, such as 1280 x 1024. The default value for this setting is 580.

Field (Editor tab)	Description
Display button text in the title bar	Check this box if you want any button's caption text to appear in the screen title's bar whenever a user moves the mouse over the button. Note the word **Update**, describing the button, in the illustration below  If you do not check this box, the screen's title remains in the title bar when the user moves the mouse over the button, as illustrated below. 
Force Preferences to all users	To force these settings on all Ektron CMS400.NET users, check this box. If you do, users can see the values in the user profile screen but not change them. If you leave this box blank, users can personalize these values in their User Profile.
Enable Verify email?	Check this box if users should be notified whenever they subscribe to an email notification list. See Also: "What Happens if Verification email is Used" on page 20-30 **Warning! Warning!** When using the Checkout Server Control on an eCommerce site, the **Enable Verify Email** setting must be unchecked. Otherwise, new users will receive an error message when they sign-up using this control. See Also: "Checkout Server Control" on page 17-16
Enable PreApproval Group	Use this field to enable Automatic Task Creation. See Also: "Automatic Creation of Tasks Associated with Content" on page 11-34

4. Make the necessary changes.
5. Click the Update button ( ).

Enabling WebImageFX

When purchasing Ektron CMS400.NET, you had the option to purchase Ektron WebImageFX as well. WebImageFX is an imaging application that allows users to edit images online.

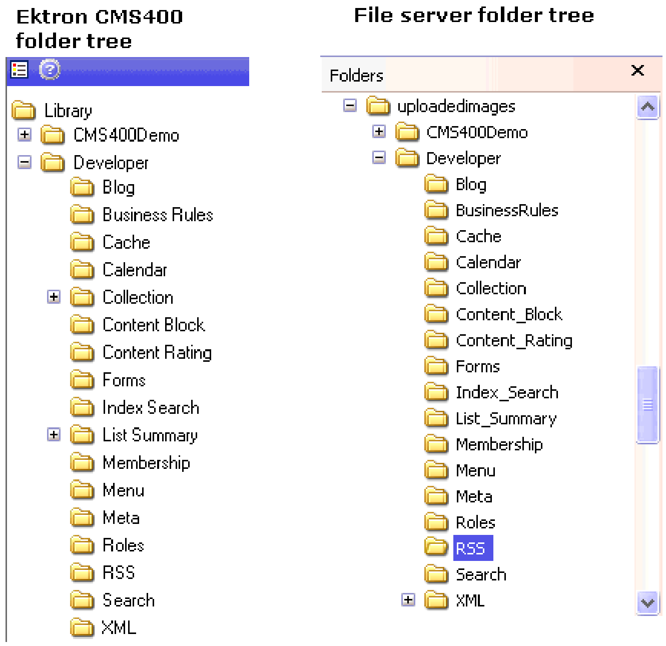
If you purchased WebImageFX when you purchased Ektron CMS400.NET, you should have received an email with a license key for WebImageFX as well.

To enable WebImageFX within Ektron CMS400.NET, from the application setup page, insert the WebImageFX license key in the **Module License** field.

Enabling CMS to Create File System Folders

If this option is enabled, each time a new content/library folder is created in Ektron CMS400.NET, a corresponding physical folder is created on the file system. This helps organize library assets on your file server.

The following illustration compares the library folder tree with the file system's folder structure.



Note: If upgrading, the installation does not the create sample Web site's folders on the file server. These folders must be added manually. However, all folders created by you are also created on the file server when enabled.

BuiltIn User

The builtin user is a user that is defined in the Ektron CMS400.NET setup screen. Primarily, he's an emergency user if you cannot log in to Ektron CMS400.NET as the administrator.

Note: The builtin user can log in to Ektron CMS400.NET whether or not Active Directory or LDAP is enabled.

Only use the builtin user to correct a bad or expired license key. It is not designed for regular CMS operations. If you try to edit content while signed on as this user, you see errors.

Warning! By default, the builtin user's username and password combination is builtin/builtin. For security reasons, Ektron recommends changing them upon installation.

Limitations on Builtin User's Workarea Access

If you log into the CMS400.NET Workarea as the builtin user, you can only access the following screens on the **Settings** tab.

- Active Directory

- Asset Server Setup
- Setup
- User
- User Group

You cannot access other areas of the CMS.

Editing the BuiltIn User

To edit the builtin user's username and password, follow these steps.

1. Access the Edit Application Setup Information screen's **General** tab, as described in "Updating Setup Information" on page 19-3.
2. Locate the **Built In User** field.
3. Change the username and password.
4. Click the Update button ( ).

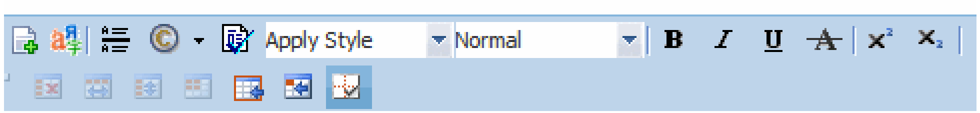
Note: If you cannot sign in to Ektron CMS400.NET because the builtin user password was changed and you don't know the new password, use the BuiltinAccountReset.exe utility. This resets your Ektron CMS400.NET user \ password to Builtin \ Builtin. This utility is located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities`.

Enable Font Buttons

Here is the editor with font related buttons enabled. To enable these buttons, check the **Enable Font Buttons** checkbox in the **Settings** > **Configurations** > **Setup** Screen.

Disable Font Buttons

Here is the editor with the font buttons disabled. To disable these buttons, uncheck the **Enable Font Buttons** checkbox in the **Settings** > **Configurations** > **Setup** Screen.



Ektron Windows Service

Ektron CMS400.NET provides a Windows Service to handle background processing functions. This section explains the service, including

- the CMS functions it performs
- how it propagates updates to the connection string and site path
- where it resides in IIS and the file system
- its activity log

The Ektron Windows Service is explained more fully through these topics.

- "Functions Performed by the Ektron Windows Service" on page 19-13
- "Changing the Update Time" on page 19-14
- "Changing the Name of the data.config File" on page 19-14
- "Changing the http Port" on page 19-14
- "Disabling PDF Generation" on page 19-14
- "Viewing the Ektron Windows Service" on page 19-15

Functions Performed by the Ektron Windows Service

The Ektron Windows Service performs the following processes.

- "XML Indexing" on page 7-389
- "Load Balancing Assets" on page 19-34
- "PDF Generation" on page 7-454
- "Bad Links Report" on page 7-725
- Publication of content scheduled to go live at a future time, and removal of content scheduled to expire. See "Scheduling Content to Begin and End" on page 7-195.
- When a new metadata definition is created, the Windows service applies it to all content in the CMS database. However, the metadata definition is only activated for the content when it is enabled for the content's folder. See Also: "Working with Metadata" on page 7-146

In addition, the Ektron Windows Service propagates updates made to the database connection string or the site path in the web.config file. The service copies the new value to the data.config and sitedb.config files (respectively). These are located in `C:\Program Files\Ektron\EktronWindowsservice30`. Any CMS components that reference these values can retrieve the current information from these files.

Warning! Do not edit the data.config and sitedb.config files. They are dynamically generated by Ektron CMS400.NET. If these files have incorrect values, edit the web.config file, which is used to generate them.

Changing the Update Time

The update of the data.config and sitedb.config files occurs once a day at a time prescribed in the `C:\Program Files\Ektron\EktronWindowsservice30\Ektron.ASM.EktronServices.exe.config` file's `updateTime` value. If desired, you can change this time.

Changing the Name of the data.config File

If your server already has a file named data.config, and you want to change the name of the one in `C:\Program Files\Ektron\EktronWindowsservice30` to avoid confusion, follow these steps.

1. Open Ektron.ASM.EktronServices.exe.config.
2. Find this line: `<connectionStrings configSource="data.config"/>`.
3. Replace `data.config` with the new file name. For example: `<connectionStrings configSource="`Ektron_data.config`" />`
4. Save Ektron.ASM.EktronServices.exe.config.

Changing the http Port

If your Web site is already using port 6060, follow these steps to change the port number used by the Ektron Windows Web Service.

1. Open Ektron.ASM.EktronServices.exe.config.
2. Find this line: `<add key="HttpServicePort" value="6060"/>`.
3. Change the `value` to the port number you will use for the Ektron Windows Service.

Disabling PDF Generation

By default, PDF generation is enabled. If you want to disable it within the Ektron Windows Services configuration file, follow these steps.

1. On the server to which you installed Ektron CMS400.NET, open `C:\Program Files\Ektron\EktronWindowsservice30`.
2. Open Ektron.ASM.EktronServices30.exe.config.
3. Find this line:

<add name="PdfFileRead" type="-Ektron.ASM.EktronServices.PdfFileManagerRead.PdfFileManagerReadService, Ektron.ASM.-EktronServices20" IntervalSeconds="101" Enabled="true" />

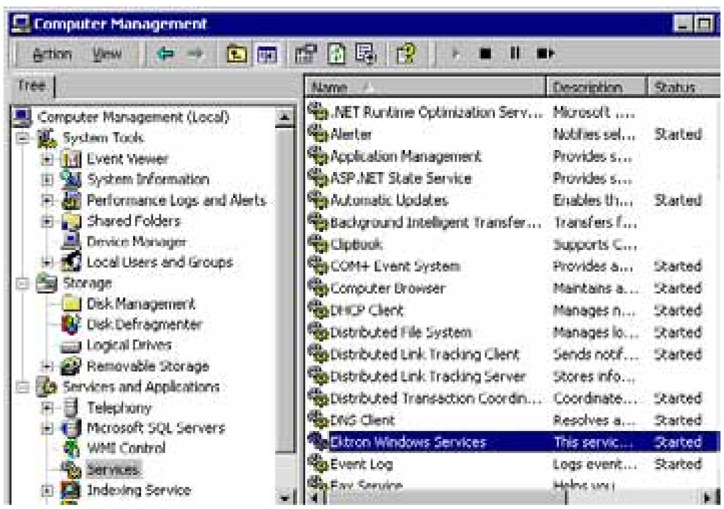
4. Set `enabled` to `false`.

Viewing the Ektron Windows Service

Viewing in IIS

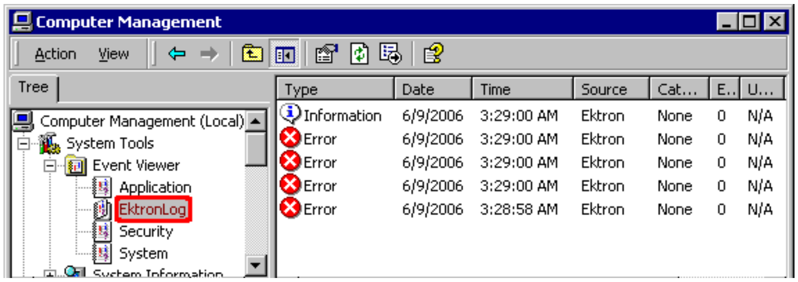
The Windows Service starts automatically when Ektron CMS400.NET is installed, and again whenever the server is restarted.

1. To see the status of the service, go to **Computer Management** > **Services and Applications** > **Services**.
2. Look for **Ektron Windows Services**. You can see its status in the **Status** column.



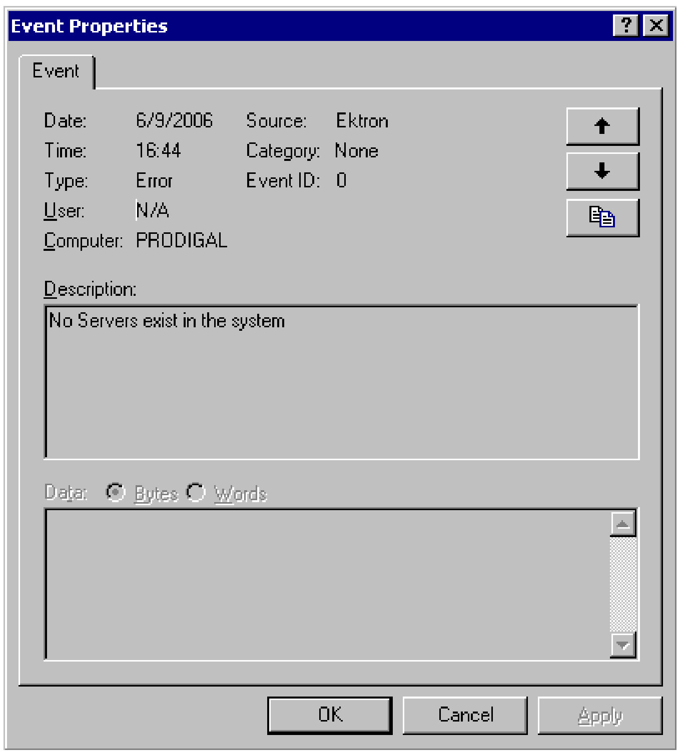
The Activity Log

The service has an Activity Log, which tracks all related events. To see it, go to **Computer Management** > **System Tools** > **Event Viewer** > **Ektron Log**.



To view detail for any event, double click it.

A common source of errors is that the service cannot find Ektron CMS400.NET sites, because they have not been created yet, as shown in the sample below.



Viewing in the File System

On your file system, the Ektron Windows Service is located in `C:\Program Files\Ektron\EktronWindowsservice30`. Within that folder, the Ektron.ASM.EktronServices.exe.config file runs the Ektron Windows service.

Using the Search Engine Optimization (SEO) Control

Ektron CMS400.NET offers a wide array of tools to ensure your Web site is optimized for search engines, and that your Web pages climb to the top of the ranks. Among these is an SEO Page Analysis Tool that gives you the key information you need in "real-time" in order to maximize your returns in organic Web searches.

This SEO tool analyzes the pages of your Web site for W3C compliance, what information Google has about the page, Alexa rankings, image alt text, keyword density and metadata. The tool lets you know how (and if) you've set these values.

This chapter explains how to use the SEO control.

(continued in Appearance of the SEO Control)

RssAggregator Server Control

An RSS Aggregator or reader takes an RSS feed and displays the information in a readable format. The RssAggregator server control lets you do the same by processing and displaying an RSS feed from any Web site. This allows you to create an information Web page for news, stories, images, lists of music, or for whatever purpose someone creates an RSS feed.

You can create a multi-level information Web page by using multiple RssAggregator server controls on the same page. For example, you could create a world news Web page by adding RSS feeds from the NY Times, The BBC, and AFP (Agence France-Presse).

The process of adding an RSS Aggregator to your Web site is simple.

1. Choose a Web form where the RSS Aggregator will reside
2. Drag and drop the RssAggregator server control on that Web form
3. Set the `URL` property to point at the RSS feed. For example, `http://msdn.example.com/rss.xml`
4. Save the Web form

When a visitor to your site views the Web form in a browser, he sees the RSS feed displayed properly. When he refreshes the Web page, any information that the RSS feed provider has updated is now reflected. See Also: "Using the RssAggregator Server Control" on page 19-19

By creating a custom XSLT, you can change the way an RSS feed is viewed by your site visitors.

This subsection contains the following topics:

- "Using the RssAggregator Server Control" on page 19-19
- "Retrieving the XML Structure of an RssAggregator Control" on page 19-20

RSSAggregator Server Control Properties

The RSSAggregator server control properties are described in this table.

Note: The following table only lists Ektron-specific properties. It does not describe native .NET properties such as font, height, width and border style. For documentation of these properties, see Visual Studio help.

Property	Value	Data Type
Authenticated	Indicates if you are logged in to the CMS Explorer and can use it to browse to Content, Collections, etc. See Also: "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9	String
DisplayXslt	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every RSS feed item See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists a title and a description of every RSS feed item See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	String
Hide	Used to hide an RSS Aggregator server control in design time and run time. **True** = Hide Metadata server control **False** = Show Metadata server control	boolean

Property	Value	Data Type
Language	Set a language for viewing the RssAggregator. This property shows results in design-time (in Visual Studio) and at run-time (in a browser).	Integer
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.	ItemLinkTarget
MaxResults	The Maximum number of items from an RSS feed that are returned (0=unlimited).	Integer
SuppressWrapperTags	Suppresses the output of the span/div tags around the control. The default is **False**. **True** - Suppress wrap tags. **False** - Allow wrap tags.	Boolean
URL	The RSS feed path for the server control. For example: http://msdn.example.com/rss.xml	String
WrapTag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an inline portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code. **Custom** - Allows you to use a custom tag.	String

Using the RssAggregator Server Control

These steps show how to use the RssAggregator server control.

1. Drag an RssAggregator server control into a template.

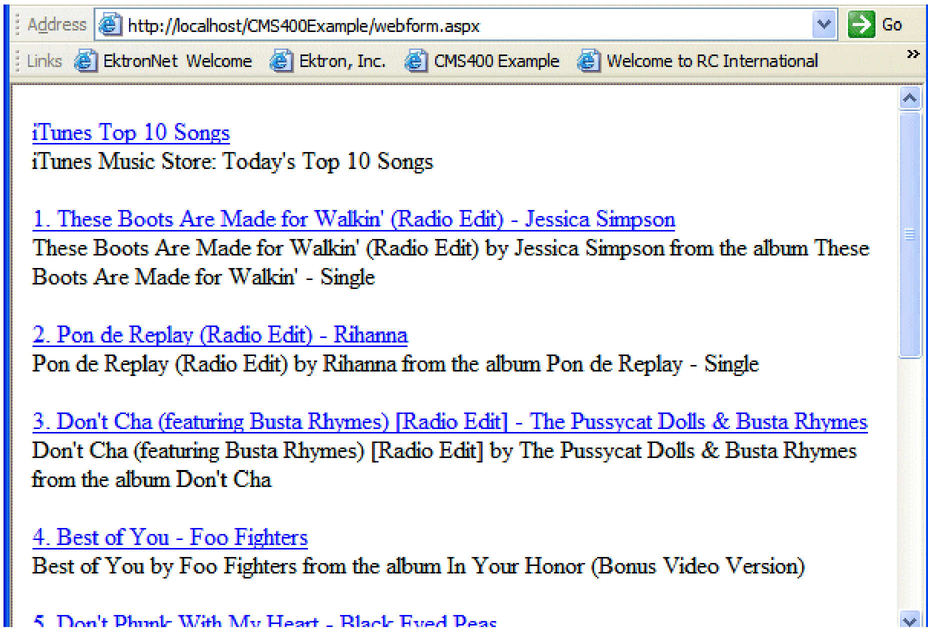
2. Set the `URL` property with the path of the RSS feed you want to display. This example use the following RSS feed:

```
http://ax-
.ph-
obos.apple.com.edgesuite.net/WebObjects/MZStore.woa/wpa/MRSS/topsongs/limit=10/rss.xml
```

This feed displays the top 10 songs according to the iTunes Music Store.

Note: In addition to the `URL` property, other Ektron properties are available to customize this server control. For more information on these properties, see "RSSAggregator Server Control Properties" on page 19-18

3. Build the Web form.
4. Browse to the Web page in your browser.



5. The page appears with an RSS list of information.

Retrieving the XML Structure of an RssAggregator Control

Retrieving the XML structure of XML content allows for greater control over developing XSLs. The following is an example of how to retrieve the XML structure:

1. Open a new Web form.
2. Drag and drop a RssAggregator server control onto it.
3. Set the `URL` property.
4. Drag and drop a Textbox on the Web form.
5. Set the `TextMode` property to **MultiLine**.

Note: It is also recommended that you set the width of the text box to at least 400px.

6. On the code behind page, add the following line.
```
Textbox1.Text = RssAggregator1.XmlDoc.InnerXml
```
7. Build the project.
8. View the Web form in a browser.

The XML structure of the RssAggregator Menu appears in the textbox.

For an additional example, see the RssAggregator XML page on the CMS400Developer samples page. It is located at:

In a browser:

```
http://<site root>/CMS400Developer/Developer/RSS/RssAggregatorXML.aspx
```

In the source code:

```
<site root>/CMS400Developer/Developer/RSS/RssAggregatorXML.aspx and
RssAggregatorXML.aspx.vb
```

Multi-Site Support

Ektron CMS400.NET's multi-site support feature lets you set up and manage several Web sites under one CMS. For example:

- www.example.com
- support.example.com
- forums.example.com

All sites share a single database. The multi-site support feature does not support multiple databases.

Multi-site support is explained through the following topics.

- "Advantages of Multi-Site Configurations" on page 19-21
- "Prerequisites" on page 19-22
- "Using Multi-Site Configurations" on page 19-22
- "Installing the Multi-Site Support Feature" on page 19-22
- ”Using eSync in a Multi-site Environment” on page 18-123

Advantages of Multi-Site Configurations

- The URL can indicate the nature of the site to visitors.
- All sites can share

- common content, but appear within their own site and templates
- the library of images and files. These files can be stored once, yet authors can insert them into content from any site.

Prerequisites

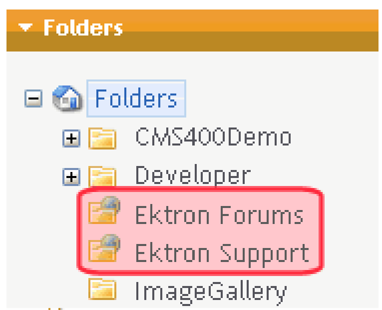
- The server must run Windows Server 2003 or 2008

Note: Windows XP supports only one Web site.

- All sites must reside on the same server

Using Multi-Site Configurations

Within the Workarea, sites appear under Ektron CMS400.NET's folder structure but the icon is a globe (see illustration below). So, an author can create and edit content in the additional site the same way he works with content in the root site.



Authors log into a root site then begin editing content in the additional site. Regardless of which site he is using, an author can use the library to insert hyperlinks, images, files, and quicklinks.

When a folder has a production domain assigned to it, it is a *domain folder*. Links to content in a domain folder are activated via linkit.aspx, which redirects to the appropriate domain name and uses the appropriate template for the folder or content.

Warning! You cannot create a hyperlink within content, a collection, menu, etc. to a form that resides in another site.

Installing the Multi-Site Support Feature

There are three major steps to setting up each new site.

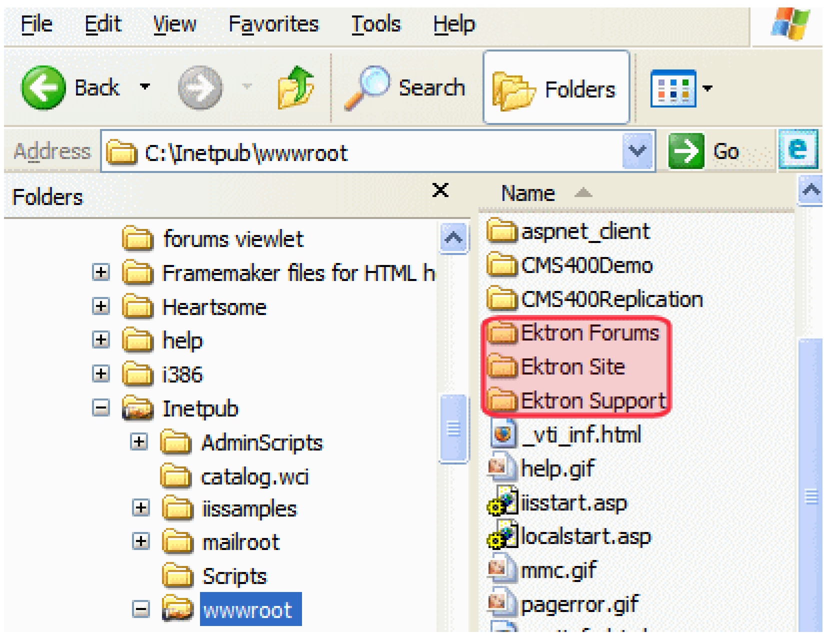
- "Step 1: Create New Folders in the File System" on page 19-23

- "Step 2: Create New Sites in IIS" on page 19-24
- "Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET" on page 19-31

Step 1: Create New Folders in the File System

Warning! Before creating a multi-site configuration, you must have installed an Ektron CMS400.NET Web site. All installed folders must remain in that site. The original site *cannot* have virtual folders.

1. Using Windows Explorer, navigate to the `C:\Inetpub\wwwroot` folder.
2. Create a new folder for each site.



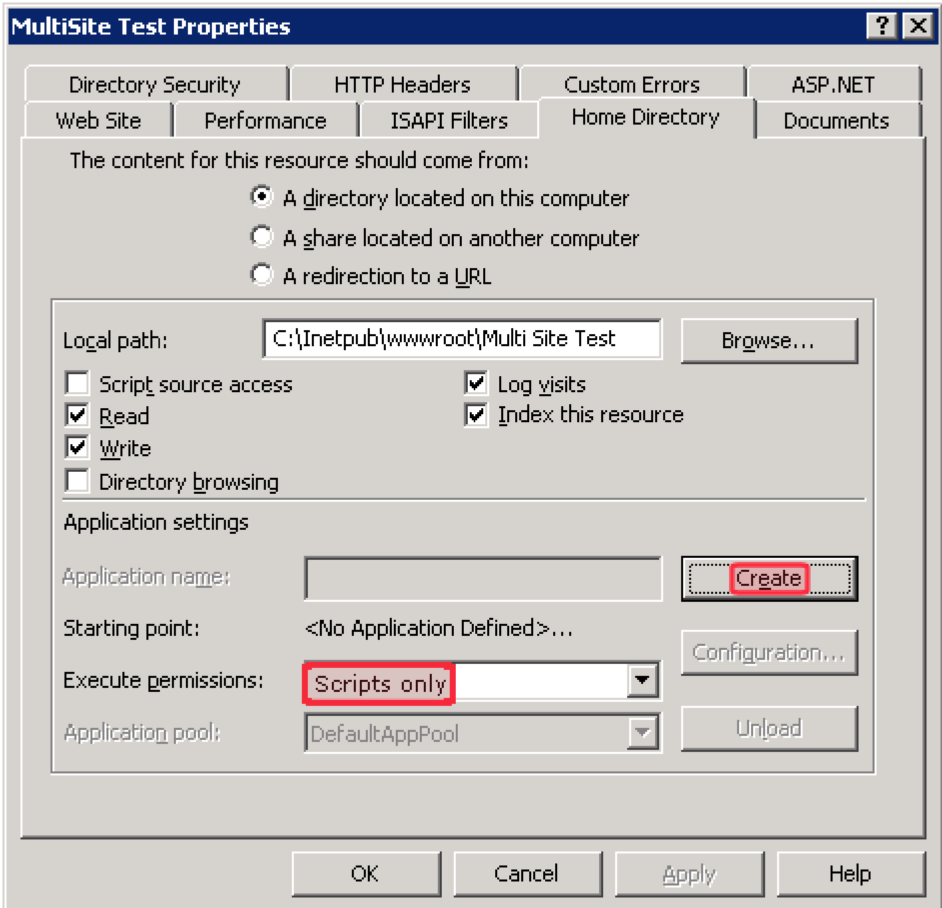
3. Copy the following CMS files and folders from the original CMS site to your new multi-site folder.
   - all individual files (not subdirectories)
   - all .config files in all directories under the site root
   - these subdirectories:
     - bin
     - WorkArea
     - widgets
     - App_Code
     - AssetManagement
4. Within each new site folder, open the web.config file and update the `ek_sitePath` and `WSPath` elements with your CMS site path.

For example, if your CMS site is in the Web site root, enter slash (/). If it is in a subdirectory of the Web site, enter the subdirectory name. For example, If your web site root is `C:\inetpub\wwwroot` and you have a subdirectory called CMS400Min, enter `CMS400Min` as the site path.

Step 2: Create New Sites in IIS

Follow these steps to create each new site in IIS.

1. Go to **Start** > **Programs** > **Administrative Tools** > **Internet Services Manager**.
2. Right click the Web Sites folder and click **New** > **Web Site**.
3. A wizard screen appears. Click **Next**.
4. Enter a name for the new site.
5. On the IP Address and Port Settings screen, enter the IP address of your new Web site or the host header. Press **Next**.
6. On the Web Site Home Directory screen, browse to the new site's folder. You created it in "Step 1: Create New Folders in the File System" on page 19-23.
7. On the Web Site Access Permission screen, make sure that **Read** and **Write** are checked.
8. You are notified that you have completed the new site.
9. Make the new site an application. To do this, right click the site, and select **Properties**. Then, click the **Home Directory** tab. Under **Application Settings** area, click the **Create** button then click **OK**.



10. Set **Execute permissions** to **Scripts only**.

Create Virtual Folders in IIS

In IIS, for each new Web site, create one new virtual folder for the following shared folders:

- assets
- privateassets
- uploadedfiles
- uploadedimages

These folders are created when you install Ektron CMS400.NET. If you did a normal installation, they reside under the site directory. For example, `C:\Inetpub\wwwroot\`*your site root*`\uploadedimages`.

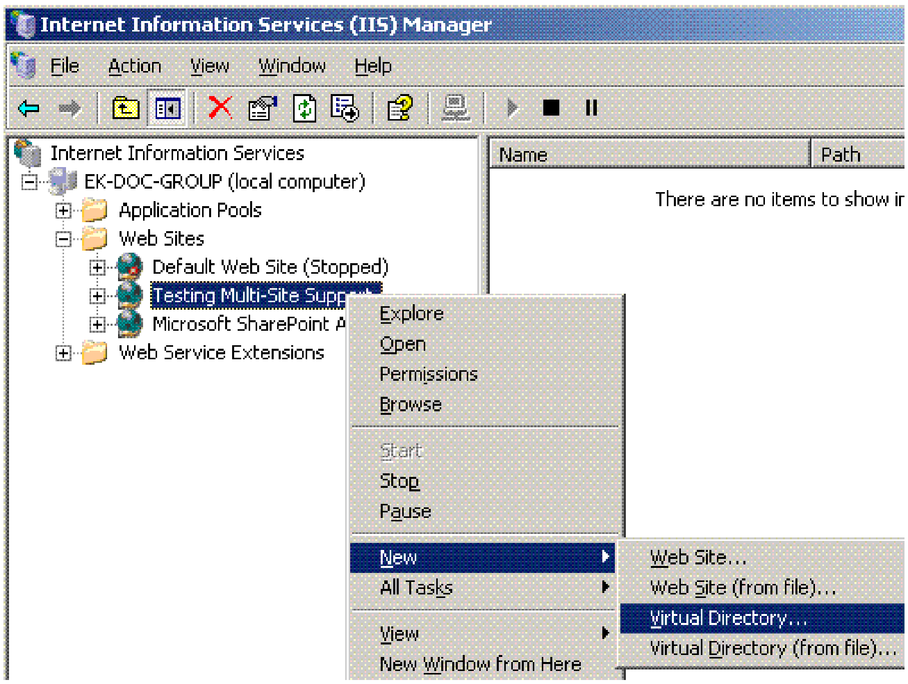
To create virtual versions of these folders, follow these steps.

- "Creating Virtual Folders in IIS6" on page 19-26

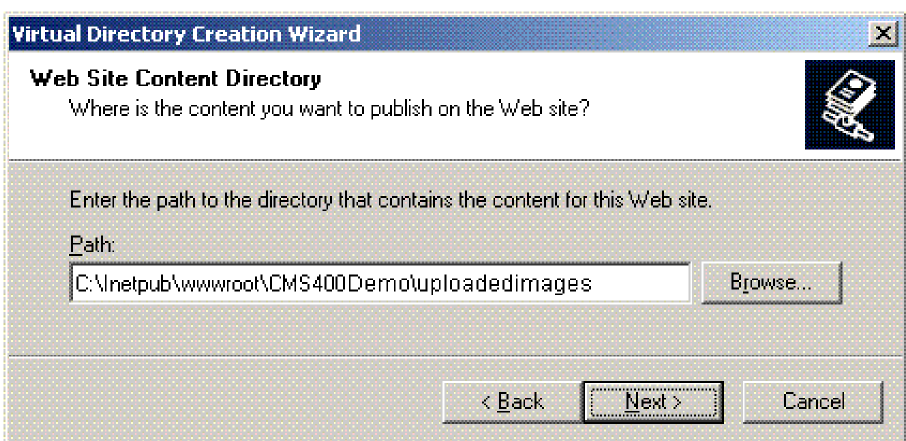
- "Creating Virtual Folders in IIS7" on page 19-27

Creating Virtual Folders in IIS6

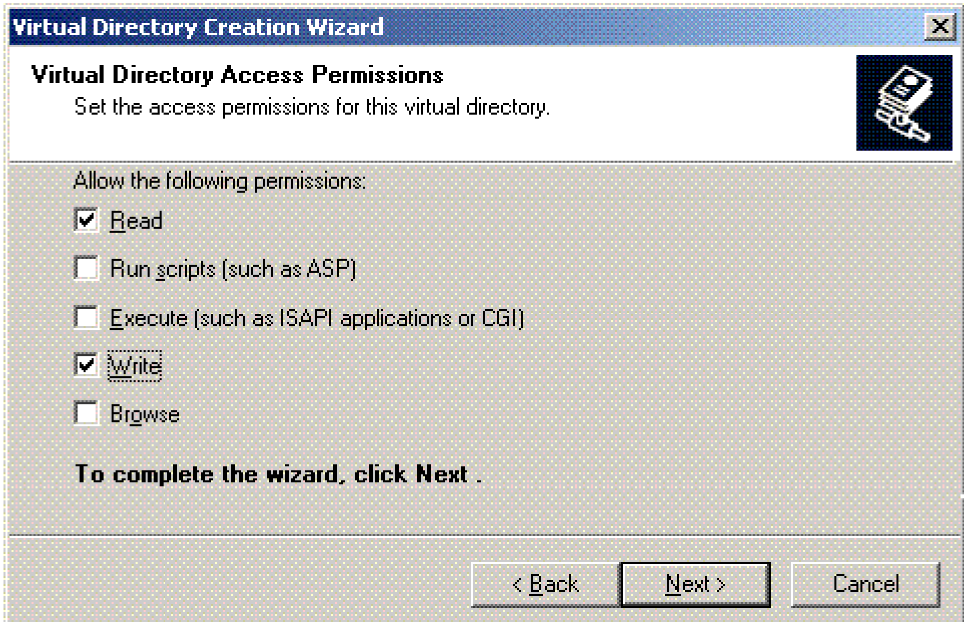
1. In IIS, select the new site folder you created in "Step 2: Create New Sites in IIS" on page 19-24.
2. Right click the mouse and select **New** > **Virtual Directory**.



3. Identify the corresponding subfolder in the root folder.



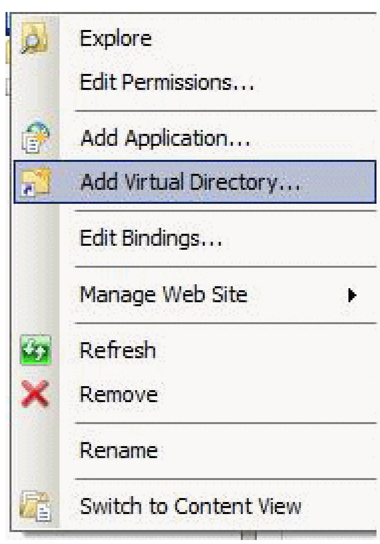
4. Assign Read and Write permissions to the virtual directory.



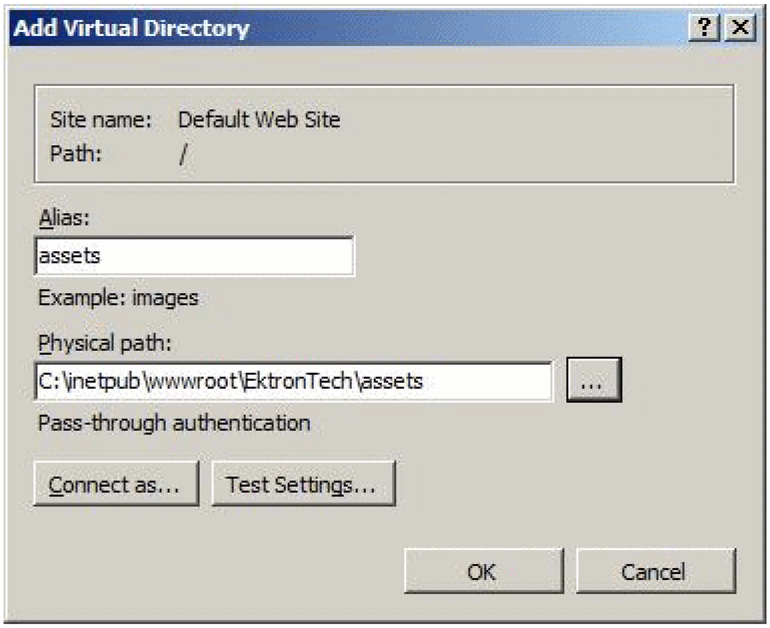
5. Follow this procedure for all four folders: assets, privateassets, uploadedfiles, uploadedimages.

Creating Virtual Folders in IIS7

1. In IIS, select the new site folder you created in "Step 2: Create New Sites in IIS" on page 19-24.
2. Right click the mouse and select **Add Virtual Directory**.



3. Identify the corresponding subfolder in the root folder.

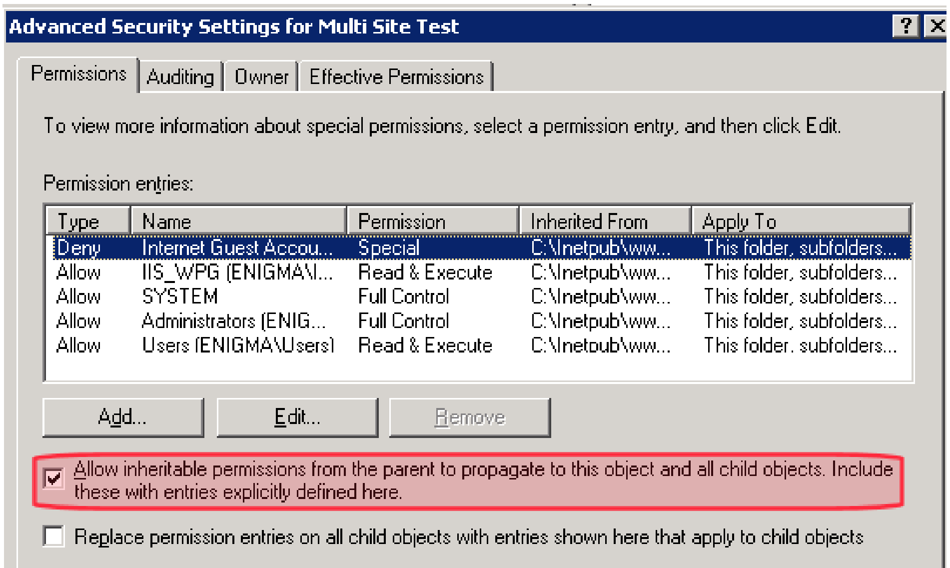


4. Follow this procedure for all four folders: assets, privateassets, uploadedfiles, uploadedimages.

Set File System Permissions on New Folders

To do this, follow these steps:

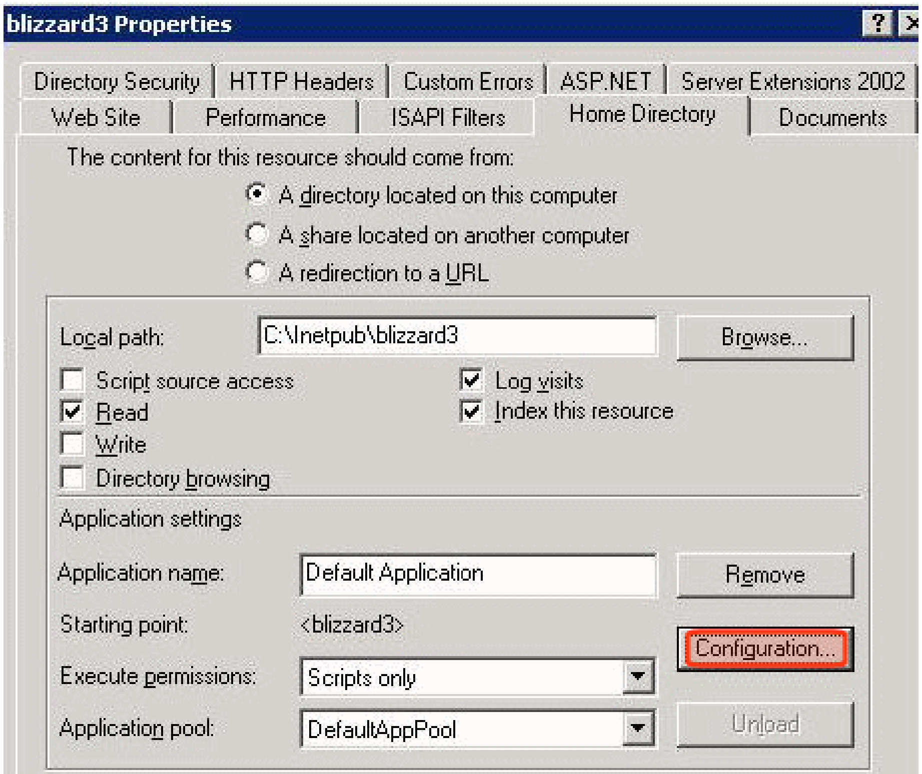
1. Using Windows Explorer, navigate to the new folder(s) you created in "Step 1: Create New Folders in the File System" on page 19-23.
2. Right click the folder and click **Properties**.
3. Click the **Security** tab.
4. Click the **Advanced** button.
5. Click the check box next to **Allow Inheritable Permissions from the Parent to Propagate**…



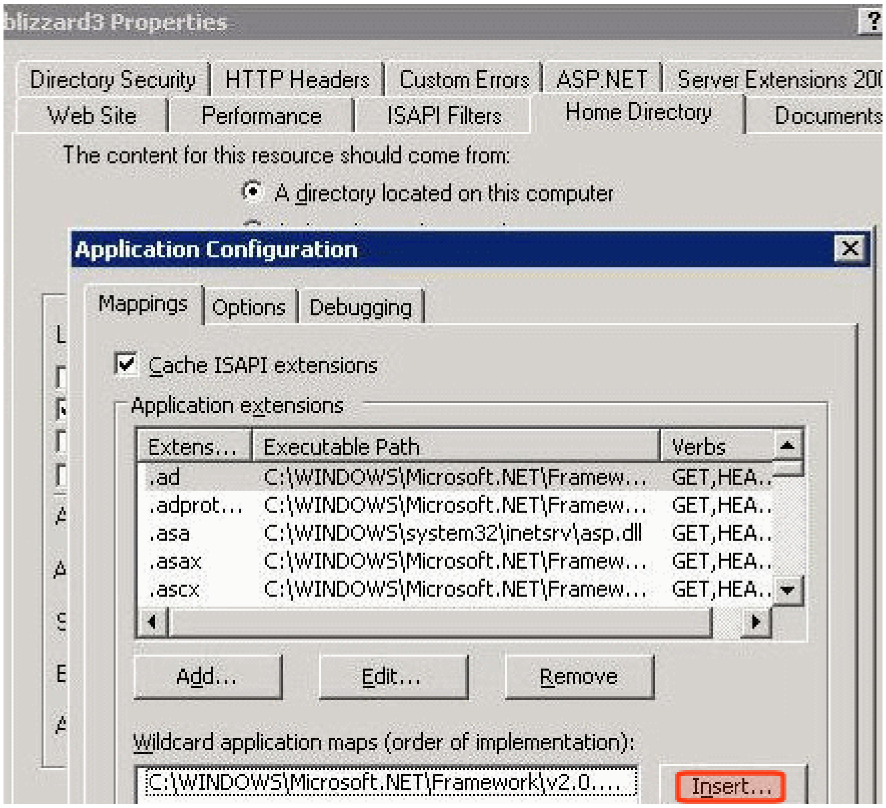
Install the aspnet_isapi.dll File

Follow this procedure to install the aspnet_isapi.dll file for every new site.

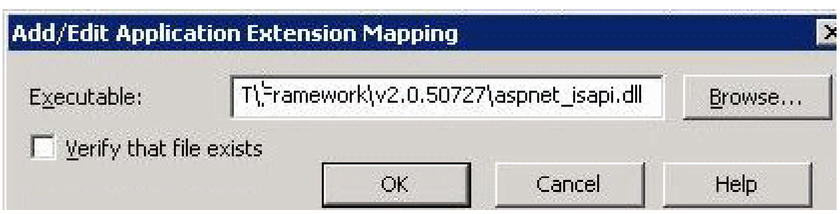
1. Open IIS.
2. Navigate to an Ektron CMS400.NET Web site.
3. Right click the site and select **Properties**.
4. On the Properties screen's **Home Directory** tab, click the **Configuration** button.



5. The Application Configuration screen appears.



6. In the **Wildcard application maps** area, click **Insert**.
7. The Application Extension Mapping screen appears.

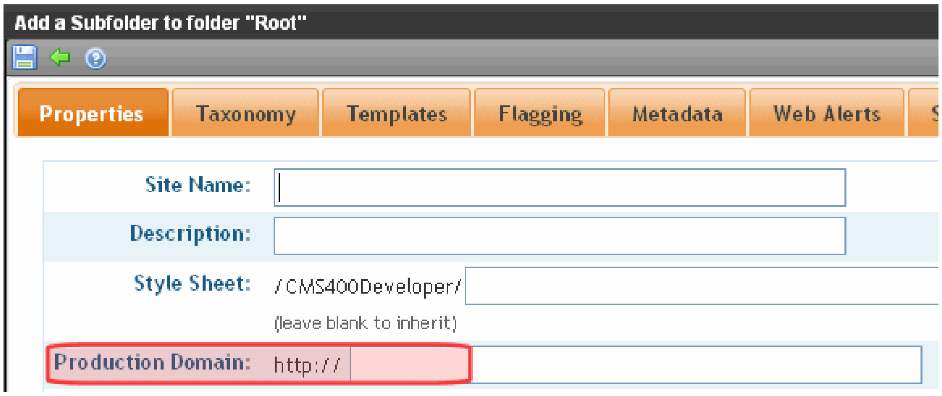


8. Browse to `C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_isapi.dll`.
9. Uncheck the **Verify that file exists** check box.
10. Click **OK**.

Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET

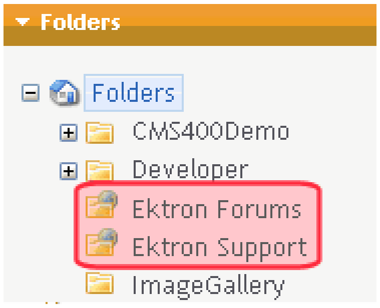
1. In the Ektron CMS400.NET Workarea, click **Content**. Each site folder must reside within the site root folder.
2. Create a new top-level site folder for each site by clicking **New** > **Site**.

3. Assign site folder properties as you did for the root folder.
4. The Multi-site Configuration fields appear on the lower section of the screen (illustrated below).



5. In the **Production Domain** field, insert your domain.
6. Save the screen.

   Within Ektron CMS400.NET, the new domains are indicated by a globe icon.



Load Balancing Support

Load Balancing has two purposes:

- Provides redundancy for your Web site - if one server fails, a second can still handle requests
- Balances requests - distributes requests across multiple servers

To enable load balancing, set up several servers that include the same files.

Warning! The physical path to the Ektron CMS400.NET Web site *must* be the same on all servers being load balanced.

Then, purchase load balancing equipment to evenly distribute content requests among the servers. Whenever an image or file gets uploaded to your Web site, regardless of the Web server the user is working on, the asset is replicated on both servers.

The client browser is unaware that more than one server is involved. All URLs point to a single Web site. The load balance software resolves them.

Ektron provides different strategies for load balancing *library images and files* and *DMS assets*. See

- "Load Balancing Library Images and Files" on page 19-33
- "Load Balancing Assets" on page 19-34

See Also: ”eSync in a Load Balanced Environment” on page 18-114

Load Balancing Library Images and Files

Library load balancing is important when your configuration consists of two or more Web sites that share a single database. Library files are not saved in the database but in the site root folders `uploadedfiles` and `uploadedimages`.

To support load balancing, the library files on all servers must be identical. To maintain this state, whenever a user uploads an item to the library, it must be replicated on all other servers. After following the setup instructions, any image or file added to the library of one server will be copied to the corresponding folder on the other servers in the configuration.

Setting up Library Load Balancing

Step 1. Update Assetmanagement.config

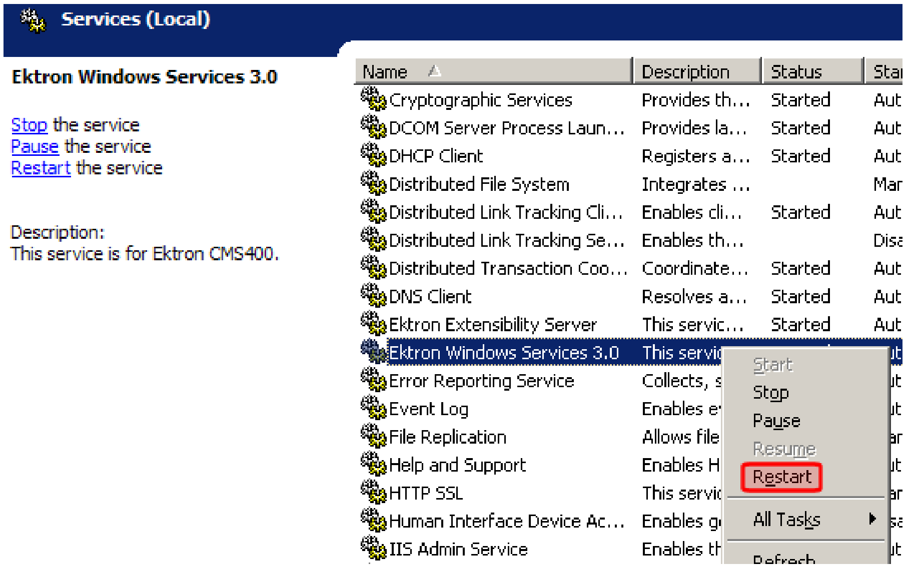
1. On the first server in the configuration, open the *`siteroot`*/AssetManagement.config file.
2. Find the `LoadBalanced` property.
3. Set the value to 1.
4. Repeat this step for all other servers in the configuration.

Step 2. Update the Ektron Windows Service File

1. Open `C:\Program Files\Ektron\EktronWindowsService30`.
2. Open Ektron.ASM.EktronServices30.exe.config.
3. Find the `LoadBalanced` property.
4. Set the value to 1.
5. Find the `LibraryLoadBalanced` property.

6. Set the value to 1.
7. Find the `LoadBalServerCount` property.
8. Set to the number of servers in your load balance cluster.

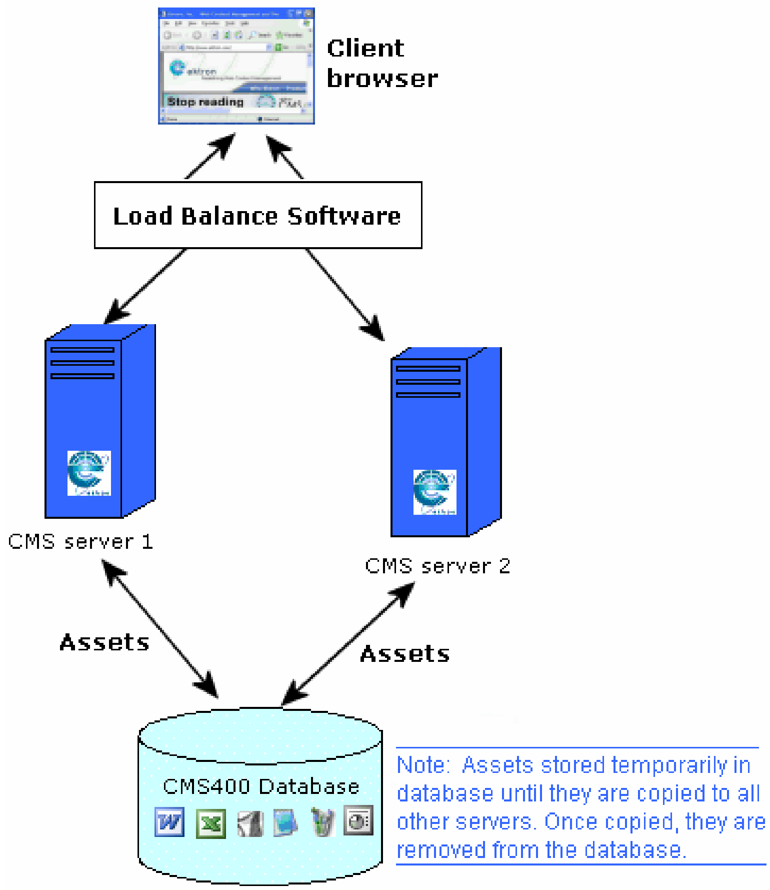
Step 3. Restart the Ektron Windows Service



See Also: "Ektron Windows Service" on page 19-13

Load Balancing Assets

Ektron CMS400.NET lets you balance requests to view or work with *assets* among two or more servers. To achieve this, each server has its own copy of every asset.



To accomplish this, Ektron CMS400.NET initially stores every new asset in the database. An Ektron service constantly checks to see if all database assets also exist on each server's file system. To learn about this service, see "Ektron Windows Service" on page 19-13.

If an asset does not exist on any server in the cluster, it is copied from the database to the server's file system. Once there, the asset is available for requests to work with it. After an asset is copied to all servers, Ektron CMS400.NET removes it from the database.

There is no limit to the number of servers or databases that can be load balanced.

Setting up Asset Load Balancing

To set up load balancing for assets, follow these steps on *both the staging and production server*.

1. Within the site root folder, open the AssetManagement.config file. Change the value of the `LoadBalanced` element to **1**.
2. Open the following file using a word processor such as Notepad

```
C:\Program Files\Ektron\EktronWindowsservice30\Ektron.ASM.EktronServices30.exe.config
```

3. Find the following tag: `<add key="LoadBalanced" value="0" />`. Change the value to 1.

4. Find the following tag `<add key="LoadBalServerCount" value="2"/>`. Make sure the value is set to the number of servers in your load balance cluster. This number must be the same for all servers in the cluster.
5. After updating these files for each server in the load balance cluster, sign on to Ektron CMS400.NET. This action sets up the load balance software in the database.

Web Services

Introduction

Web Services (WS) are reusable software components that can be consumed by variety of clients, independent of operating system, programming language, or Web server, using standard Internet technologies. Because Web Services allow heterogeneous systems to communicate with each other in a standard way, they have received quick acceptance for data interchange over the Web.

It's easy for anyone to integrate your WS into their application. The client application can be a Web application, a Windows application, a Java application, a Visual Studio.net application, or a host of others -- it does not matter as long as it supports Web Services.

A Web Service consists of one or more methods that expose functionality. In this sense, a Web Service is an API that can be accessed using SOAP over HTTP. (SOAP is an XML-based, lightweight protocol that defines the message format of Web Services.)

For example, you might develop a purchasing application that automatically obtains price information from several vendors, lets the user select a vendor, submits the order and then tracks the shipment until it is received. The vendor application, in addition to exposing its services on the Web, might in turn use XML Web services to check a customer's credit, charge the customer's account and set up the shipment with a shipping company.

This manual does not explain how Web Services work. To learn more about them, try these sites.

- http://msdn2.microsoft.com/en-us/library/aa480728.aspx#wsmsplat_topic2
- http://aspalliance.com/jnuckolls/articles/introws/default.aspx
- http://aspnet.4guysfromrolla.com/articles/062602-1.aspx
- http://www.15seconds.com/Issue/010430.htm

CMS400.NET's Implementation of Web Services

CMS400.NET supports XML Web Services. This means that you can create pages that offer your content to any Web-enabled device, and you can create pages that consume existing Web

Services. CMS400.NET’s Web Services feature can return data separated from presentation. In combination with XML support, this feature lets consumers retrieve your XML data independent of presentation information and act on it however they see fit.

Benefits of Using Web Services

Web Services make it easy to connect with partners. They can also deliver more personal, integrated experiences to users via smart devices, including PCs. WSs can save time and money by reducing development time, and increase revenue by making your own XML Web services available to others.

WS Components and CMS400.NET Architecture

Web Services require the installation of the .NET Framework on the server.

Ektron’s Web Service runs within the .NET Framework. Through Application API classes in the Ektron.cms.API, .NET managed code can communicate with .NET Framework code.

Software and Hardware Requirements

- .NET framework, version 2.0, must be installed on the server (for more information, see http://msdn.microsoft.com/netframework/).
- Ektron CMS400.NET, version 6.0 or higher

CMS400.NET Methods

CMS400.NET implements Web Services that exposes methods for accessing CMS400.NET functionality. These methods mirror their Ektron.Cms.API equivalent that are avail lab le in the .NET Assemblies.

The methods determine the *kind* of content that is made available (for example, a content block, a collection of content blocks, a summary list) along with the *presentation* of that information (for example, an HTML string or an XML data structure representing content block information).

Ektron’s API documentation contains a list of methods that are exposed with a brief description of functionality. You can access Ektron’s API documentation through the following resources.

- API Help inside Visual Studio
  - In Visual Studio click **Help** > **Contents**
  - When the help window appears, expand **Ektron CMS400.NET API Documentation** in the frame on the left. If you do not see this entry, use the filter and choose **(unfiltered)** or **Ektron Documentation**.
- HTML online help from www.ektron.com

- http://www.ektron.com/web-content-management-solutions.aspx?id=4020
- Under the Ektron CMS400.NET SDK header, click **CMS400.NET API Reference manual (HTML)**

- PDF from the Desktop
  - Click Start > Programs > Ektron > CMS400 > Documentation > API Reference Manual
- PDF From the Workarea
  - Click Settings > Help > Developer's API Reference Manual
- PDF From www.ektron.com
  - http://www.ektron.com/web-content-management-solutions.aspx?id=4020
  - Under the Ektron CMS400.NET SDK header, click **CMS400.NET API Reference manual (PDF)**

These methods are made available through various **.asmx** files. Below is a list of features, the associated .asmx files and the location on your server. Each of these files, when viewed in a browser shows a list of the methods available for that feature.

Feature	File & Location Location
Activity	Activity.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI`
Business Rules	BusinessRules.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI`
Calendar	Calendar.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Calendar`
Calendar	CalendarEvent.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Calendar`
Calendar	CalendarEventType.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Calendar`
Community - Social Networking	CommunityGroup.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Community`
Community - Social Networking	Favorites.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Community`
Community - Social Networking	Flag.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Community`

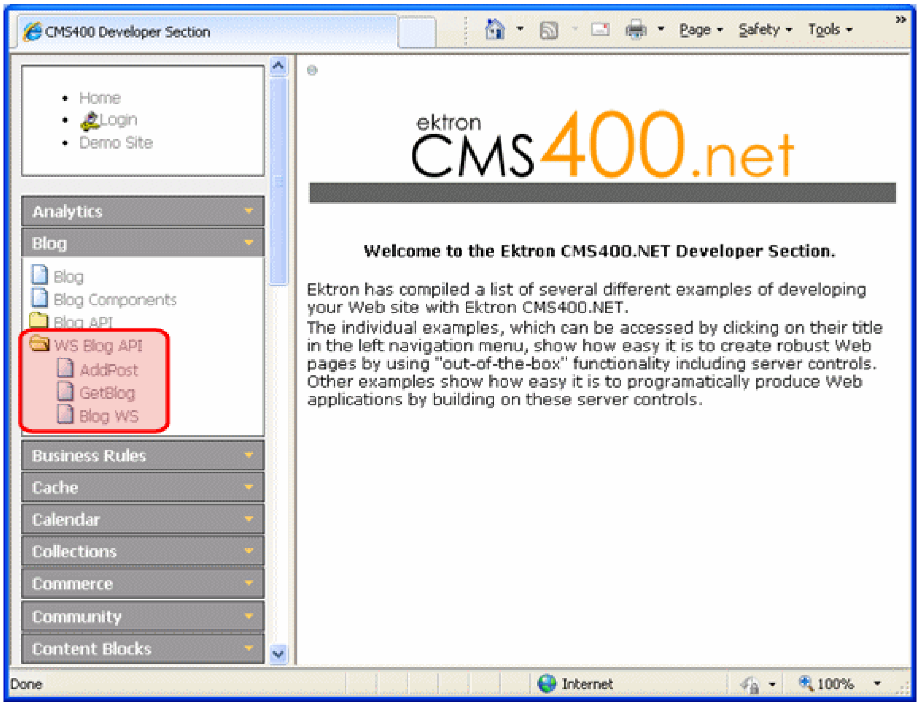
Feature	File & Location Location
Community - Social Networking	Friends.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Community
Community - Social Networking	MessageBoard.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Community
Community - Social Networking	Tags.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Community
Content	Asset.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Content
Content	Blog.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Content
Content	Content.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Content
Content	ContentRating.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Content
Content	Form.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Content
Content	ThreadedDiscussion.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI\Content
Custom Fields	CustomFields.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI
Folders	Folder.asmx *webroot\siteroot*\Workarea\webservices\WebServiceAPI
Fonts	*Font.asmx* *webroot\siteroot*\Workarea\webservices\WebServiceAPI
Library	*Library.asmx* *webroot\siteroot*\Workarea\webservices\WebServiceAPI
Metadata	Metadata.asmx webroot\siteroot\Workarea\webservices\WebServiceAPI
Navigation - Menus	FlexMenu.asmx webroot\siteroot\Workarea\webservices\WebServiceAPI\Navigation
Notification System	Notification.asmx webroot\siteroot\Workarea\webservices\WebServiceAPI

Feature	File & Location Location
Permissions	Permissions.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI`
Search	SearchManager.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Search`
Site	Site.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI`
Site Map	SiteMap.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI`
Tasks	Task.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Task`
Tasks	TaskCategory.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Task`
Tasks	TaskCategoryType.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Task`
Taxonomy	Taxonomy.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\Taxonomy`
Users	ActiveDirectoryUser.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\User`
Users	User.asmx `webroot\siteroot\Workarea\webservices\WebServiceAPI\User`

CMS400.NET Web Services Examples

CMS400.NET Web Services Example are available through in the Developer sample site.You can download the sample site from http://www.ektron.com/cms400-web-cms.aspx?id=5278.

Once you've downloaded the Developer sample site, you can view Web Services examples by accessing the developer sample site at `http://localhost/CMS400Developer/developer/default.aspx` and selecting a feature from the side bar menu. If a feature has Web service examples associated with it, a folder containing the letters WS will appear in the list of items (illustrated below).



In addition to the examples, a link to the .asmx file appears. Clicking this link shows a lists all of the methods available for a given Web service.

The code examples for these Web Services are located on your server in *[Drive:]**[webroot]*\CMS400Developer\Developer\dotNetAssemblies\WebServicesAPI folder. This folder contains sub folders based on each feature for which there is an example.

Ektron's Microsoft Office SharePoint Server Connector

Using this tool, Ektron's customers can take full advantage of SharePoint's collaborative workspace to create documents. These documents can then be delivered to a public facing Web site, corporate intranet or extranet enabled with all the latest search, navigation, Web 2.0 and social networking functionality provided by Ektron CMS400.NET

Ektron CMS400.NET supports the distribution of SharePoint content to any CMS400.NET folder. For example, your Marketing Department uses Microsoft SharePoint to create and edit content. After completing a press release, they use the **Publish to Ektron CMS** menu option to copy it from SharePoint to a content folder. Once there, the document can pass through an approval chain or be published immediately.

See Also:

- "Enabling Ektron's SharePoint Connector" on page 19-42

- "Distributing SharePoint Content to CMS400.NET" on page 19-42

Enabling Ektron's SharePoint Connector

To enable Ektron's SharePoint Connector in Microsoft SharePoint, simply copy the SharePoint_To_CMS.exe file from `C:\Program Files\Ektron\CMS400v80\Utilities` to your SharePoint server and follow the on screen dialog.

If you successfully log in during Step 1of the Publish To CMS400 process, then get a **Please Login** message in Step 2, make sure your web browser is configured to accept cookies from the Ektron CMS400.NET server. For example, if your Sharepoint server is on `sharepoint.company.com`, and Ektron CMS400.NET is on `cms.company.com`, your web browser must allow cookies from `cms.company.com`.

If cookies are being blocked, a stop sign symbol appears at the bottom of Internet Explorer (shown below).

Distributing SharePoint Content to CMS400.NET

Once the SharePoint Connector is setup on a SharePoint server, navigate to a content item and click the dropdown arrow next to the content's title. A menu appears with the item **Publish to Ektron CMS**. Clicking this item starts a simple wizard that publishes the document into your CMS400.NET site's folder structure and taxonomy-based information architecture. This information is collected through a series of screens that guide you through the process.

After SharePoint content is distributed to CMS400.NET the first time, the original content is forever linked to the destination content. You cannot break the link. However, deleting the destination content in CMS400.NET allows you to select a new folder when you republish the content from SharePoint.

Note: If you delete the destination content, you will not be able to access history revisions of the content in CMS400.NET.

If you want to later revise the document, you would typically edit it in SharePoint and select the **Publish to Ektron CMS** option again. When you do, you are asked to confirm replacing the document in the destination folder. You are not allowed to select another folder.

Prerequisites

When you click the **Publish to Ektron CMS** menu item, it will check to see if you can log into CMS400.NET using Active Directory. If so you will be logged in. If not, you will be prompted for your username and password. You must have the following permissions:

- Add
- Delete
- Restore Content.

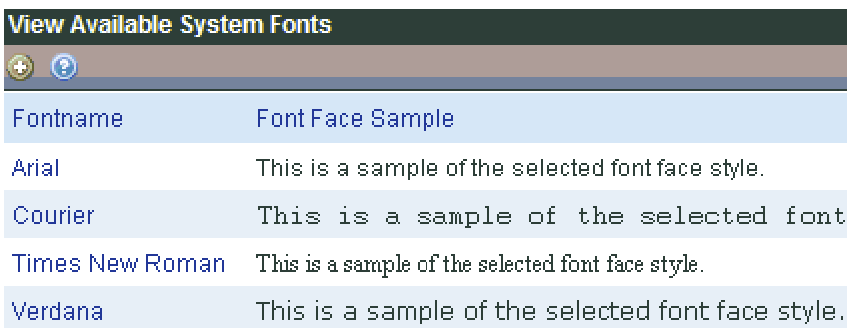
If you do not have these permissions, the folder doesn't appear on the folder selection screen.

Font Manager

As an administrator, you can add, edit, and delete fonts to and from the Ektron CMS400.NET application. By adding fonts, you are allowing the content contributors to use them when creating content. Administrators can also edit the name of a font, and delete a font from the system.

Minimizing the number of available fonts makes the Web site look more uniform.

Below is the Font Manager screen.

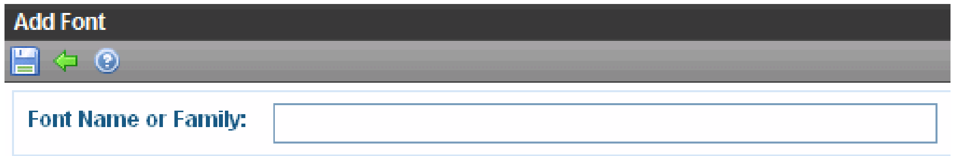


Note: Only members of the Administrator User Group can view, add, or edit fonts.

Adding Fonts

To add a font to the application, follow these steps.

1. From the left frame of the Workarea, click **Settings** > **Configuration** > **Fonts**.
2. Click the Add button ( ).
3. The Add Font screen is displayed.



4. Enter the font name or family into the text field provided.
5. Click the Save button (.)

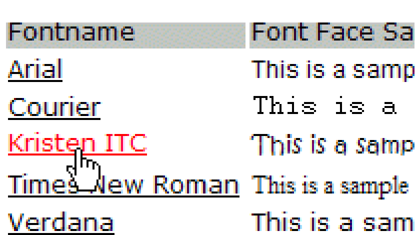
The new font is available to use when adding or editing content if the Application Setup screen's **Enable Font Buttons** field is checked. See Also: "Modifying the Application Setup Screen" on page 19-1

Viewing Fonts

When viewing fonts, you can also edit or delete them.

To view a font:

1. Access the font manager in your Workarea as described in "Adding Fonts" on page 19-43.
2. Click the font you want to view.



3. The view font screen is displayed.

Edit Fonts

When you edit a font, the font or family name is changed. Editing does not change any fonts in existing content.

To edit a font name, follow these steps.

1. Access the view font screen, as described in "Viewing Fonts" on page 19-44.
2. Click the font that you want to edit.
3. Click the Edit button ( ).
4. The Edit Font screen is displayed.

5. Edit the font name or family in the text field specified.
6. When finished, click the Update button ( ).

Delete Fonts

By deleting a font from the system, you are taking away the content contributors' use of that font in their content. To delete a font, follow these steps.

1. Access the view font screen, as described in "Viewing Fonts" on page 19-44.
2. Click the font that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message is displayed.
5. Click **OK**.
6. The screen is refreshed, and the updated fonts table is displayed.

Note: When you delete a font from Ektron CMS400.NET, you do not delete it from your computer.

Chapter 20

Web Alert Feature

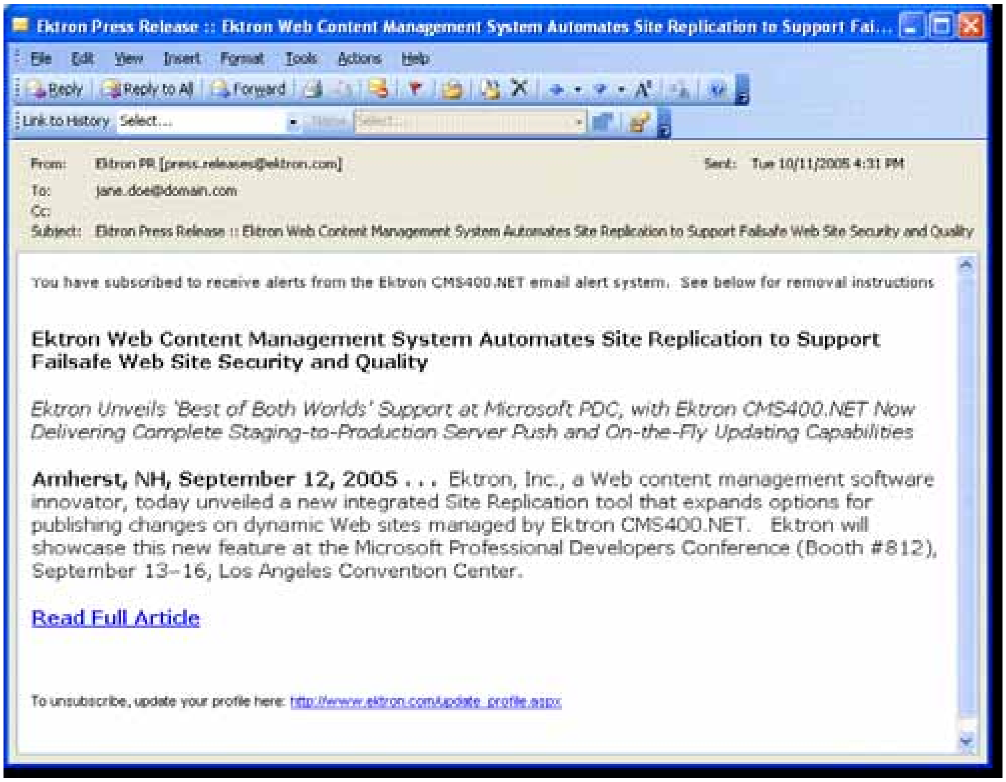
The Web Alert feature enables Ektron CMS400.NET to generate email for a list of registered users whenever new content appears on your site, or existing content is updated.

For example, anyone may register to be notified when new information about your product is published. As soon as a page is published on your site, registered users receive an email announcement with a link to the new/updated page. The recipient clicks the link to immediately access the page.

As a result, a self-selected group of users can be instantly notified of changes on your Web site relating to their interests. Once the system is set up, you don't need to do anything -- everything happens in the background.

Note: Only members of the Administrator User Group and users identified on the Manage Members for Role: Folder User Admin screen can work with Web Alerts.

Sample Web Alert email



This chapter explains the Web Alerts feature through the following topics.

- "How Web Alert Works" on page 20-3

- "Server Configuration" on page 20-4
- "Enabling the Web Alert Feature" on page 20-5
- "Setting Up the Message Queue and Asynchronous Processor" on page 20-6
- "Creating the email Message" on page 20-13
- "Defining Subscriptions" on page 20-18
- "Assigning Web Alert Information to Folders and Content" on page 20-21
- "How Users Sign up for Subscriptions" on page 20-28

See Also: "Using eSync with Web Alerts" on page 18-129

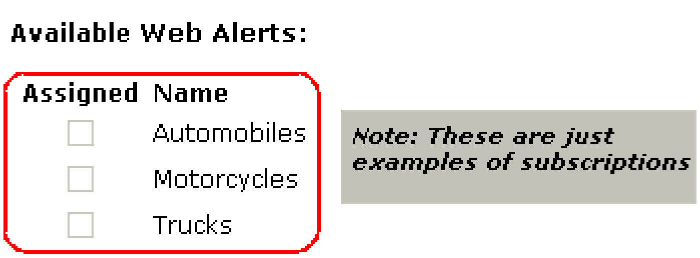
How Web Alert Works

The following explains how Web Alert email works.

1. Content is published.
2. Ektron CMS400.NET checks the **This is a staging server** checkbox on the Settings > Configuration > Setup screen. If it is unchecked, proceed to the next step. If the box is checked, no Web alerts will be issued for this server.
3. Ektron CMS400.NET checks to see if any subscriptions are assigned to the folder or content. (Subscriptions can be assigned at the folder or content level.)

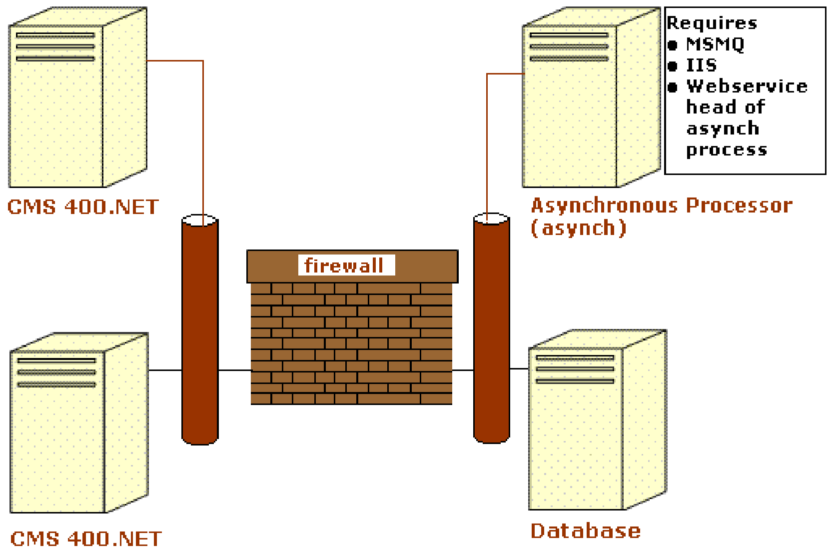
   If no subscriptions are assigned, the **Web Alerts** tab does not appear when editing content.
4. If any subscription is assigned, Ektron CMS400.NET checks to see if an email should be created for this content. The settings appear under **Web Alerts** tab.

   For example, some content only triggers an email when it is first published, while other items always generate an email.
5. If an email should be generated, Ektron CMS400.NET builds the email content by retrieving information from fields on the Folder Properties screen. These are identified under the **Web Alert Contents** section of the Web Alerts tab.
6. Ektron CMS400.NET determines which subscription lists should receive the email. These are identified on the **Available Web Alerts** area of the Web Alerts tab. Each list contains the email address of every subscribed user.



Server Configuration

The following illustration depicts a typical Web server configuration you would use with the Web Alerts feature.



- **Firewall** - the Ektron CMS400.NET business tier must have Web access to the asynchronous server. The business tier maintains the CMS files. This configuration enables proper communication between Ektron CMS400.NET and the asynchronous processor.
  - The asynchronous processor must have port 25 (SMTP) access to a valid mail server to send emails
  - The mail server (omitted from the illustration) must be allowed to send out port 25 (SMTP) traffic and can be on the Async server
- **Queuing** - Message queuing must be installed on the Async server.

You must create a message queue on the Async machine and record its name. The message queue is specified in the exe.config file for the service, and in the web.config file for the Web Service interface.

- **CMS** - The web.config file includes a key for the location of the asynchronous processor. This needs to be verified as working.
- **Other** - IIS must be installed on the asynchronous processor. IIS allows a Web service call to schedule a file download and send commands.

Ektron recommends that the Async machine only allow HTTP traffic from Ektron CMS400.NET servers. This provides additional security on the Async processor.

Verifying Connections

- You can verify the Web service > queue connection by
  - leaving the Ektron asynchronous processor service off, submitting content with notifications, and verifying that a message arrived in the queue
  - turning on journaling for the queue. Submit a message in the queue. The Ektron asynchronous processor service picks it up and places it in the journaled messages.
  - turning on logging for the Ektron asynchronous processor service
- To verify the CMS > Web service connection, open the asynchronous processor location inside a Web browser and test the Web services.

To verify the writing of files, ensure that Ektron CMS400.NET has write access to the `[site-path]subscriptions` directory and submit content that will trigger notifications. This action places a file inside that directory.

- To verify that the Ektron asynchronous processor service can download a file, open a Web browser on the Async machine and connect to the location of the notification command files. Attempt to download one.

Enabling the Web Alert Feature

Enabling the Web Alert feature involves the following steps.

Step	Description	For more information, see
1. Set up message queue and asynchronous processor.		"Setting Up the Message Queue and Asynchronous Processor" on page 20-6
2. Create messages.	Define components of the email to be sent to subscribers.	"Creating the email Message" on page 20-13
3. Define subscriptions.	Categories of information on your site. Site visitors can subscribe to be notified when content in a category is added or updated.	"Defining Subscriptions" on page 20-18

Step	Description	For more information, see
4. Assign Web Alert information to folders and content.	Assign Web Alert information to folders and content items which, when published, trigger emails. For each folder or content item to which you assign subscriptions, determine - activities that trigger emails (for example, only upon initial publication of content) - the content of the email - the subscription list(s) to whom the email is sent	"Assigning Web Alert Information to Folders and Content" on page 20-21
5. Create and publish site visitor registration page.	Create a new Web form and drop the membership server control onto it. Then, publish that form on your Web site. Note: This task is typically done by a developer.	"Membership Server Control" on page 16-24
6. Site visitors subscribe to lists of interest.	Someone signs up to be notified when changes in a selected subscription (category) are published on your Web site.	"How Users Sign up for Subscriptions" on page 20-28
7. CMS users can also subscribe.		"CMS User Subscription Sign Up" on page 20-32
8. Subscribers are automatically notified when content is updated.	Web content is either first published or updated. If at least one subscription is assigned to the content or its folder, email is sent according to pre-defined criteria for the folder.	

Setting Up the Message Queue and Asynchronous Processor

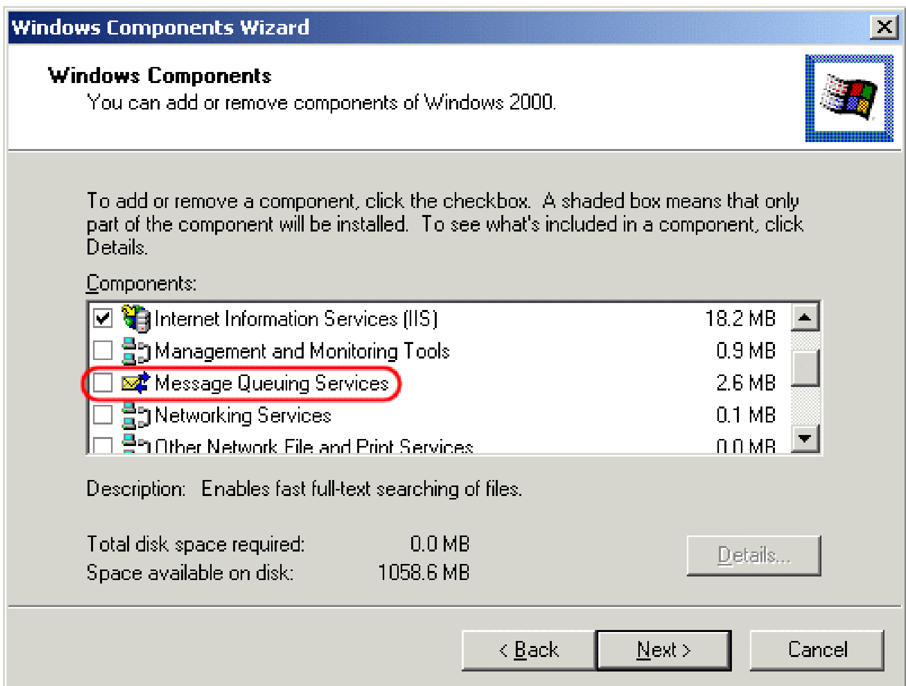
After installing Ektron CMS400.NET version 5.1 or higher, you need to set up the Microsoft Message Queuing and the Ektron Asynchronous Processor. It is assumed that the following directories and files are installed on your server:

- `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\EktronAsyncProcessor_Service\`
- `C:\inetpub\wwwroot\`*`your site root`*`\bin\EktronAsyncProcessorWS.dll`

- `C:\inetpub\wwwroot\`*`your site root`*`\Workarea\webservices\EktronAsyncProcessorWS.asmx`

Note: If you need to move Web services file, use the **Asynchronous Processor Location** field in the Configuration > Setup screen to specify the new folder location.

1. On the server that hosts Ektron CMS400.NET, go to **Control Panel** > **Add/Remove programs** > **Add/Remove Windows Components**.
2. If it is not checked, check **Message Queuing Services**.



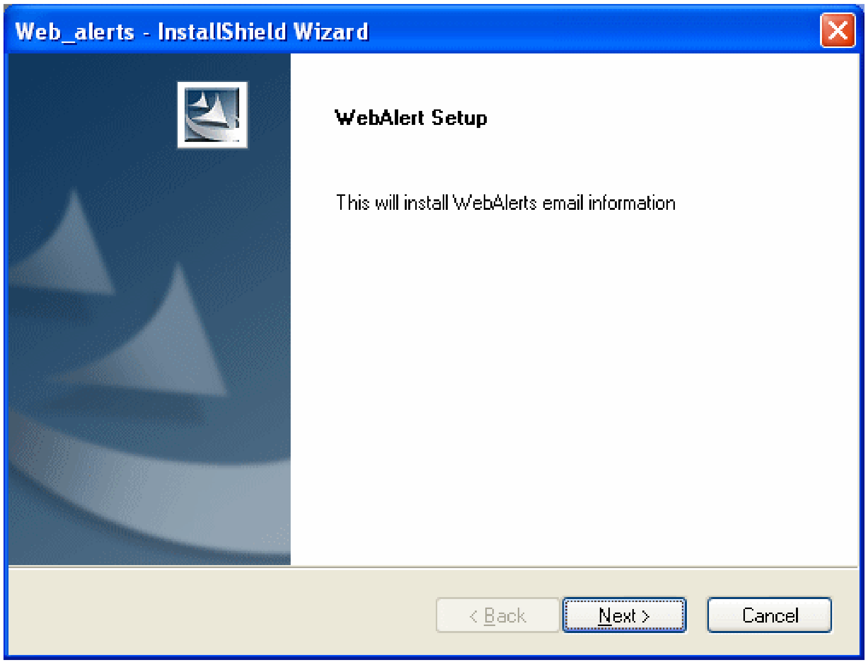
Note: On Windows 2003, it is within the Application Server Components group.

3. If **Message Queuing Services** was checked when you viewed it, go to step 4.

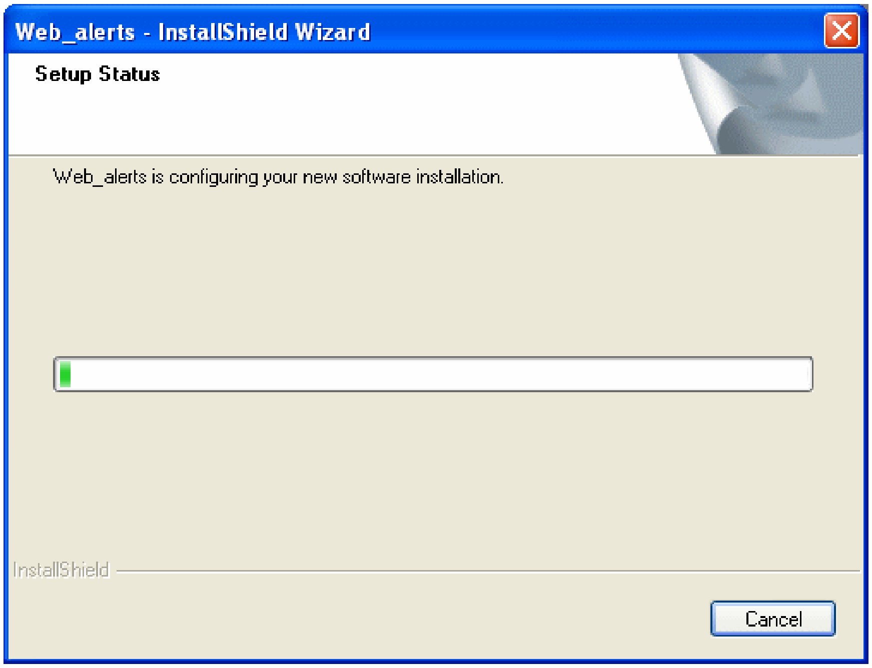
   If it was not checked, click **Next**. A wizard creates the component.

Note: The rest of this procedure employs a wizard that saves you several manual steps. If you have a problem using the wizard, or prefer to install Web Alerts manually so you can track the files being installed to your server, see "Manual Steps for Setting up the Message Queue and Asynchronous Processor" on page 20-10.

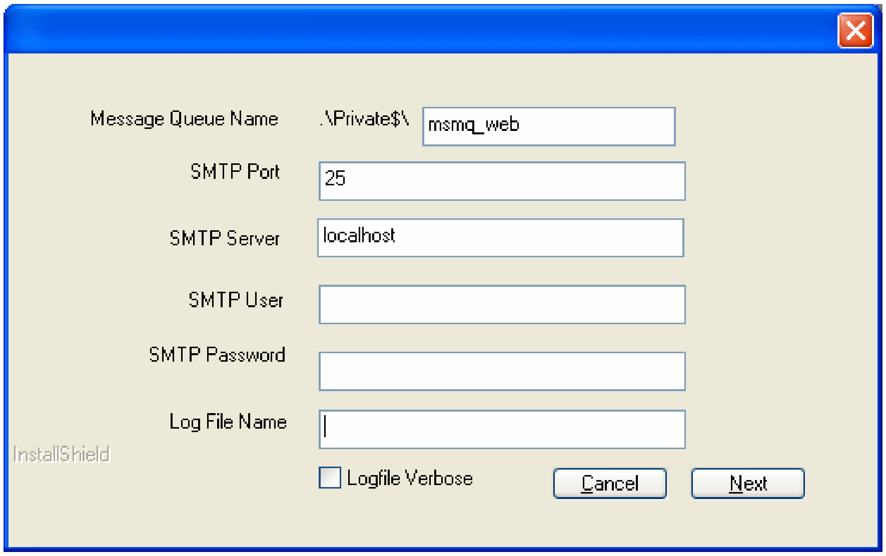
4. From the Windows Start Menu, click **All Programs** > **Ektron** > **CMS400** > **Utilities** > **Web Alerts Setup**.
5. The Web Alert Wizard setup screen appears.



6. Press **Next**. The wizard begins installing the Web Alerts feature.

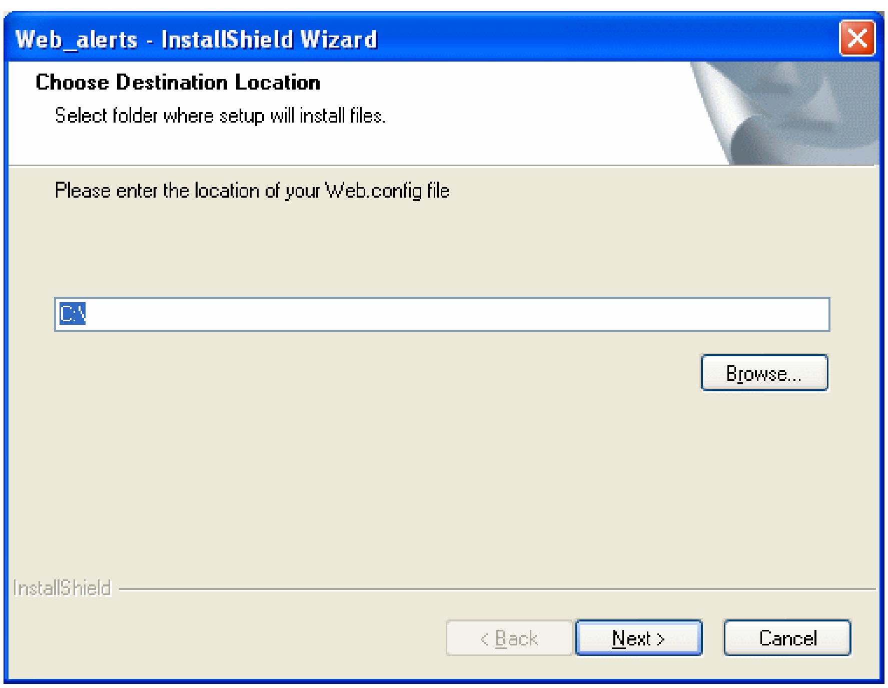


7. The following screen appears.



8. Enter the username and password that will be used to send and receive email.
9. At the **Log File Name** field, enter the name of the file that will track Web Alert activities. If you enter nothing, the file is named listener.log.

   The file resides in the `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\EktronAsyncProcessor_Service` folder. It is also available from the Workarea. See "Asynchronous Log File Reporting" on page 20-13.
10. If you want a very detailed log file, click **Logfile Verbose**.
11. Press **Next**. The following screen appears.



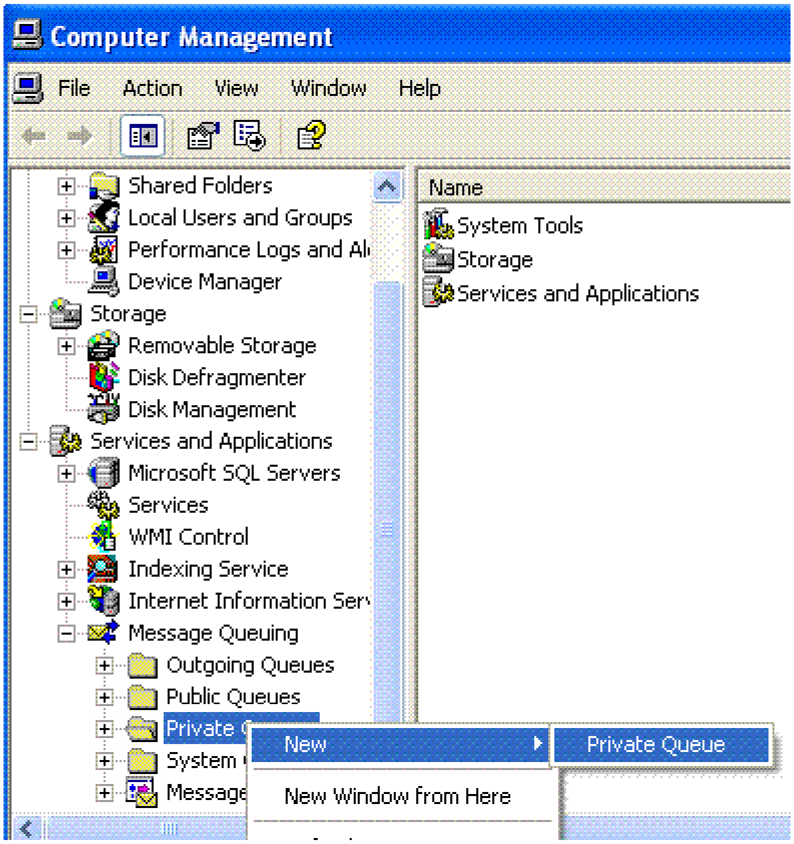
12. Either insert or browse to the folder that contains your web.config file. This is your site root folder. Then press **Next**.
13. If your Asynchronous Processor service is not running, the following message appears.

14. If you see this message, press **OK** then click **Finish**.
15. Go to **Control Panel** > **Administrative Tools** > **Computer Management** > **Services and Applications** > **Services**. Start the Ektron Async Processor Service.

Manual Steps for Setting up the Message Queue and Asynchronous Processor

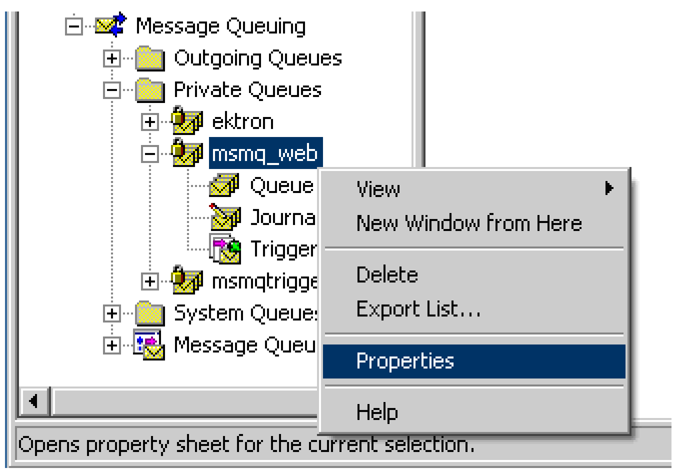
This section describes manual steps for setting up the Message Queue and Asynchronous Processor. You can use this procedure if you had a problem using the wizard, or you want to know which files are being installed to your server.

1. Go to **Control Panel** > **Administrative Tools** > **Computer Management** > **Services and Applications** > **Message Queuing**.
2. Right click the Private Queues folder and select **New** > **Private Queue**.



3. Create a private queue named `msmq_web`.

4. Right click `msmq_web` and select Properties.



5. Go to the **Security** tab. You can give the Everyone group Full Control if you are in a testing environment. If you are on a production server or want better security, give the local system account (the account which the EktronAsyncProcessor Service runs as) the following permissions:

- Delete
- Receive Message
- Peek Message
- Send Message

Give the ASP.NET account (the account that the Web services interface runs as) Send Message permission.

6. Click **OK**.
7. Open the following file:
`C:\Program Files\Ektron\CMS400v52\EktronAsyncProcessor_ Service\RegEktron.Services.EktronAsyncProcessor.bat`
8. Review and update as necessary the paths to the .NET directory and `Ektron.Services.EktronAsyncProcessor.exe` file.

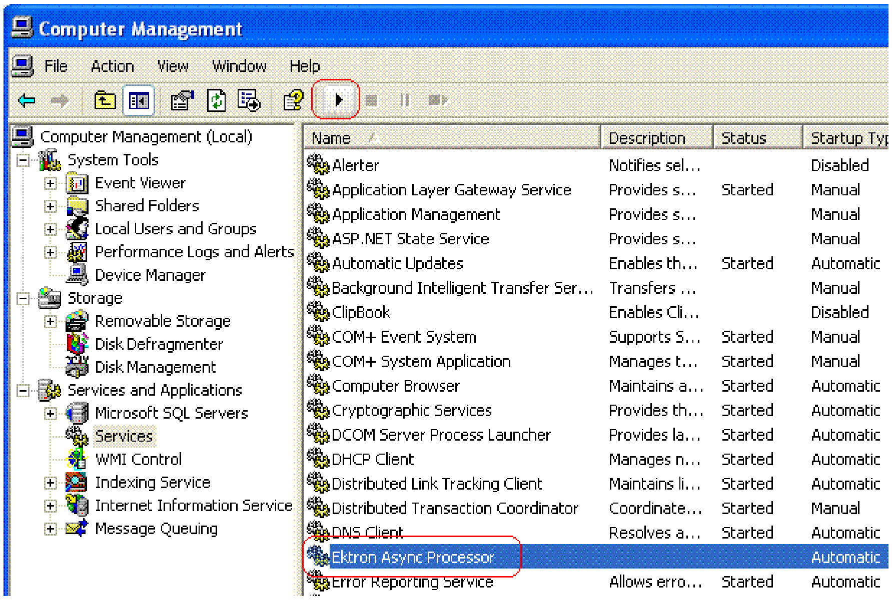
Warning! Update the paths to the .NET Directory and the .exe file if necessary.

9. Execute the .bat file.

Or, from a command line or **Start Menu** > **Run**, enter:

`C:\Windows\Microsoft.NET\Framework\v2.0.50727\installutil "C:\program Files\Ektron\CMS400v80\EktronAsyncProcessor_ Service\Ektron.Services.EktronAsyncProcessor.exe"`

10. Open the following file and enter your SMTP connection settings: `C:\Program Files\Ektron\CMS400v80\EktronAsyncProcessor_ Service\Ektron.Services.EktronAsyncProcessor.exe.config`.
11. Go to **Control Panel** > **Administrative Tools** > **Computer Management** > **Services and Applications** > **Services**. Start the **Ektron Async Processor** Service.



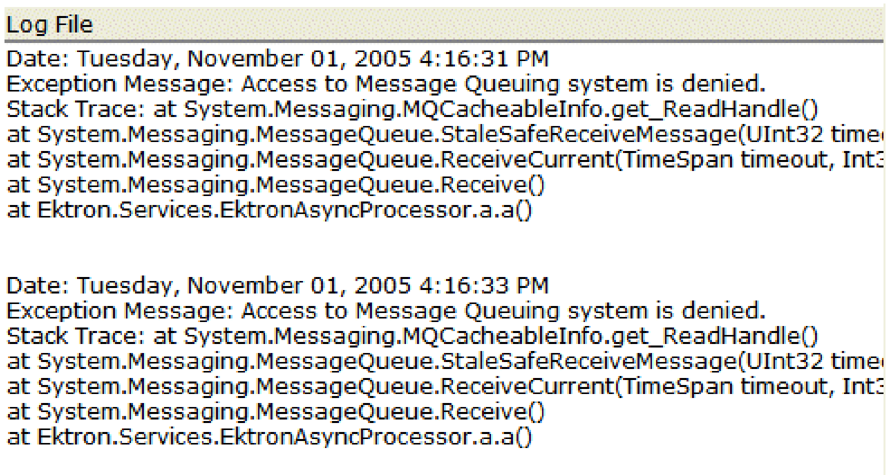
Asynchronous Log File Reporting

Once the Message Queuing and Asynchronous Process are set up and running, you can access a log report about the Asynchronous process. This report shows any problems with the Asynchronous Processor.

In addition to viewing the report, you can email it to any CMS400.NET user. See "Emailing Reports" on page 7-708.

To access the Asynchronous Process log, follow these steps.

1. From the Workarea's Smart Desktop, click **Reports**.
2. Click **Contents** > **Asynchronous Log File Report**.
3. Any problems appear on the screen.



```
Log File
Date: Tuesday, November 01, 2005 4:16:31 PM
Exception Message: Access to Message Queuing system is denied.
Stack Trace: at System.Messaging.MQCacheableInfo.get_ReadHandle()
at System.Messaging.MessageQueue.StaleSafeReceiveMessage(UInt32 time
at System.Messaging.MessageQueue.ReceiveCurrent(TimeSpan timeout, Int3
at System.Messaging.MessageQueue.Receive()
at Ektron.Services.EktronAsyncProcessor.a.a()

Date: Tuesday, November 01, 2005 4:16:33 PM
Exception Message: Access to Message Queuing system is denied.
Stack Trace: at System.Messaging.MQCacheableInfo.get_ReadHandle()
at System.Messaging.MessageQueue.StaleSafeReceiveMessage(UInt32 time
at System.Messaging.MessageQueue.ReceiveCurrent(TimeSpan timeout, Int3
at System.Messaging.MessageQueue.Receive()
at Ektron.Services.EktronAsyncProcessor.a.a()
```

Creating the email Message

This section has the following topics.

Predefining Message Components

Before you can create an email message, define the following information.

- default message text
- opt out message
- unsubscribe message
- “from” address

You can define as many as you want of each item. You must, however, define at least one opt-out message, unsubscribe message, and “from” address to use the Web Alert feature.

These message components are later inserted into an email message that is sent to your subscribers. See Also: "Creating the email Message" on page 20-13

Creating Default Message Text

You can create one or more default messages to contain the text of the email. A simple editor lets you apply some XHTML formatting the message.

Including Variables in the Default Message

The default message can include variables that retrieve information about the content and display it in the message text. The variables are surrounded by at signs (@). For example

```
The following content was recently updated: @AppContentLink@
```

In the email, this text might read:

```
The following content was recently updated: The Effect of Coumadin on Cardiac Patients
```

You can use the following variables in the body of a Web Alert message.

Variable	Displays this information in the email
@appContentTitle@	The title of the content block.
@appCRLF@	A carriage return. Moves the text down one line.
@appContentLink@	The link to the content block on the Web site. Note: You must be logged in to see the changes.
@appContentURL@	The URL of the content, from the quicklink and domain.

Variable	Displays this information in the email
@appSubscriptionNames@	Comma separated list of subscriptions that a user selected.
@appComment@	The comments for the content block.
@appSubmitterFirstName@	The first name of the user who submitted the content block.
@appSubmitterLastName@	The last name of the user who submitted the content block.

To create default message text, follow these steps.

1. In the Workarea, go to **Settings** > **Configuration** > **Web Alerts** > **Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the message.
4. At the **Type** field, select **DefaultMessage**.
5. In the editor, enter the message text.
6. Click the Save button ( ).

Creating Opt Out Message Text

An Opt-Out message appears as the first line of every email. It directs the reader to the Unsubscribe message at the bottom. Here is an example:

```
You have subscribed to receive alerts from the Ektron CMS400.NET email alert system. See
below for removal instructions.
```

You can add variables to the Opt Out text. See Also: "Including Variables in the Default Message" on page 20-14

To create Opt-Out message text, follow these steps.

1. Go to **Settings** > **Configuration** > **Web Alerts** > **Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the Opt-Out message.
4. At the **Type** field, select **OptOut**.
5. In the editor, enter the message text.
6. Click the Save button ( ).

Creating Unsubscribe Message Text

An Unsubscribe message lets the person receiving the email remove himself from the subscription list.

You can add variables to the Unsubscribe text. See Also: "Including Variables in the Default Message" on page 20-14

To create Unsubscribe message text, follow these steps.

1. Go to **Settings** > **Configuration** > **Web Alerts** > **Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the Unsubscribe message.
4. At the **Type** field, select **Unsubscribe**.
5. In the editor, enter the message text.
6. Click the Save button ( ).

Creating "From" Addresses

Any email generated by the Web Alert feature must have a "from" address. To create one or more "from" addresses, follow these steps.

1. Go to **Settings** > **Configuration** > **Web Alerts** > **Email From List**.
2. Click the Add button ( ).
3. Enter an email address that will be used in the From field of messages generated by the Web Alert feature.
4. Click the Save button ( ).

Combining Message Components to Create the Message

You create the content of an email message by configuring the following components. Some are required. Then, when content is published, Ektron CMS400.NET retrieves the field values to create the email Web Alert.

Note: If you reached this screen while creating an eCommerce message, see "Messages" on page 17-103.

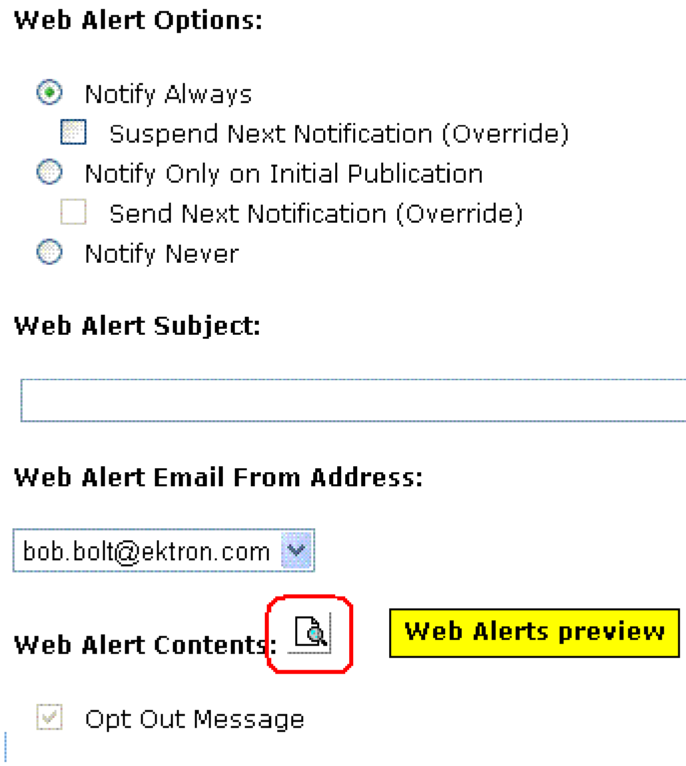
Note: To set or modify this information, you must have permission to edit the folder.

Component		Comment	Required?
1.	Subject line	Plain text you enter on the Web Alerts tab of the Folder Properties screen	No
2.	From address	See "Creating “From” Addresses" on page 20-16	Yes
3.	Opt out message	See "Creating Opt Out Message Text" on page 20-15	Yes
4.	Default message	See "Creating Default Message Text" on page 20-14	No
5.	Content Summary	The Summary of the content item whose creation or change generates the email. Note: The Summary can include variables that retrieve information about the content item. See "Including Variables in the Default Message" on page 20-14	No
6.	Any CMS content item	Identify CMS content to include within the email content. ■ To identify an existing content item, click **Select** next to the **Use Content** checkbox. Then, navigate to the content item. Note: If the content item is an Office document or a managed file, a *link* to that item appears within the email message, not the item itself. ■ To insert this content item (that is, the one whose creation or change triggers this Web Alert), click **Use Current**. ■ To create a new content block to insert into this message, click **Select** next to the **Use Content** checkbox. When the folder navigation window appears, click the Add Content button ( ). Then, see "Adding HTML Content" on page 7-15.	No
7.	Unsubscribe message	See "Creating Unsubscribe Message Text" on page 20-16	Yes

The elements appear within the email in the sequence shown above.

Previewing the email Message

You can preview the email message at any time by clicking the preview button, which appears to the right of the **Web Alert Contents:** label on the Web Alerts tab (see below).



The button appears on the Web Alerts tab for folders as well as content.

When you click the preview button, a new window displays the body of the email message. (The components used in an email message are listed in "Combining Message Components to Create the Message" on page 20-16.)

After previewing the message, you can change any message components and click the button again to review the updated message. You don't need to save or check in the content to update the preview.

Defining Subscriptions

Create a subscription for each type of information site visitors might want to be notified about. For example, if your site sells electronics, you could set up one subscription for televisions, another for computers, and a third for stereo equipment. Site visitors can then subscribe to appropriate areas of interest.

CMS and membership users can also sign up for subscriptions.

See Also: "Server Configuration" on page 20-4

To create one or more subscriptions, follow these steps.

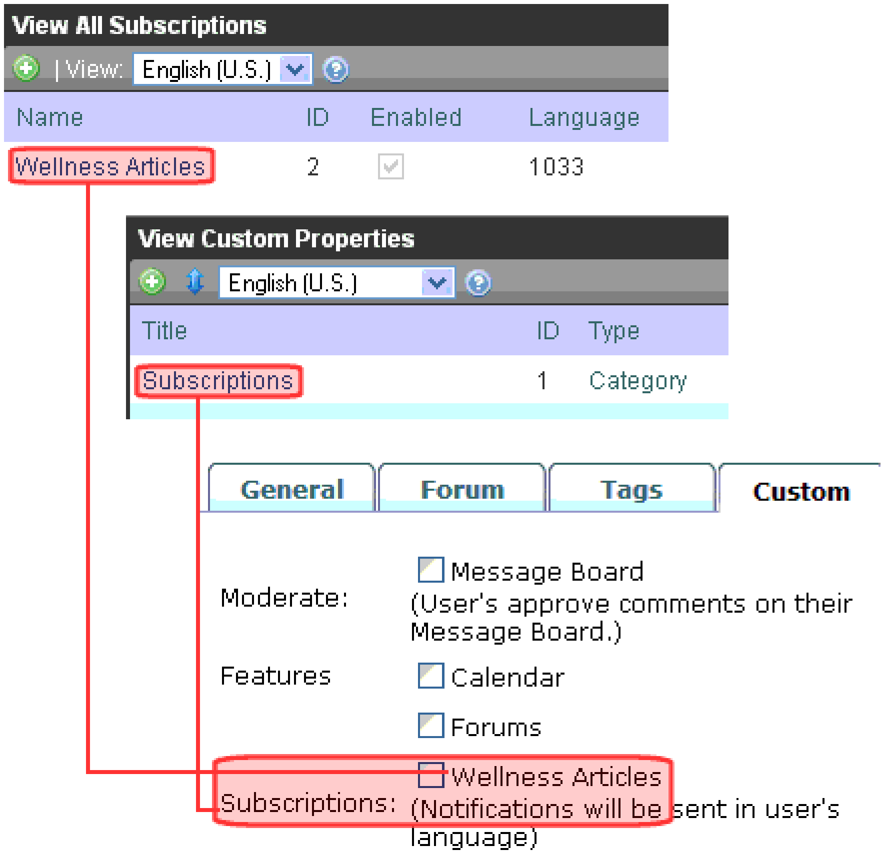
1. Go to **Settings** > **Configuration** > **Web Alerts** > **Subscriptions**.
2. Click the Add Subscription button ( ).
3. Enter a name for the subscription. The name should indicate the kind of information that it will cover.
4. Use the **Enabled** check box to indicate if the subscription is currently active.
5. Press the Save button ( ).

Effect on Custom User Properties

When you create the first subscription, a new entry is automatically created in the Custom User Properties screen. By default, its name is **Subscriptions**, and its type is **Category**. This occurs because all custom user properties appear on the Site Visitor Registration screen. In this way, users visiting that page can select areas of interest about which to be notified when content is updated.

The default name (**Subscriptions**) appears on the Site Visitor Registration screen. You may want to change it to something more helpful, such as **Select Areas of Interest**. To do this, select the Subscriptions entry and edit the **Label** field in the Custom User Properties screen.

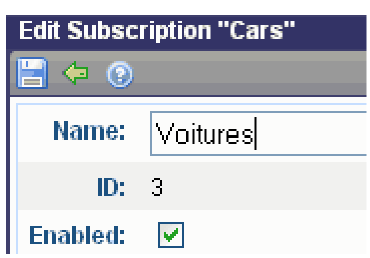
The following graphic illustrates the relationship among the Subscriptions, Custom Properties, and Site Visitor Registration screens.



If you add more subscriptions later, they have no effect on the **Subscriptions** entry in the Custom User Properties screen -- that single entry covers all subscriptions.

Using Subscriptions in a Multi-Language System

When you create a subscription, a version of it is created for every enabled language in your system. You can edit the subscription name and **Enabled** values for any language but the ID number cannot be changed.



To translate any subscription, follow these steps.

1. Go to **Settings** > **Configuration** > **Subscriptions**.
2. From the View Languages dropdown list, select the language into which you want to translate the subscription.
3. Click the subscription that you want to translate.
4. Click the Edit button ( ).
5. Enter the translation for the subscription name. If desired, you can check or uncheck the **Enabled** checkbox. Only enabled subscriptions appear on the Site Visitor Registration screen.
6. Click the Save button ( ).

Assigning Web Alert Information to Folders and Content

After creating predefined messages (as explained in "Predefining Message Components" on page 20-14) and subscriptions (as explained in "Assigning Web Alert Information to Folders and Content" on page 20-21), you need to identify which folders include content that, when updated, trigger a Web Alert. For example, new product announcements are placed in the Marketing folder.

Note: In order to set or modify Web Alert information, you must have permission to edit the folder.

For each folder, you can assign the following kinds of message information.

- whether Web Alert information is *inherited* from a parent folder or customized
- whether a folder's Web Alert information is inherited by all content items in the folder
- *when* email is sent: always, only on initial publication, or never
- the *content* of the Web Alert email
- the subscriptions assigned to the folder. These determine which recipients receive email when content in this folder is created or updated.

Customizing Web Alert Information for a Folder

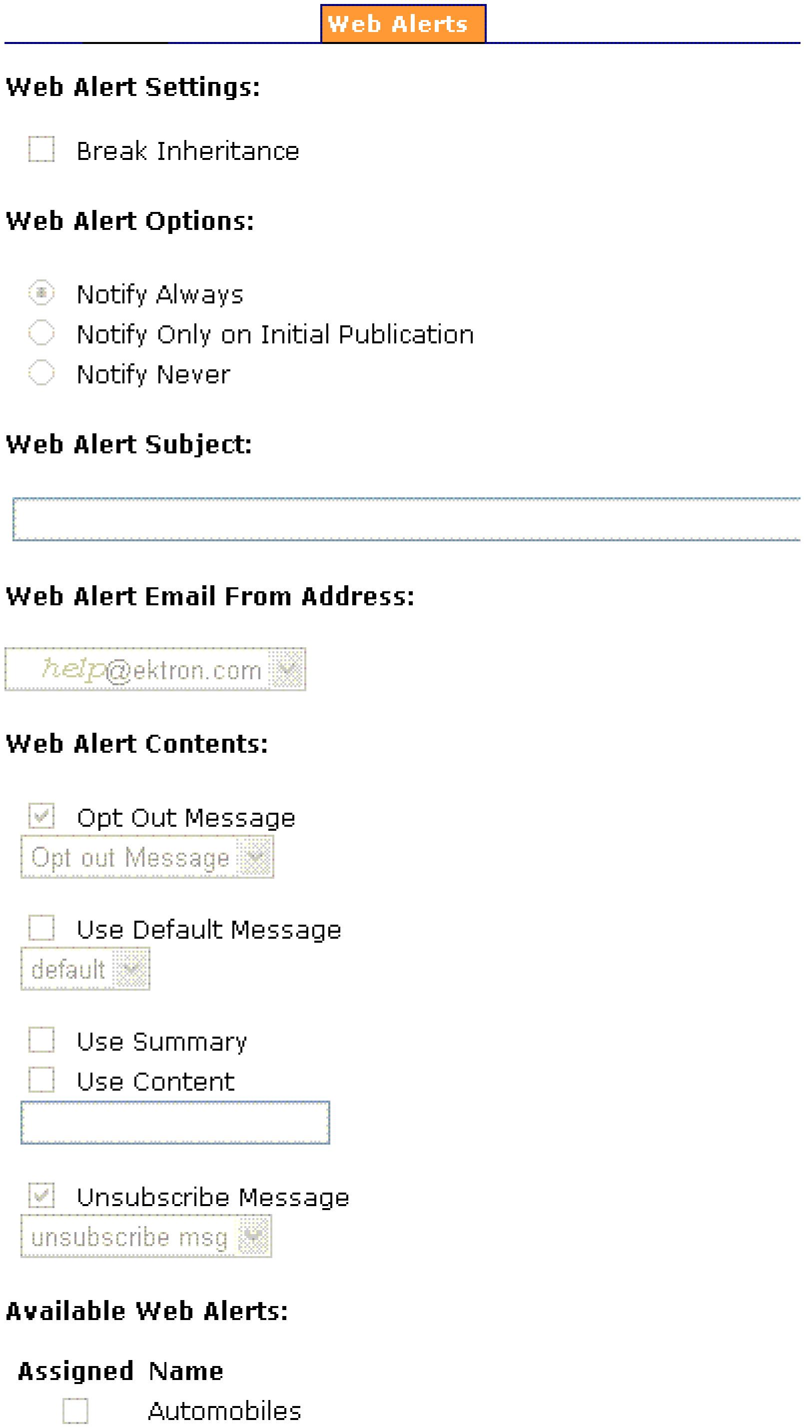
Like other folder-level information in Ektron CMS400.NET, Web Alert information is inherited from a parent folder. By default, all folders inherit these settings from the root (Content) folder.

However, inheritance can be broken and customized at any folder level or even the content level. Breaking inheritance means that custom settings can be made at any folder level. Subsequent changes to Web Alert settings at the parent level are ignored.

See Also: "Assigning Web Alert Information to Content" on page 20-25

To view, enter, or modify folder-level Web Alert information, follow these steps.

1. Navigate to the folder whose Web Alert information you want to edit.
2. Click **View** > **Properties**.
3. Click the **Web Alerts** tab.
4. Scroll down to view the Web Alert options.



5. To change any value, click the Edit Properties button ( ).
6. The following table describes the fields.

Web Alert Fields

Field Group	Description
Web Alert Settings: Break Inheritance	To inherit Web Alert settings (described below) from this folder's parent folder, leave this box (**Break Inheritance**) empty. To assign custom Web Alert settings for this folder, check this box and use the fields below to customize the settings.
Web Alert Options	Check *when* Web Alert emails are sent as content in this folder is published. - **Notify Always** - send email whenever any content is published. It doesn't matter if the content is being published for the first time or being updated. - **Notify only on Initial Publication** - send email the first time content is published. After that, email is not sent. - **Notify Never** - email is never sent for content in this folder.
Web Alert Subject	Enter the subject line of the email.
Web Alert email From Address	Select the address of the person from whom the email will be sent. See Also: "Creating "From" Addresses" on page 20-16
Web Alert Contents	Check any or all of the following components to determine the text of the email. See Also: "Combining Message Components to Create the Message" on page 20-16 - OptOut Message - see "Creating Opt Out Message Text" on page 20-15 - Use Default message - see "Creating Default Message Text" on page 20-14 - Use Summary - include the content summary in the email - Use Content - see "Any CMS content item" on page 20-17 - Unsubscribe message - See "Creating Unsubscribe Message Text" on page 20-16 The components appears within the email in the order listed above.
Available Web Alerts	All enabled subscriptions set up in the Subscriptions screen appear. Check those to be notified when content in this folder is added or updated. See Also: "Assigning Web Alert Information to Folders and Content" on page 20-21 Note: If you uncheck all subscriptions, you disable the Web Alert feature for this folder and all of its content. This applies even if unique subscription information has been assigned to content items within the folder.

Assigning Web Alert Information to Content

You can customize Web Alert settings for any content item. If you do, you break the inheritance from its folder. This means that any subsequent changes to the folder settings do not affect the content's Web Alert settings. From then on, its settings are independent of the folder's settings.

See Also: "Server Configuration" on page 20-4

Exception!

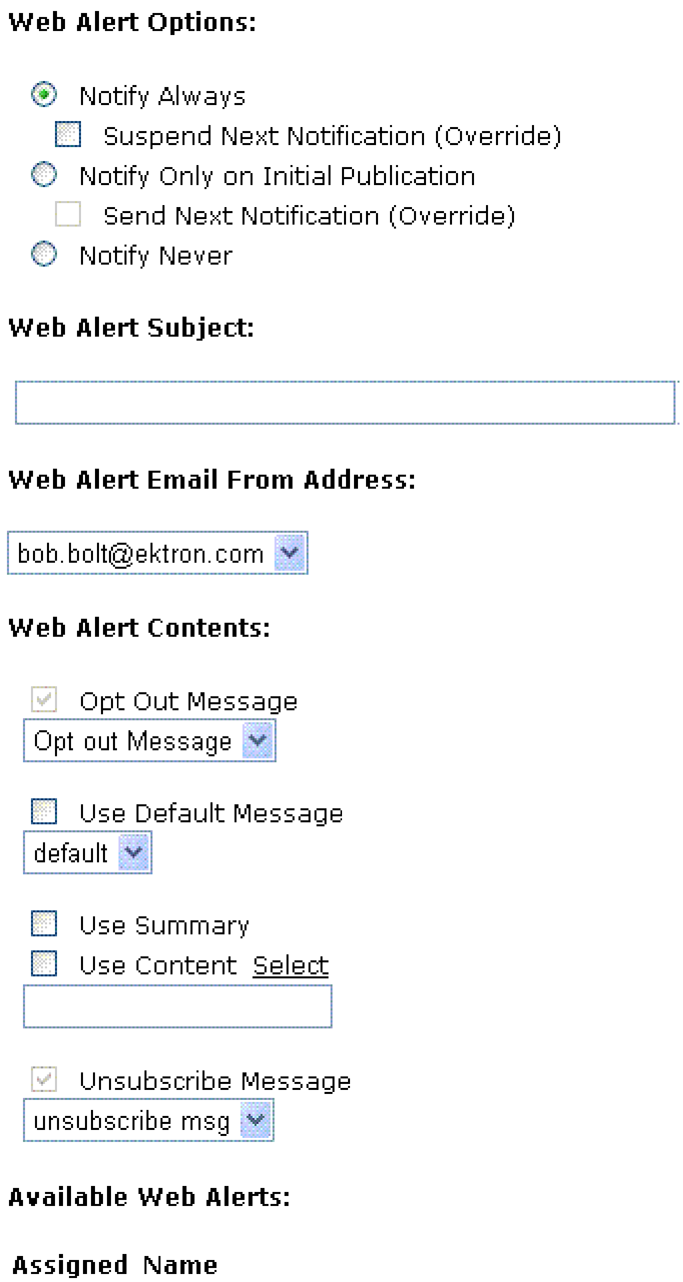
Warning! If *all subscriptions* are unchecked for a folder, the Web Alert feature is disabled for all content in the folder. This applies even if unique Web Alert information has been assigned to content.

To customize the Web Alert settings for any content item, follow these steps.

1. Navigate to the folder that contains the content.
2. Click the content. The View Content screen appears.
3. Click the Edit button ( ).
4. Click the **Web Alerts** tab.

Note: The Web Alerts tab only appears if required messages, "from" email addresses, and at least one subscription are assigned to the content's folder.

5. The Web Alert settings for the content appear.



The following table describes the settings.

Field Group	Description
Web Alert Options	Check *when* Web Alert emails are sent as this content is published. ▪ **Notify Always** - send email whenever content is published. It doesn't matter if the content is being published for the first time or being updated. ▪ **Suspend Next Notification (override)** - Check this box if you want to suspend the next email to be sent for this content. You might use this feature is you notice a small error in the content and don't want to notify all subscribers that the page was updated. **Warning! Important!** - This setting only applies until the next time this content is published. When that happens, this box is automatically unchecked. ▪ **Notify only on Initial Publication** - send email the first time content is published. After that, email is not sent. ▪ **Send Next Notification (override)** - Send an email to all subscribers the next time this content is published. Use this checkbox to send a one-time mailing to all subscribers about content that has already been published. **Warning! Important!** - This setting only applies until the next time this content is published. When that happens, this box is automatically unchecked. ▪ **Notify Never** - email is never sent when content in this folder is published.
Web Alert Subject	Same as for a content folder. See "Web Alert Subject" on page 20-24
Web Alert email From Address	Same as for a content folder. See "Web Alert email From Address" on page 20-24
Web Alert Contents	Same as for a content folder. See "Web Alert Contents" on page 20-24
Available Web Alerts	Only Web Alerts assigned to the folder appear. Check ones that you want to assign to this content item. For more information, see "Available Web Alerts" on page 20-24.

Inheriting Content-Level Web Alert Information from Its Folder

If you customized Web Alert information for content items and later decide to standardize that information for all content in a folder, use the Restore Web Alert Inheritance toolbar button ( ).

This button copies folder-level Web Alert information to every content item in the folder, replacing whatever content-level information exists. In this way, all content in a folder will have the same Web Alert information.

How Content that is Dragged and Dropped is Handled

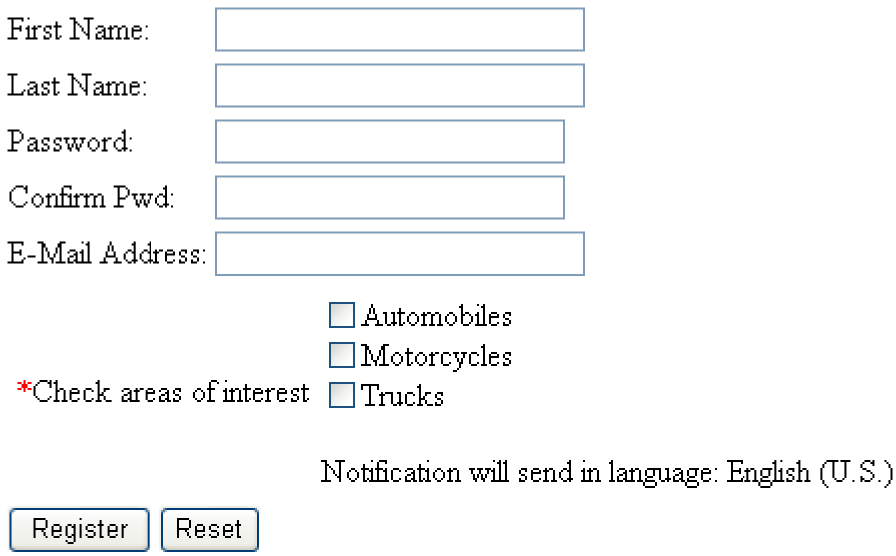
Web Alert emails are not generated for files that are dragged and dropped into Ektron CMS400.NET and immediately published. To generate email for these files, you must manually publish them.

Like HTML content, these files must reside in a folder for which the Web Alert feature is enabled.

How Users Sign up for Subscriptions

Once subscriptions are set up, you create a page on your Web site to let site visitors subscribe to areas of interest. An example of that page is below.

Note: The email address collected on the screen is used for the membership **Username** field.



To place this form on a Web page, your developer inserts a Membership Server Control. See Also: "Membership Server Control" on page 16-30

Any user who subscribes via the above screen becomes an Ektron CMS400.NET membership user, and is automatically added to the All Members user group. For more information, see "Membership Users and Groups" on page 16-3.

What happens next depends on the **Enable Verify email** check box in the Application Setup screen (shown below).

This topic is explained through the following subtopics.

- "What Happens if Verification email is Not Used" on page 20-29
- "What Happens if Verification email is Used" on page 20-30
- "Setting up Other Web Pages for Site Visitor" on page 20-32
- "CMS User Subscription Sign Up" on page 20-32

What Happens if Verification email is Not Used

If the **Enable Verify email** checkbox is *not* checked, everyone who signs up automatically becomes a membership user.

What Happens if Verification email is Used

Warning! When using the Checkout Server Control on an eCommerce site, the **Enable Verify Email** setting must be unchecked. Otherwise, new users will receive an error message when they sign-up using this control. See Also: "Checkout Server Control" on page 17-21

Typically, when managing a self-subscribe list, you want new users to confirm their interest in being on the list. This prevents people from being subscribed by someone else without their permission.

If the **Enable Verify email** checkbox *is* checked, everyone who signs up is placed on the Users Not Verified list. (To see this list, go to **Workarea** > **Settings** > **Community Management** > **Memberships** > **Users Not Verified**.)

These people then receive an email. You define the content of this email in **Workarea** > **Settings** > **Community Management** > **Messages**. The email should direct the unverified user to a new Web page that asks him to confirm his interest in signing up for the subscription. (See "The Verification Message" on page 20-30.) New users are activated when the subscriber confirms his interest.

To create such a page, your Web developer creates or updates a Web Form using the Membership Server Control. For this purpose, set the control's **DisplayMode** property to **AccountActivate**.

Note: Users can also be manually activated or removed via the View Not Verified Users screen. For more information, see "The View Not Verified Users Screen" on page 20-31.

The Verification Message

By default, Ektron CMS400.NET supplies a generic message asking the user to confirm his password and directing him to the `acitvatemyaccount.aspx` page on your Web site. If you want to customize that message, follow these steps.

1. Go to **Workarea** > **Settings** > **Community Management** > **Messages**.
2. Click the Add button ( ).
3. Assign a title to the message, such as **Verification Message**.
4. Click to place a check mark in the **Default** box.
5. Enter the text of the confirmation message you want the subscriber to receive. Be sure to place the `@appQueryLink@` variable in the message to create a link to the confirmation page. For example:

```
Welcome to example.com. You have registered to be notified of updates to our site.
Before we can do this, you need to activate your account. To do so, please visit
@appQueryLink@.
```

The `@appQueryLink@` variable places a link in the message that gets resolved as follows:

```
http://sitepath/workarea/activateuser.aspx?uid=[username]&acc=[accountID]
```

For example:

```
http://ww-
w.example.com/Workarea/activateuser.aspx?uid=john.edit@example.com&acc=ce5w84o936477
```

If you want the message to include the user's name and email address, use the following variables to retrieve that information:

- name - `@appEmail@`
- email address - `@appActivateId@`

For example:

```
Your user name is @appEmail@.

Your account id is @appActivateId@
```

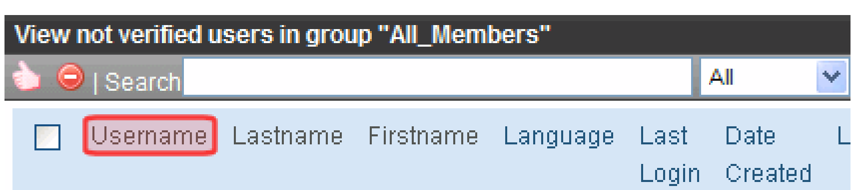
The View Not Verified Users Screen

All users who have signed up for a subscription but who have not yet verified that subscription appear on the View Not Verified Users Screen. This screen is available via **Settings > Community Management > Memberships > Users not Verified**.

After viewing membership users on the screen, you can manually activate their account. To do so, selecting one or more users then click the Activate button (). Alternatively, you can delete members by selecting one or more and clicking the Delete button ().

Note: The `ek_PageSize` setting in the web.config file determines the maximum number of users that can appear on a page before it "breaks." When a page breaks, additional entries appear on another screen, and the following text appears near the bottom of the list:
Page 1 of 2[First Page] [Previous Page] [Next Page] [Last Page]

To select all members, click the check box in the header line, next to **Username** (circled below).



You can also change the way membership users are sorted, or use the **Search** button to find users that match your criteria (for example, users whose username includes *example.com*.) These features are explained in "Sorting Membership Users" on page 16-11 and "Searching for Membership Users" on page 16-11.

Setting up Other Web Pages for Site Visitor

You can set up other Web pages that let the subscriber perform the following actions:

- Activate their account
- Reset their password
- Unsubscribe

To create these pages on your web site, place the membership server control on the page. Then use the control's **DisplayMode** property to determine the kind of screen you want to place. For example, to create a screen that lets the user reset his password, set the Membership server control's **DisplayMode** property to **ResetPassword**.

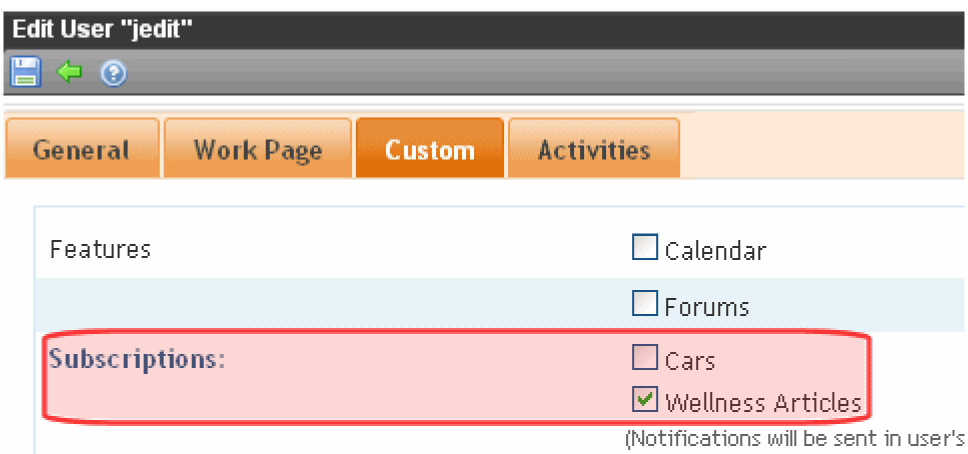
For more information, see "Membership Server Control" on page 16-30.

CMS User Subscription Sign Up

CMS users can also subscribe to any subscription list. This would be particularly useful on an intranet where, for example, employees are notified when job-related information is updated.

Another example would be for your internet site. The manager of the Marketing Department could sign up to be notified whenever Marketing content is added or updated.

To do so, users go to **Settings** > **Users** > **Edit User** > **Custom tab** (see illustration).



Chapter 21

Developer Topics

Introduction to Ektron CMS400.NET Server Controls

Ektron CMS400.NET provides an extensive list of server controls that can be dragged and dropped onto any ASPX page to coexist with other components. This includes control for everything from content to user management to breadcrumbs to social network controls, all in order to provide out-of-the-box markup and functionality.

With Ektron's server controls there is a great deal of flexibility. In addition to having a set of properties that can be used to change the controls' output and behavior, developers can access the Server Control API. See Ektron's CMS400.NET API Reference Manual for information on the Server Controls API.

Ektron CMS400.NET's server controls let you insert many standard methods and properties within the Visual Studio environment. This means that you can see the effect of your changes in real time -- you don't have to modify a page then compile a sample project to see the results.

You can insert server controls using drag and drop or programmatically. You can also use databinding to retrieve and display data from Ektron CMS400.NET. This chapter explains the use of the Ektron CMS400 Server Controls through the following topics.

Additional information and examples for Ektron Server Controls are available online after you install the Developer sample site. Here is the path:

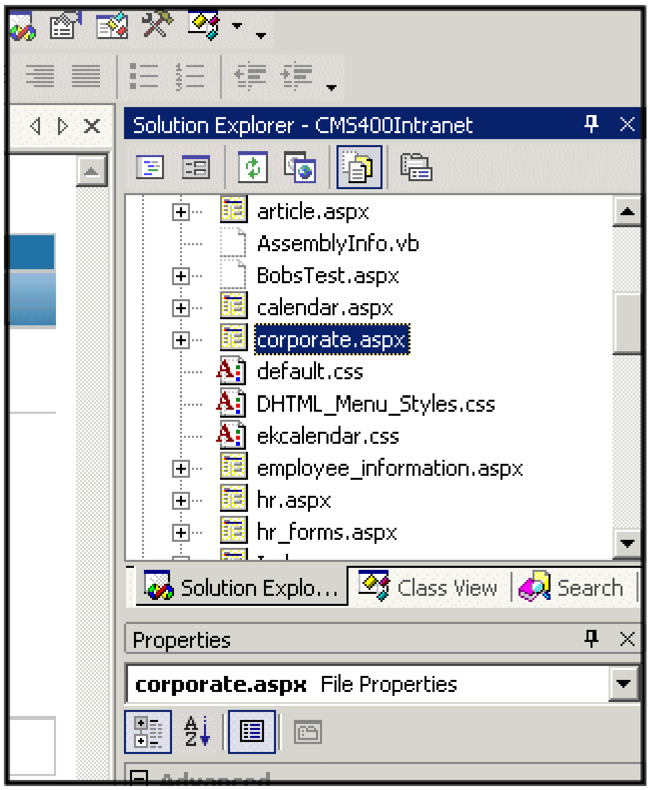
```
http://localhost/CMS400Developer/Default.aspx
```

Replace localhost with the webroot where you installed the Developer site.

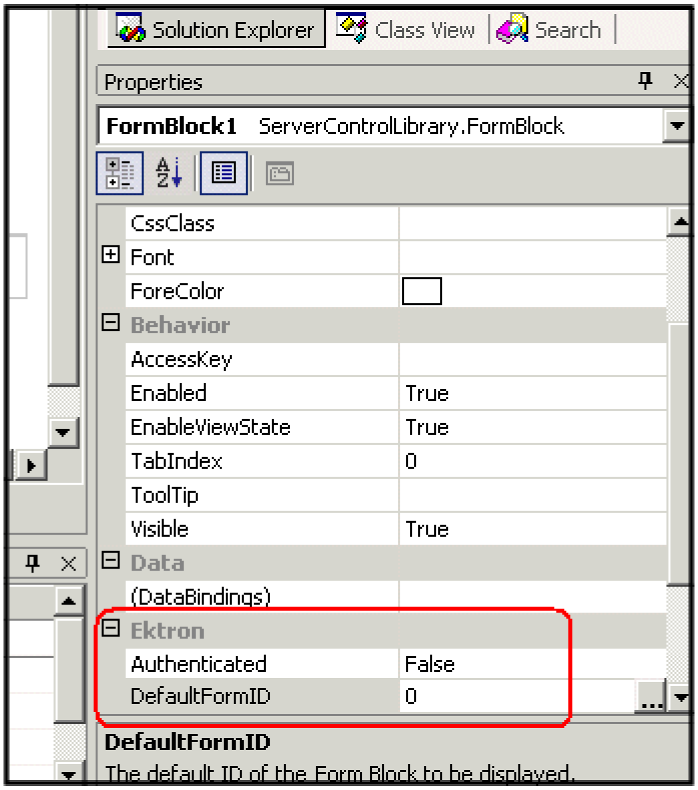
Opening the Sample Project

To help get you started, these directions explain how to open the sample site delivered with Ektron CMS400.NET.

1. Browse to and double click `Ektron CMS400.NET`'s solution file, `localhost/`*`siteroot`*`/CMS400Developer.sln`.
2. The sample site project opens.
3. To work on a template page, click it from the Solution Explorer.



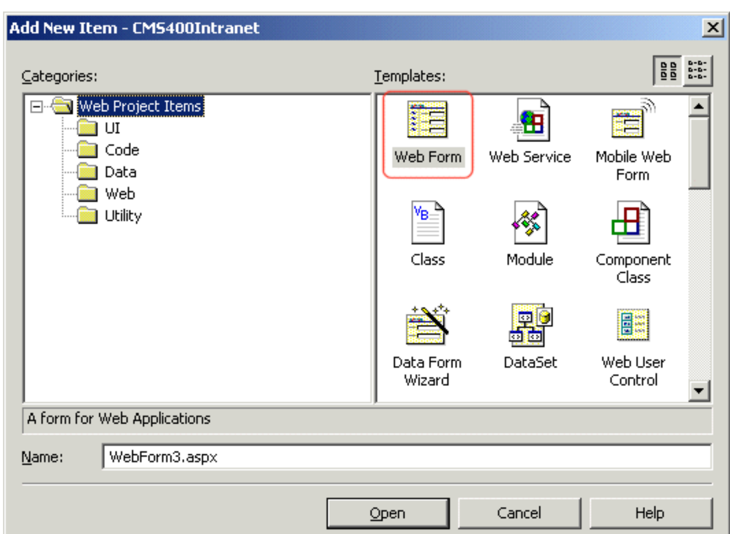
When you select a page, its properties appear in the Properties area (below Solution Explorer), and the page appears in the center of the screen. A control's properties include several standard .NET properties along with Ektron-specific ones. The Ektron properties are labeled as illustrated below.



Setting Up a Template

To create a new template (.aspx) page, follow these steps.

1. Click **Project** > **Add Web Form**.
2. On the Add New Item screen, click Web Form and assign a name.

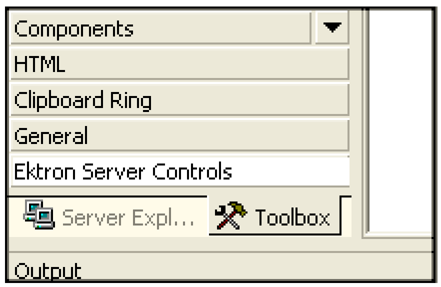


3. Add controls to determine the page content.

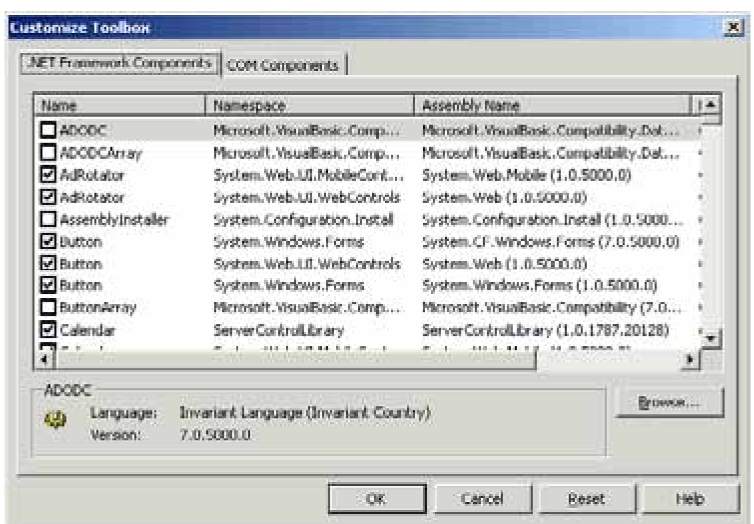
Making the Server Controls Available

Note: You must copy the dlls to a local drive before installing them. You cannot copy them from a network drive.

1. Display the Visual Studio toolbox (**View > Toolbox**).
2. Right click the mouse within the Toolbox.
3. Click **Add Tab**.
4. Type **Ektron Server Controls** then press enter.



5. Click the Ektron Server Controls Tab.
6. Right click the mouse in the empty area.
7. Click **Add/Remove Items**. If using Visual Studio, click **Choose Items**.
8. The Customize Toolbox dialog appears.



9. Select the **.NET Framework Components** tab.
10. Browse to the directory that stores `Ektron CMS400.NET`'s dll files, `localhost/CMS400Developer/bin`, and add the `Ektron.Cms.Controls.dll` file. This file provides access to Ektron CMS400.NET's server controls.

Alternatively, you could use the following location, `C:\Program Files\Ektron\CMS400v8x\bin`. The file is identical in both places.

Using the bin folder in your site provides better speed when loading Web pages. However, if you use the bin folder located in Program Files, you do not have to worry about deleting the .dll file if you change or delete your site.

11. Click **OK**.

For easier viewing once the server controls are installed, you can right click on them and select Sort Items Alphabetically. Note that you can only see the server controls when an aspx template is selected.

Removing the Server Controls

1. Display the Visual Studio toolbox (**View** > **Toolbox**).
2. Right click the mouse within the Toolbox.
3. Click **Add/Remove Items**. If using Visual Studio, click **Choose Items**.
4. Click **Namespace** or **Assembly Name** to sort the Server Controls by manufacturer.
5. Uncheck all boxes that are Ektron.Cms.Controls.
6. Click **OK**.
7. Right click the **Ektron Server Control** tab.
8. Click **Delete Tab** to remove it.

Updating the Server Controls

To update the server controls you must first remove the existing server controls in Visual Studio, then add the new server controls.

For information on removing server controls, see "Removing the Server Controls" on page 21-6

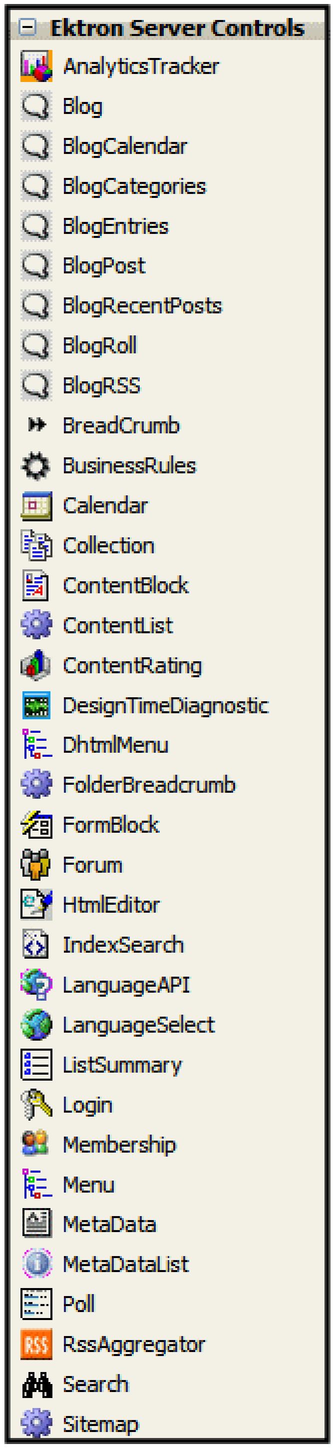
For information on adding server controls, see "Making the Server Controls Available" on page 21-5

Inserting Server Controls Using Drag and Drop

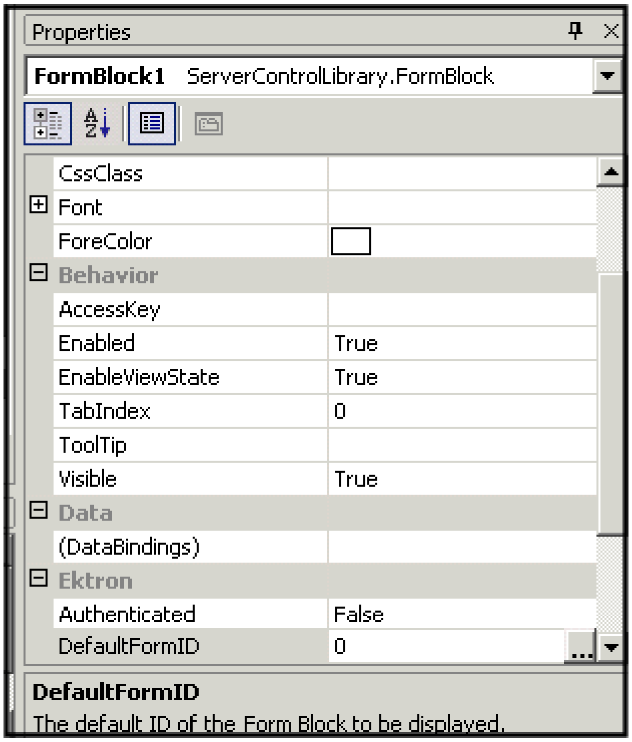
Because Visual Studio is a visual environment, you can watch the page layout change as you add or move a control and adjust its properties. And, whenever you need to identify an Ektron CMS400.NET object (such as content block or collection), you can use the CMS Explorer to visually browse to and select it.

Adding a Server Control to a Template

1. Display the Visual Studio toolbox (**View** > **Toolbox**).
2. Click the **Ektron Server Control** tab. The Ektron CMS400.NET's server controls appear.



3. Drag a server control and drop it into the desired location on the page.
4. As desired, modify the control's properties using the Properties area of Visual Studio.



For a description of server control properties, see "List of Server Controls" on page 21-38.

ServerControlWS.asmx

Best Practice

For improved security, Ektron recommends renaming or removing the Web services file when you move it to your production server. After installation, this file is named ServerControlWS.asmx and resides in the /*siteroot*/Workarea/ folder in your Web root.

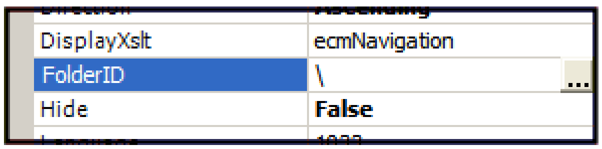
ServerControlWS.asmx is the Web service that lets the server controls talk to Ektron CMS400.NET. The path is coded in the web.config file. This is how it appears:

```
<!-- Web Service URL for Server Controls design time --> <add key="WSPath"
value="http://localhost/siteroot/Workarea/ServerControlWS.asmx" />
```

You will need to edit this line if you change the location or name of the ServerControlWS.asmx file.

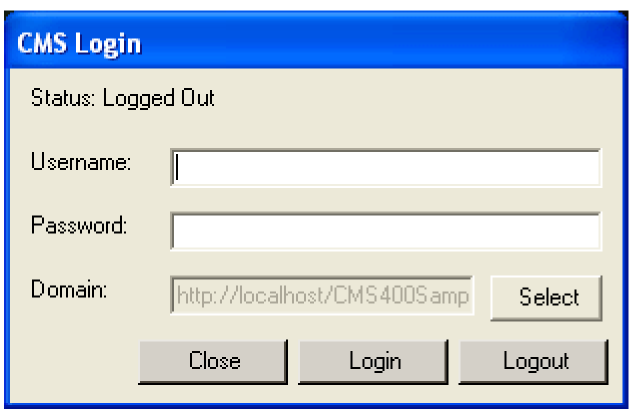
Using CMS Explorer to Browse Your Ektron CMS400.NET Site

Ektron CMS400.NET provides a window (called the CMS Explorer) that lets you browse through your Web site to identify CMS objects such as folders, calendars, blogs and content blocks. For example, if you insert a List Summary Server Control, its `FolderID` property identifies the folder whose contents are displayed. If you are not sure of the folder path, click the gray button.

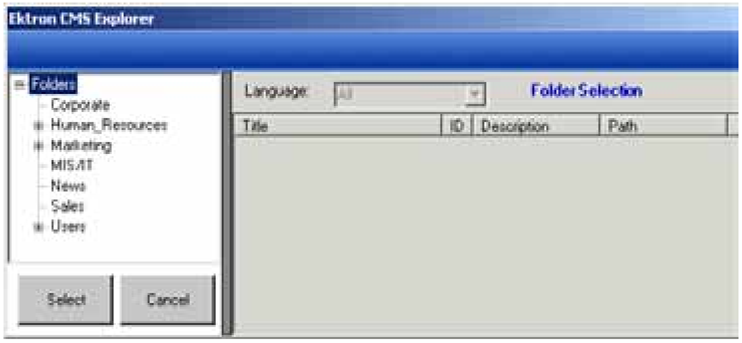


When you do, a login screen appears (illustrated below).

Note: A user cannot be logged into the CMS Explorer and the CMS400.NET Workarea at the same time. If you log into the CMS Explorer while logged into the Workarea, you will receive the following error when you try to use the Workarea: Error: The current user does not have permission to carry out this request [CBR R31]. If you log into the Workarea while logged into the CMS Explorer, you will need to re-login to the CMS Explorer when you return to using it.



Enter your Ektron CMS400.NET username and password. When you do, the CMS Explorer window appears, providing a visual way to browse your Ektron CMS400.NET Web site.



Navigate through the folders, select an object, then click the **Select** button. The selected object is pasted to the server control property.

Note: Although you see the object in the selected language in Visual Studio, the language is not stored. For example, if you select a German content block whose ID=2, Ektron CMS400.NET only stores `content block ID=2`. When a visitor to your site browses to that page, the content block does not appear in the selected language. Instead, it is determined by a cookie or the user's language selection.

Build the Project

After you open the solution file in Visual Studio and add the required files, build the project. This may take a while the first time you do so. After the project is built, a browser opens and it is displayed as a Web page.

You can also view a Web page while working on it by right clicking on the Web form and clicking **View in Browser**.

Inserting Server Controls Programmatically

Besides using the drag-and-drop method to insert a server control (explained in "Inserting Server Controls Using Drag and Drop" on page 21-6), you can insert one programmatically. You might prefer to insert server controls programmatically for several reasons, such as

- you want the control to be loaded into memory only under certain conditions. In this case, insert the logic that only displays the control if the condition exists.
- you want to display only certain properties of an object, such as the title of last edited date of a content block.

Note that you can drag and drop controls on your page then customize them using code behind. For more information, see:Using Drag & Drop and Programmatically Together.

The following sections explain how to use the server controls programmatically.

- "Steps to Insert a Server Control Programmatically" on page 21-11
- "Server Control Properties in Code Behind" on page 21-14
- "Customizing Server Controls" on page 21-23

Steps to Insert a Server Control Programmatically

To insert an Ektron server control programmatically, follow these steps.

"Step 1: Declare the Namespace " on page 21-11

"Step 2: Create an Instance of the New Control" on page 21-12

"Step 3: Set the Properties" on page 21-12

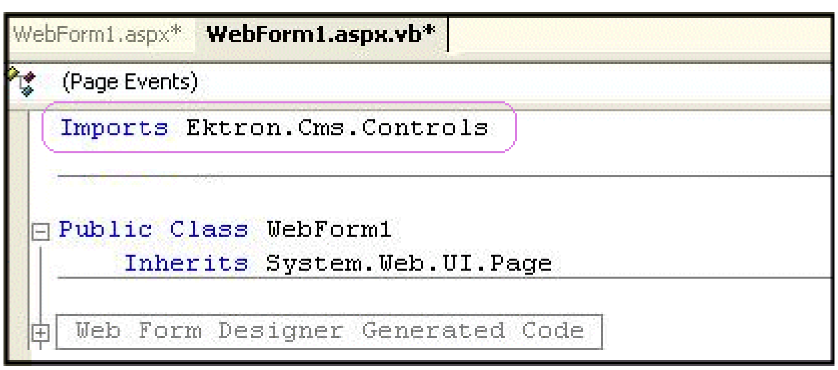
"Step 4: Call the Fill Method" on page 21-13

"Step 5: Use .text Property to Display the Control" on page 21-13

Each step is described below. These steps show an example of using the Collection Server Control.

Step 1: Declare the Namespace

Before inserting the server control, you can declare the namespace at the top of the code behind Visual Basic file, as shown below.



Note: You do not need to declare a namespace. However if you do not, you must fully qualify objects that you create.

Best Practice

For any customization of the CMS, classes or controls that inherit from Ektron classes, it is recommend that you create your own namespace within 'Ektron.Cms.Custom'. For example, if your company is 'AcmeExampleTech, Inc.' you should create all of your custom classes within the namespace 'Ektron.Cms.Custom.AcmeExampleTech'.

Step 2: Create an Instance of the New Control

Next, declare a control as an object in the code behind. In this example, we create a collection named `MyColl`.

```
dim MyColl as New Collection
```

or

```
dim MyColl as new Ektron.Cms.Controls.Collection
```

With C#, use this syntax.

```
Ektron.Cms.Controls.Collection MyColl = new
Ektron.Cms.Controls.Collection();
```

You can declare any server control as an object by using the server control name in the "List of Server Controls" on page 21-38. Another example would be: Dim MyMdl as New MetaDataList.

Step 3: Set the Properties

Note: For descriptions of the properties and how to use them, see "Server Control Properties in Code Behind" on page 21-14.

After inserting the control, you can set the properties that you want to display on the page. For example:

```
Dim MyColl as New Collection
MyColl.DefaultCollectionID = 4

MyColl.Page = Page
```

or if you are using code behind to insert the control,

```
dim MyColl as new Ektron.Cms.Controls.Collection
MyColl.DefaultCollectionID = 4
MyColl.ID = "Collection1"
MyColl.Page = Page
```

With C#, use this syntax.

```
Ektron.Cms.Controls.Collection MyColl = new
Ektron.Cms.Controls.Collection();
MyColl.DefaultCollectionID = 4;
MyColl.ID = "Collection1";
MyColl.Page = Page;
```

These lines tell the page to display CollectionID 1 unless otherwise specified.

Warning! When using code behind to add a server control to your Web form, you must set the Page object for the server control to Page. For example, `Mycoll.Page = Page` This line needs to appear between Dim new server control line and the Fill() line. This line is not added when dragging and dropping a server control on a Web form.

See Also: "Referencing the Page Property" on page 21-22.

Note: If you do not know an object's ID number, you can switch to Design mode, drag and drop the object, then use the CMS Explorer to find the ID number. (See "Using CMS Explorer to Browse Your Ektron CMS400.NET Site" on page 21-9.) If you do this, remember to delete the dropped object when you are done.

You can also obtain the ID number via the Workarea.

```
Dim MyColl as New Collection
MyColl.ID = "Collection1"
MyColl.DefaultCollectionID = 4
MyColl.Page = Page
```

MyColl.Random = True

This line sets the `Random` property to **true**. See Also: "Random" on page 9-275.

Step 4: Call the Fill Method

Because there is no render event when using objects as components not as controls, use the Fill method to fill an object's properties on the page. An example is below.

```
Dim MyColl as New Collection
MyColl.ID = "Collection1"
MyColl.DefaultCollectionID = 4
MyColl.Page = Page
MyColl.Random = True
```

MyColl.Fill()

Step 5: Use .text Property to Display the Control

Finally, use the `.text` property to determine what appears on the Web page. For example, to display the first item in a collection, use this syntax.

Note: Before adding this line you need to drag and drop a label on your Web form.

```
Dim MyColl as New Collection
MyColl.ID = "Collection1"
MyColl.DefaultCollectionID = 4
MyColl.Page = Page
MyColl.Random = True
MyColl.Fill()
```

```
Label1.Text = myColl.EkItems(0).Title
```

To display *all* items in a collection, use this syntax.

```
        Dim myColl As New Ektron.Cms.Controls.Collection
        Dim ekitem As New Ektron.Cms.Common.ContentBase
        MyColl.DefaultCollectionID = 2
        MyColl.ID = "Collection1"
        MyColl.Page = Page
        MyColl.Fill()
        Label1.Text = "<ul>"
        For Each ekitem In myColl.EkItems
            Label1.Text &= "<li><a href=""" & ekitem.QuickLink & """>" & ekitem.Title &
"</a>"
        Next
        Label1.Text &= "</ul>"
```

This example displays the quick link for every content block in the collection, formatted as a bulleted list. You can use similar code to display a List Summary or search results. The following explains the new (red) code above.

- `label1.Text = "<ul>"` displays the opening tag for the bulleted list
- `For Each ekitem In myColl.EkItems` creates a loop for all content blocks in the collection
- `label1.Text &= "<li><a href=" & ekitem.QuickLink & ">" & ekitem.Title & "</a></li>"` for each content block in the collection, displays its quicklink and title
- `Next` loops through all content blocks in the collection
- `label1.Text &= "</ul>"` closes the bulleted list

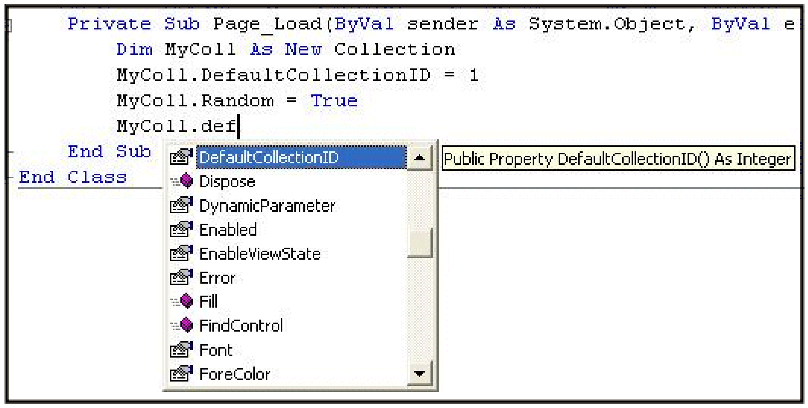
Server Control Properties in Code Behind

Every server control has properties associated with it that you can only access programmatically. This subsection explains, what they are, how to access them, and how to use them.

- "Displaying Properties for a Control" on page 21-14
- "Mutual Server Control Properties in Code Behind" on page 21-15
- "Accessing Additional Properties" on page 21-17
- "Accessing Items in an Array" on page 21-22
- "Referencing the Page Property" on page 21-22

Displaying Properties for a Control

You can use Visual Studio's intellisense feature to display a control's properties. The intellisense box appears as soon as you insert the period (.) after the object, as illustrated below.



The intellisense box displays *all* properties that can be applied. For a description of Ektron's standard server control properties, see"List of Server Controls" on page 21-38. To learn about native VS properties, see its documentation.

The property's tooltip text indicates its type. In the above example, you can see that the DefaultCollectionID's type is integer.

For more information about accessing Ektron CMS400.NET object properties, see "Customizing the Server Control in the Code Behind" on page 21-24.

Mutual Server Control Properties in Code Behind

There are several read-only properties that can be called in the code behind and used by every server control. The list below explains these properties.

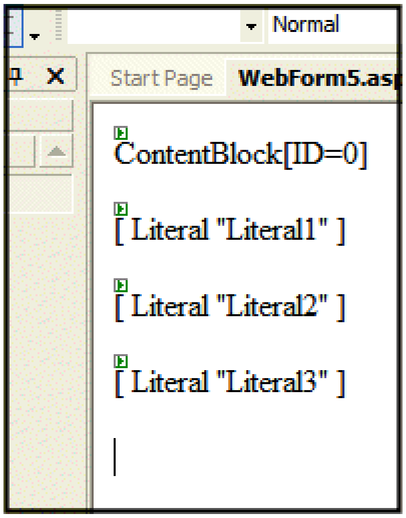
Note: The properties do not display values within Visual Studio during design time. Instead, they only display values at run time, which are dependent on the user's login status.

Property	Value	Data Type
IsLoggedIn	Tells if a user is logged in to Ektron CMS400.NET. **True** = User is logged in **False** = User is not logged in	Boolean
LoggedInUserName	Gets the Ektron CMS400.NET user name to display.	String
LoggedInUserID	Gets the Ektron CMS400.NET ID of the user to display.	Integer

These properties will allow you to personalize any page with your users names and IDs, and show if they are logged in. Here is an example of using these properties in code behind.

Note: You must be logged in to Ektron CMS400.NET for this example to show your name and ID.

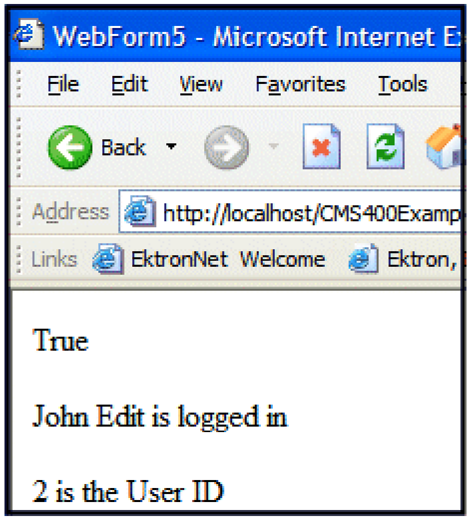
1. Drag an Ektron CMS400.NET server control onto a Web form.
2. Drag three Literals onto the Web form.



3. Open the code behind for the Web form.
4. Add the following code to the Page_Load event.

```
Literal1.Text = ContentBlock1.IsLoggedIn
If ContentBlock1.IsLoggedIn Then
   Literal2.Text = ContentBlock1.loggedInUserName & " is logged in "
   Literal3.Text = ContentBlock1.loggedInUserID & " is the User ID "
End If
```

5. Build and run the solution.
6. Browse to the login page and log in.
7. Browse to the new Web form you added.
8. The login information is displayed.



Accessing Additional Properties

In addition to the standard properties, Ektron CMS400.NET provides access to additional properties for the following objects.

- ListSummary
- Collection
- Search
- ContentBlock
- FormBlock

To access additional properties, use the same syntax you use for standard properties but add `.ekitem` or `.ekitems` after the object. Here is an example.

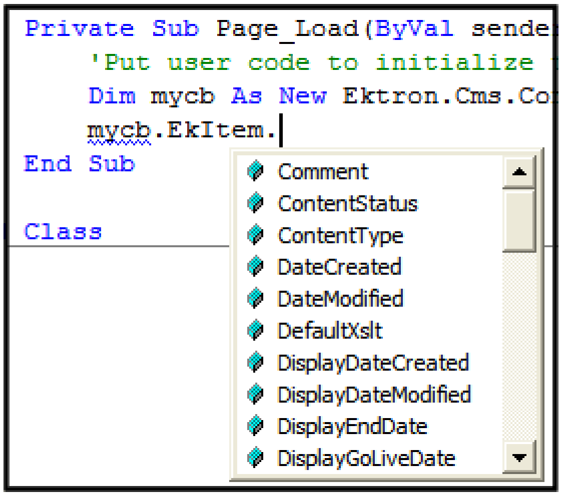
```
dim MyCB as New ContentBlock
MyCB.DefaultContentID = 30
MyCB.ID = “ContentBlock1”
MyCB.Page = Page
MyCB.Fill()
label1.text = MyCB.EkItem.dateCreated
```

or

```
dim MyCB as new Ektron.Cms.Controls.ContentBlock
MyCB.DefaultContentID = 30
MyCB.ID = “ContentBlock1”
MyCB.Page = Page
MyCB.Fill()
label1.text = MyCB.EkItem.dateCreated
```

Warning! To access additional properties for the Collection, ListSummary, and Search objects, use ekitems, not ekitem. For example: MyColl.ekitems(0).dateCreated. where (0) is the index of the array. For more Information on using ekitems, see "Accessing Items in an Array" on page 21-22.

You can use intellisense to select from a list of additional object properties, as shown below.



The additional properties are listed below.

Note: The following properties are read-only. For example, you can get a content block's ID and pass it through to another part of the code, however you cannot set a content blocks ID to be shown. `mycb.Ekitem.id = 8` will not set a content block's ID. The correct way to set a content blocks ID is `DefaultContentID = 8`.

Property	Description	For more information, see
Comment	The content block's comment.	
ContentStatus	The status of the content block. ■ approved ■ checked out ■ checked in ■ expired ■ pending deletion ■ pending expiration ■ pending start date ■ submitted	"Content Statuses" on page 7-133

Property	Description	For more information, see
ContentType	One of the following - all types - archived content - archived forms - content - forms	To learn about archived content, see "Scheduling Content to Begin and End" on page 7-195.
DateCreated	The date when the content block was created, formatted as a .NET date type.	
DateModified	The date when the content block was modified, formatted as a .NET date type.	
DefaultXslt	The default XSLT used to display the content.	
DisplayDateCreated	The date when the content block was created. It is formatted as a string that represents Ektron CMS400's display of the date.	
DisplayDateModified	The date when the content block was edited. It is formatted as a string that represents Ektron CMS400's display of the date.	
DisplayEndDate	The content block's end date. It is formatted as a string that represents Ektron CMS400's display of the date.	"Setting an End Date on Content" on page 7-197
DisplayGoLiveDate	The content block's start date. It is formatted as a string that represents Ektron CMS400's display of the date.	"Setting a Start Date" on page 7-195
DisplayStartDate	The content block's start date. It is formatted as a string that represents Ektron CMS400's display of the date.	"Setting a Start Date" on page 7-195
EndDate	The content block's end date, formatted as a .NET date type.	"Setting an End Date on Content" on page 7-197

Property	Description	For more information, see
EndDateAction	archive display archive expire refresh report	"Setting Archive Options" on page 7-198
FolderID	The ID of the folder that contains each content block.	
GoLiveDate	The content block's start date formatted as a .NET date type.	"Setting a Start Date" on page 7-195
Html	The content that makes up the content block. If content block is in XML it will return it as raw XML content.	
Hyperlink	Content block title wrapped by `<a href>` tags.	
Id	The content block 's ID number.	
InheritedFrom	If folder permissions are inherited, the folder from which they are inherited.	"Inheritance" on page 5-44
IsInherited	Whether a content block's permissions are inherited.	"Inheritance" on page 5-44
IsPrivate	Whether or not a content block is private.	"Private Content" on page 7-191
Language	The content block's language.	"Working with Multi-Language Content" on page 14-1
LastEditorFname	The first name of the last person to edit the content block.	
LastEditorLname	The last name of the last person to edit the content block.	
PackageDisplayXSLT	If the content block is XML, the name of its XSLT.	
QuickLink	The content block's quicklink.	"Quicklinks and Forms" on page 8-22

Property	Description	For more information, see
StartDate	The content block's start date formatted as a .NET date type.	"Setting a Start Date" on page 7-195"
Status	The status of the content block - approved - checked out - checked in - expired - pending deletion - pending expiration - pending start date - submitted	"Content Statuses" on page 7-133"
Teaser	The content block summary.	"Adding HTML Content" on page 7-15
TemplateLink	Currently empty and not being used with the ContentBlock server control.	
Title	The content block title.	
UserID	Last user who edited the content.	
Xslt1	The content block's first Xslt, as defined in Ektron CMS400.NET.	
Xslt2	The content block's second Xslt, as defined in Ektron CMS400.NET.	
Xslt3	The content block's third Xslt, as defined in Ektron CMS400.NET.	
Xslt4	The developer can use this property programmatically. Ektron CMS400.NET only uses Xslt1, 2 and 3 in the workarea.	
Xslt5	The developer can use this property programmatically. Ektron CMS400.NET only uses Xslt1, 2 and 3 in the workarea.	

Accessing Items in an Array

To access and manipulate content blocks returned by an object, use the common class `Ektron.Cms.Common.ContentBase`. *EkItems* is an array of Ektron.Cms.Common.ContentBase. *EkItem* is a single Ektron.Cms.Common.ContentBase.

Search, Collection and ListSummary have EkItems (an array of ContentBase), while ContentBlock has a single EkItem. Here is an example of how to use this feature.

```
dim MyC as new Ektron.Cms.Controls.Collection
MyC.DefaultCollectionID = 1
MyC.ID = "Collection1"
MyC.Page = Page
MyC.Fill()
dim item as Ektron.Cms.Common.ContentBase
MyC.Text = "<ul>"
for each item in MyC.EkItems
MyC.Text &= "<li>" & item.Title & "</lI>"
next
MyC.Text &= "</ul>"
Response.Write(MyC.Text())
```

This example formats every item in the collection in a bulleted list.

Note: For information on using ekitems with the eCommerce server controls, see "Using the EkItems Property with eCommerce Server Controls" on page 17-318 and "Using eCommerce Server Control Events" on page 17-317.

Referencing the Page Property

Server controls require a reference to their parent page (for example, utilizing the `DynamicParameter` property on a content block to check for a query string), you must provide access to the page object if you declared your control in the code behind. To do this, set the control's `Page` property to the Web page you're working on. For an example, see the code in red and italics below.

```
dim search as new Ektron.Cms.Controls.Search()
MySearch.ID = "Search1"
MySearch.Page = Page
MySearch.Fill()
```

With C#, use this syntax.

```
Ektron.Cms.Controls.Search MySearch = new Ektron.Cms.Controls.Search();
MySearch.Page = Page;
MySearch.Fill();
```

This relationship is only required when inserting a control in the code behind. When dragging and dropping, even if you make changes in code behind, the relationship is automatically generated.

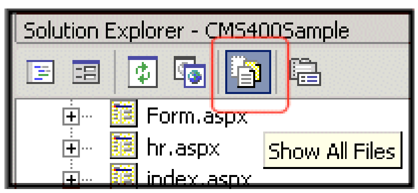
Best Practice

Ektron recommends including the `Page` property reference when using the server controls as components in the code behind.

Customizing Server Controls

One of Visual Studio's strengths is its separation of coding and logic from presentation. Web page formatting is handled by a page's HTML, while the logic is handled by the code behind, which is stored in the corresponding .vb file. For example, if the ASP.NET page is mypage.aspx, the code behind file is mypage.aspx.vb.

Note: If you do not see the code behind files, click the Show All Files button on the VS Solution Explorer toolbar.



Within the vb file, you can use Visual Basic to insert code to manipulate the events that occur on the page.

This subsection contains the following topics:

- "Recognizing the Server Control Within the HTML" on page 21-23
- "Recognizing the Server Control Within the Code Behind" on page 21-24
- "Customizing the Server Control in the Code Behind" on page 21-24
- "Troubleshooting Error Creating Control Message" on page 21-25

Recognizing the Server Control Within the HTML

Within a Web page's HTML, a `<cms>` tag wraps the Visual Studio object, as shown below.

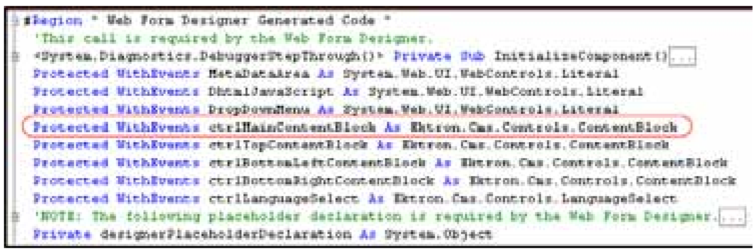
```
<cms:Search id="Search1" runat="server" ButtonText="Search" Dis-
play="Vertical"></cms:Search>
```

Above is an example of a Search Server Control. Below is an example of a ContentBlock Server Control.

<cms:ContentBlock id="ctrlMainContentBlock" runat="server" DefaultContentID="1" DynamicParameter="id" OverrideXslt="Default"></cms:ContentBlock>

Recognizing the Server Control Within the Code Behind

Within the Visual Studio code behind file, the Ektron server controls appear (along with the VS controls) in the Web Form Designer Generated Code section. When you click the plus sign (+) to display this section, you see something like the following. The content block listed in HTML above is circled below to help you see their relationship.



The next section of the code behind page loads the page into the browser.

Private Sub Page_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

We want our events to occur while the page is loading, so we'll add custom code following this line.

Customizing the Server Control in the Code Behind

To customize an Ektron server control in the code behind, insert code similar to the following *after* the Page_load command.

```
Dim MyObj As New Ektron.Cms.Controls.ContentBlock
```

This code declares a variable named MyObj and assigns to it the value of a content block. The content block is part of the Ektron.CMS.Controls content base, so it has access to the Ektron CMS400.NET database.

After defining MyObj as a content block, you can access its properties. For example, to assign a defaultID of 24, insert the following.

```
Dim MyObj As New Ektron.Cms.Controls.ContentBlock
MyObj.DefaultContentID = 24
```

Now, the content block can be specified dynamically in the URL of the hyperlink that calls it. If not, content block 24 displays.

This is just an example of programmatically applying property values to content blocks. For a complete list of properties available to Ektron CMS400.NET objects, see "List of Server Controls" on page 21-38.

Troubleshooting Error Creating Control Message

If you get an Error Creating Control message while trying to use a server control, you can view the text of the error message by hovering the mouse over the control. See illustration below.

(continued in Using Drag & Drop and Programmatically Together)

Data Binding with Server Controls

With data binding, you can bind Ektron server controls to a GridView Control, DataList Control, or Repeater Control. This gives more flexibility when you use data from the Ektron server controls. Benefits of data binding include ease of data manipulation and the ability to format data.

Warning! When HTML is bound to a column, you need to add `HtmlEncode = False` to it. Otherwise, the HTML appears as code. For example, **<p>**`Ektron Inc., an innovator in Web content management software, today announced...`**</p>**.

The following are data bindable Ektron Server Controls.

- Collection
- ContentList
- IndexSearch

- ListSummary
- MetaDataList
- RssAggregator

The following is an example of code behind that uses a GridView to display a Collection:

Note: For the example code below to work properly, you need to drag and drop a GridView server control on a Web form.

```
Dim myCol As New Ektron.Cms.Controls.Collection
MyCol.ID = "Collection1" '''Create an ID for the Collection
myCol.DefaultCollectionID = 4
myCol.Page = Page
myCol.Fill()
GridView1.DataSource = myCol
GridView1.DataBind()
```

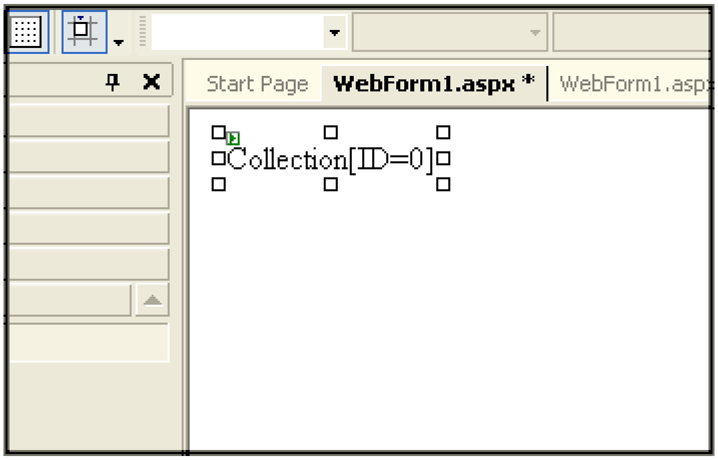
This subsection contains the following topics:

- "Steps to Data Binding Using Drag and Drop Server Controls" on page 21-26

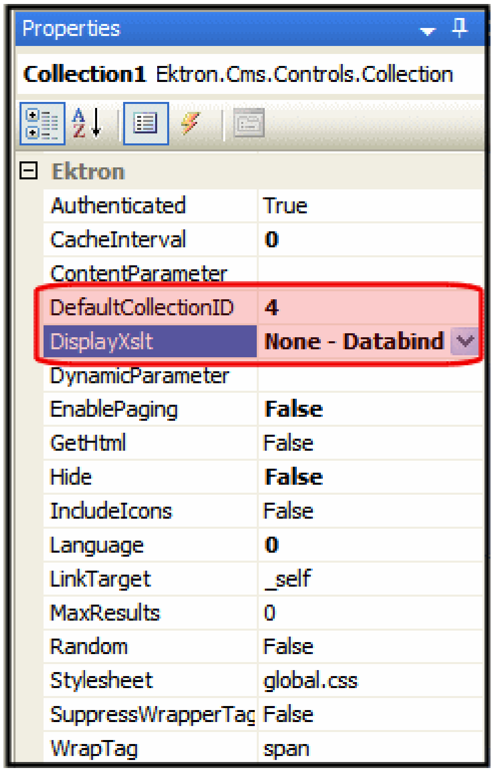
Steps to Data Binding Using Drag and Drop Server Controls

The following example uses a Collection.

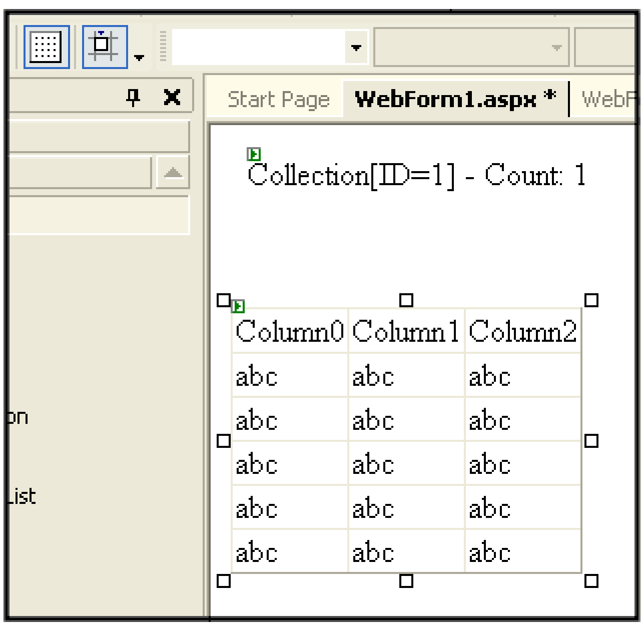
1. Create a new Web form.
2. Drag and drop a data bindable Server Control on the Web form. For example, a Collection server control.



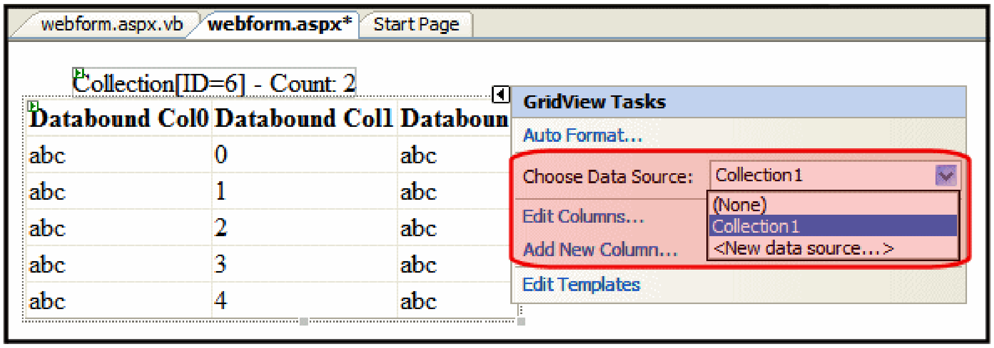
3. In properties, choose a `DefaultCollectionID` for the Server Control and make sure DisplayXslt is set to **None- DataBind Only**.



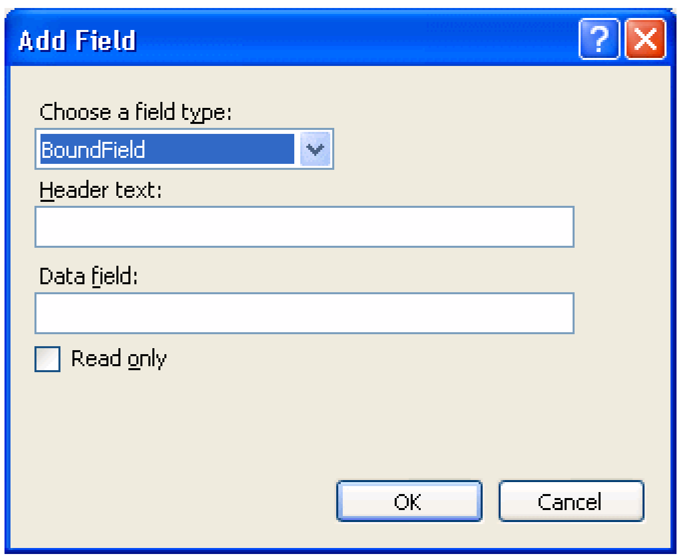
4. Drag and drop a GridView on the Web form.



5. In the GridView Tasks, choose the DataSourceID.



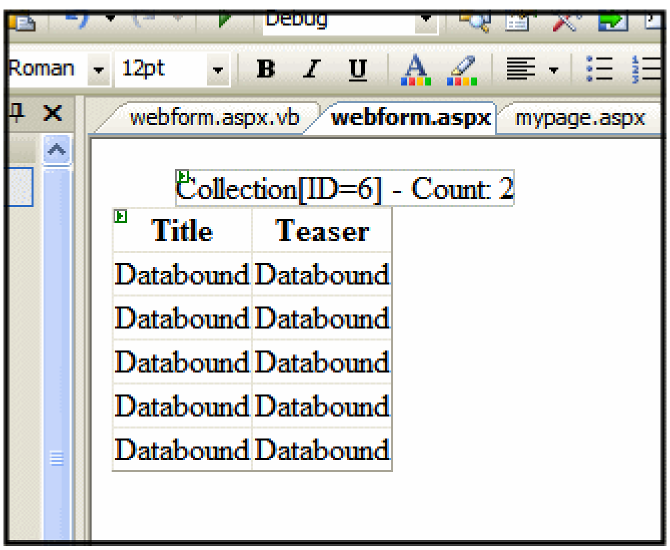
6. In code behind, add the following line of code to the Page add field.gifnit event:
   ```
   Collection1.Fill()
   ```
7. Select the columns to be databound by clicking **Add New Column** in GridView Tasks.
8. Complete the Add Field window according to the table below.



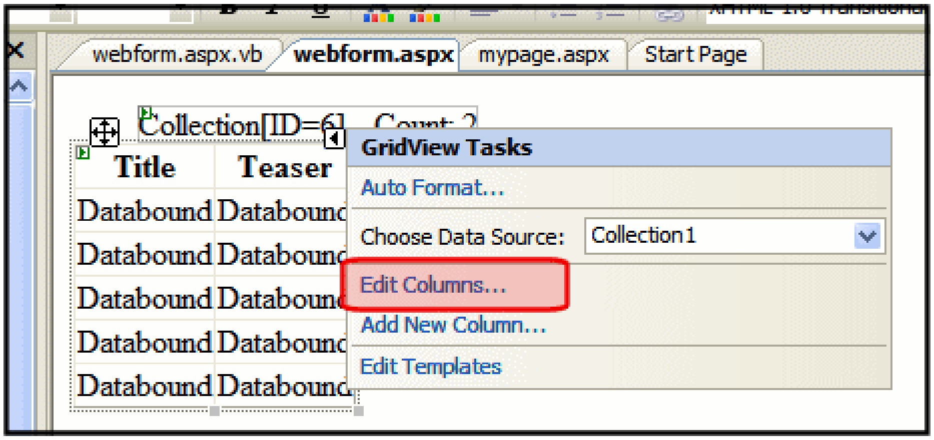
Field	Entry
Choose a field type:	BoundField
Header text:	The title name for each column.

Field	Entry
Data field:	The data to bind to each column. Choose one of the following: **ID** - the content block ID **Title** - the content block title **Teaser** - the content summary **Html** - the html content **StartDate** - the content's start date **DateModified** - the content's last modified date **EndDate** - the content's end date **LastEditorFname** - the last editor's first name **LastEditorLname** - the last editor's last name **QuickLink** - the content's quicklink **HyperLink** - the content's hyperlink **DisplayStartDate** - the string representation of the start date **FolderID** - the folder ID where the content is located **ContentStatus** - the content's status **Language** - the content's default language **DisplayDateModified** - string representation of the content's last modified date **DisplayEndDate** - string representation of the content's end date **EndDateAction** - an action tied to end date. For example, Refresh_Report **Comment** - the content's comments

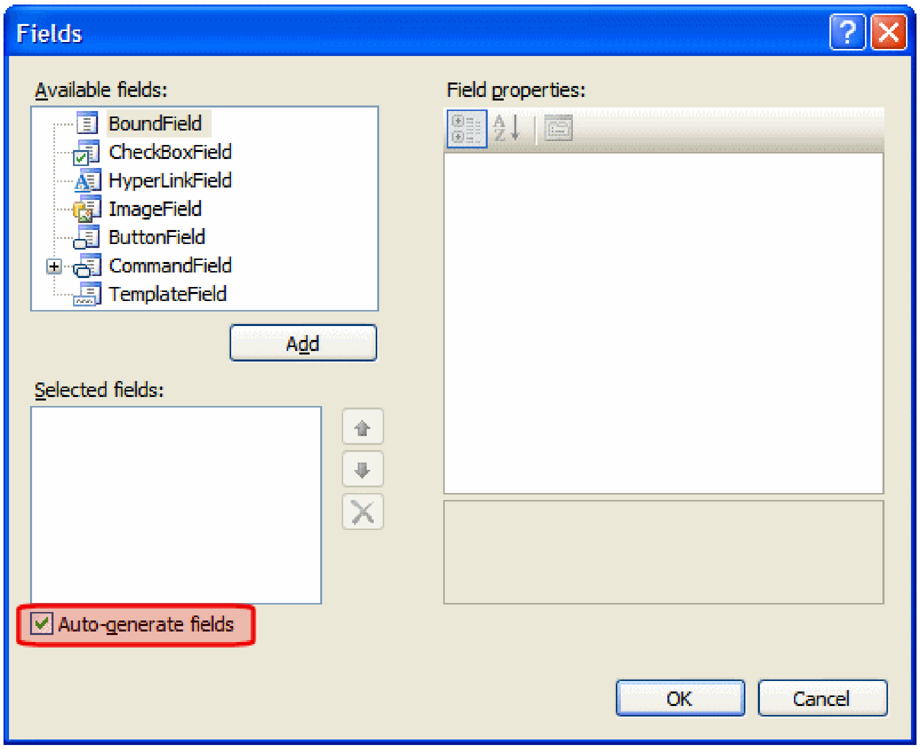
9. Click **OK**.
10. Repeat steps six, seven and eight for each column you want to add.



11. If you want to add all of the columns automatically, in the GridView Task menu click Edit Columns. Otherwise, skip to step thirteen.



12. Click the **Auto-generate fields** checkbox.



13. Click **OK**.

14. From the Build menu, click **Build Page**.

15. In design view, right click the form and select **View in Browser**.

Title	Teaser
Ektron Rated Positive	Ektron Inc., an innovator in Web content management software, today announced ...
Ektron to Demonstrate Healthcare	"Healthcare Content Indexing Framework" which enables hospitals, medical groups and health insurers to deliver indexed content via the Web.

For more information on GridView, DataList, Repeater and DetailsView, see the help inside Visual Studio.

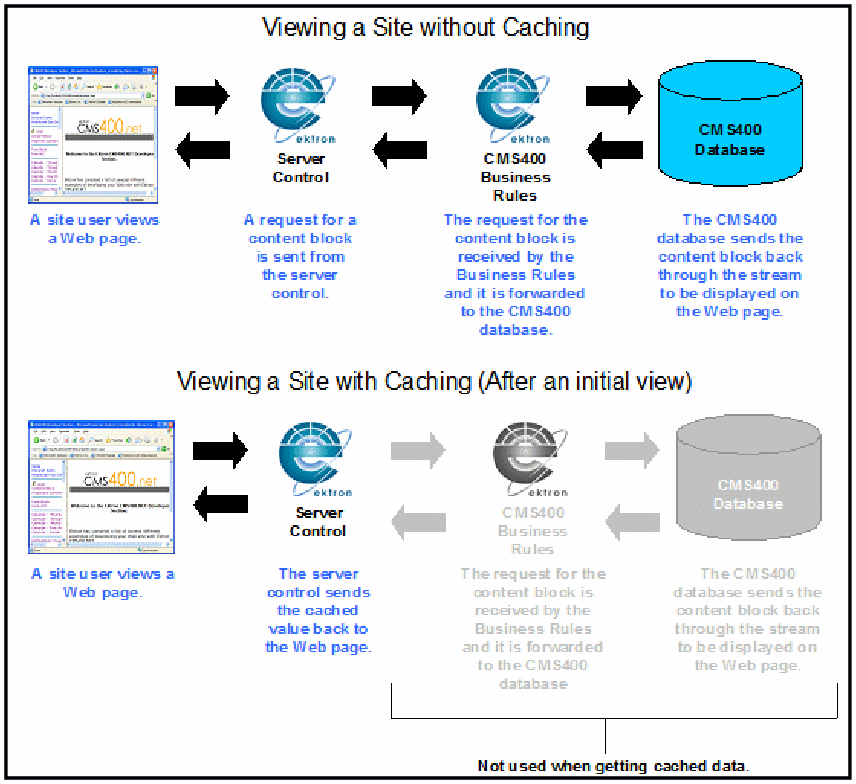
Caching with Server Controls

A key factor in building high-performance, scalable Web applications is the storage of items in memory after the first time they are requested. The items include data objects, pages, and parts of a page.

Known as caching, this process saves and later reuses page output or application data across HTTP requests. You can store items on the Web server or other software in the request stream, such as the proxy server or browser.

Caching saves time and resources because the server does not have to recreate information, particularly things that demand significant processor time or other resources.

The following illustrates data flow in non-cached and cached environments.



Ektron CMS400.NET provides two kinds of caching.

- Caching Individual Content - lets you cache part of a Web page; available with some server controls
- Page Level Caching - lets you cache an entire page; available with all server controls

Each is explained below.

Caching Individual Content

There are two kinds of caching of individual content.

- "Caching While not Logged In" on page 21-33
- "Caching While Logged In" on page 21-33

Caching While not Logged In

For a description of how Caching While not Logged In works, see "Caching with Server Controls" on page 21-31.

Caching While Logged In

When a user is logged in, caching prevents any changes from appearing on the site for the number of seconds defined in the cache interval. This reduces the number of database hits, which improves your server's performance.

For example, if you add a new item to a Collection, the change only appears on the site when the cache interval expires. However, the user can switch to Preview mode to see the updated Collection immediately. See Also: "Site Preview" on page 3-4

Warning! Caching while logged in does not work with Private content. See Also: "Private Content" on page 7-191

Setting up Caching of Individual Content

To set up caching of individual content for any Web page, follow these steps.

1. Make sure the Web.config file's `ek_CacheControls` property's `value = "1"` (one). This is the default. This setting lets you control caching with server controls.
2. Add a server control that supports caching of individual content to a Web form. See "The caching of individual content is available for the server controls listed below." on page 21-33.
3. Set the server control 's `CacheInterval` property to the length of time the data should be cached. For example, to cache data for five minutes, set `CacheInterval` to 300 (three hundred).

   The default value is 0 seconds. So, you must change the default to enable caching.

Server Controls that Support Caching of Individual Content

The caching of individual content is available for the server controls listed below.

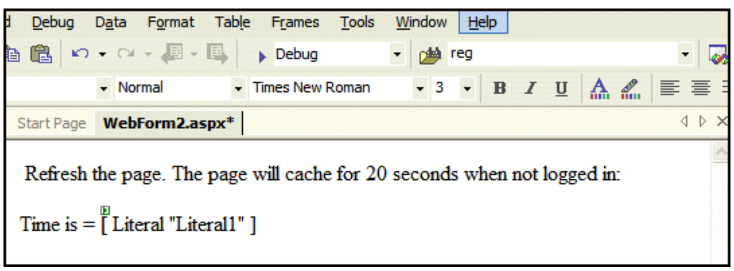
Control	Caching available while not logged in	Caching available while logged in
ActiveTopics	X	
All blog controls	X	
Collections	X	X
CommunityDocuments	X	
CommunityGroupBrowser	X	
CommunityGroupList	X	
CommunityGroupMembers	X	
CommunitySearch	X	
ContentBlock	X	
ContentList	X	X
DhtmlMenu	X	X
Directory	X	
Favorites	X	
FlexMenu	X	
FormBlock	X	
Forum	X	
Friends	X	
ListSummary	X	X
MetadataList	X	X
Menu	X	X
Poll	X	
PostHistory	X	

Control	Caching available while not logged in	Caching available while logged in
SiteMap	X	
SmartMenu	X	X
TagCloud	X	
UserProfile	X	

Page Level Caching

Below is an example of a page level cache for non logged-in users. In this example, you use a Server Control to define whether a user is logged in or not. Then, define if the time is cached, based on the user's status.

1. Create a new Web form in your Ektron CMS400.NET project.
2. Add the following text to the Web form:
```
Refresh the page. The page will cache for 20 seconds when not logged in:
Time is =
```
3. Next to **Time is =**, add a literal.



4. Below that, add a ContentBlock Server Control.
5. Set the DefaultContentID. For this example, `DefaultContentID = 20`.
6. Add the following to the Page_Load event in the code behind.

```
If Not ContentBlock1.IsLoggedIn Then
Response.Cache.SetExpires(DateTime.Now.AddSeconds(20))
Response.Cache.SetCacheability(HttpCacheability.Public)
Response.Cache.SetValidUntilExpires(True)
Response.Cache.VaryByParams("id") = True
Response.Cache.SetVaryByCustom("cmsCache")
End If
Literal1.Text = Now()
```

7. Build your Web form.

8. Browse to your Web form using your browser.
9. Press your browser's refresh button.

If you are not logged in to CMS400.NET, the time remains for twenty seconds. After twenty seconds, when you refresh, the new time appears.

Note: You can use the same code in a user control to cache output in a particular region of the page.

Using Ajax Enabled Server Controls and Custom Code

Best Practice

When using Ajax server controls and custom code, wrap the custom code in a check for "is not a callback" so it is not executed when a callback from an Ajax server control occurs.

If you use an Ajax-enabled server control and write custom code, it may generate an exception, indicating the server control does not work. This issue happens during callback for the Ajax server control when custom code accesses a property that is filled during page load, but not filled during callback.

For example, a Poll server control is on a Web form, and you want the title of a content block to appear in a literal on that form. The `EkItem.Title` property for the content block is filled upon page load. When a site user answers the poll question, an exception occurs during the callback because the `EkItem.Title` property is not refilled. However, the site user does not see the exception. It just looks like the Poll server control is not working.

Below is an example of custom code that makes the content block's title appear in the literal:

```
Literal1.Text = ContentBlock1.EkItem.Title
```

To solve this issue, wrap the custom code in a check for "is not a callback". This prevents the code execution when callback occurs. For example,

```
[C#]

If( !IsCallback ) {

Literal1.Text = ContentBlock1.EkItem.Title

}
```

```
[VB]

If ( Not IsCallback )

Literal1.Text = ContentBlock1.EkItem.Title

End If
```

Displaying Custom XML in Ektron's Server Controls

Ektron provides a CustomXml property in several server controls that allows you to add custom XML to a control's generated XML before being processed by its XSLT.

This property is available in code behind when using these server controls:

- Cart
- Checkout
- CurrencySelect
- MyAccount
- OrderList
- Product
- ProductList
- ProductSearch
- Recommendation

CustomXml Property Usage Example

Below is a C# example of using the CustomXml property in code behind.

```
protected void Page_Load(object sender, EventArgs e)
{
product1.CustomXml = "<banner>Save $$$ While Christmas
Shopping!</banner><specials><special><link>ProductDemo.aspx?id=1013</link><text>A great
gift for Dad!</text></special><special><link>ProductDemo.aspx?id=1015</link><text>A
great gift for Mom!</text></special></specials>";
}
```

Example of CustomXml XSLT Output

Below is an example of the XML sent to the XSLT file.

```
<root>
   <customXml>
```

```
        <banner>Save $$$ While Christmas Shopping!</banner>
        <specials>
            <special>
                 <link>ProductDemo.aspx?id=1013</link>
                 <text>A great gift for Dad!</text>
            </special>
            <special>
                 <link>ProductDemo.aspx?id=1015</link>
                 <text>A great gift for Mom!</text>
            </special>
        </specials>
    </customXml>
    <otherTags>
     ... (for illustration only, there would be many other tags here)
    </otherTags>
</root>
```

List of Server Controls

To customize your Ektron CMS400.NET application, use these server controls.

Server Control Names	Description	More Information
Analytics	Track statistics about visits to your Web site.	
AssetControl	The AssetControl server control, when viewed on a Web form, displays a drag and drop box for users to upload assets to CMS400.NET or update an existing asset.	"AssetControl Server Control" on page 7-486
Blog	Ektron provides nine server controls that relate to displaying a Blog on a Web site. They are: - The Blog server control - The BlogCalendar server control - The BlogCategories server control - The BlogEntries server control - The BlogPost server control - The BlogRecentPost server control - The BlogRoll server control - The BlogRSS server control - The BlogArchive server control	"Introduction to Blog Server Controls" on page 7-532

Server Control Names	Description	More Information
BreadCrumb	Creates a breadcrumb trail of where site visitors have been and allows them to navigate back to previous pages.	"BreadCrumb Server Control" on page 9-285 For information on other Breadcrumb types, see "FolderBreadcrumb Server Control" on page 9-294 and "SiteMap Server Control" on page 9-298
BusinessRules	Adds a Business Rule created in the CMS400.NET Workarea to a Web form.	"BusinessRules Server Control" on page 12-13
Calendar	Displays an event calendar.	

Server Control Names	Description	More Information
Community Platform	These controls enable you to build a community site. - CommunityDocuments server control - CommunityGroupBrowser server control - CommunityGroupList server control - CommunityGroupMembers server control - CommunityGroupProfile server control - Favorites server control - Friends server control - Invite server control - MessageBoard server control - Messaging server control - PhotoGallery server control - SocialBar server control - UserProfile server control - CommunitySearch server control - TagCloud server control	"CommunityDocuments Server Control" on page 16-146 "CommunityGroupBrowser Server Control" on page 16-129 "CommunityGroupList Server Control" on page 16-134 "CommunityGroupMembers Server Control" on page 16-141 "CommunityGroupProfile Server Control" on page 16-123 "Favorites Server Control" on page 16-67 "Friends Server Control" on page 16-54 "Invite Server Control" on page 16-255 "MessageBoard Server Control" on page 16-97 "Messaging Server Control" on page 16-259 "PhotoGallery Server Control" on page 16-76 "SocialBar Server Control" on page 16-269 "UserProfile Server Control" on page 16-49 "CommunitySearch Server Control" on page 16-301 "TagCloud Server Control" on page 16-293
Collection	Displays links generated by collections.	"Collection Server Control" on page 9-118
ContentBlock	Displays and manages a content block.	"ContentBlock Server Control" on page 7-201
ContentList	Displays a list of content blocks created from a comma delimited list.	"ContentList Server Control" on page 7-210

Server Control Names	Description	More Information
ContentRating	Place a rating scale on any page of your Web site. The scale lets Ektron CMS400.NET collect feedback by giving site visitors the opportunity to rate a particular content item.	"ContentRating Server Control" on page 7-747
ContentReview	Places a star based rating scale on any page of your Web site. This control can also be used to retrieve and display visitor reviews and comments.	"ContentReview Server Control" on page 7-736
DesignTime Diagnostic	The DesignTimeDiagnostic server control is used to verify the connection to Ektron's server controls Web service.	"DesignTimeDiagnostic Server Control" on page 21-57
DhtmlMenu	Displays a drop down menu with submenus.	"DhtmlMenu Server Control" on page 9-191
Directory	The Directory server control lets you customize the behavior of the Taxonomy feature. You place this control on any Web form to display a taxonomy.	"Directory Server Control" on page 9-241
eCommerce	The eCommerce server controls allow you to set up an online market place where site visitors can purchase merchandise, services or content. • Cart Server Control • Checkout Server Control • CurrencySelect Server Control • MyAccount Server Control • OrderList Server Control • Product Server Control • ProductList Server Control • ProductSearch Server Control • Recommendation Server Control	"Cart Server Control" on page 17-6 "Checkout Server Control" on page 17-21 "CurrencySelect Server Control" on page 17-74 "MyAccount Server Control" on page 17-276 "OrderList Server Control" on page 17-265 "Product Server Control" on page 17-201 "Product List Server Control" on page 17-215 "ProductSearch Server Control" on page 17-223 "Recommendation Server Control" on page 17-247

Server Control Names	Description	More Information
FlexMenu	The FlexMenu server control displays a menu on a Web form. Although it looks and acts like a Smart Menu, its architecture is substantially different. Specifically, a FlexMenu creates XML. So, you can modify its behavior using an XSLT file, and change its appearance using a cascading style sheet (.css) file.	"Flexible Menu Server Control" on page 9-164
FolderBreadcrumb	FolderBreadcrumbs show you the path through the sitemap to the current page.	"FolderBreadcrumb Server Control" on page 9-294 For information on other Breadcrumb types, see "BreadCrumb Server Control" on page 9-285 and "SiteMap Server Control" on page 9-298
FormBlock	Displays a content block that is associated with a form.	"FormBlock Server Control" on page 7-281
Forum	Forums provide a Discussion Board where topics can be discussed on your Web site. There are three server controls associated with Discussion Boards. They are: - The Forum server control - The ActiveTopics server control - The PostHistory server control	"Discussion Board Server Controls" on page 7-665
ImageControl	Display a CMS400.NET image on a Web page. In addition, if a user has permission to edit the image, he can right click the image and a drag and drop box appears. This box allows a user to overwrite the existing file.	"ImageControl Server Control" on page 7-489
IndexSearch	Perform XML index searches on XML content. (XML content is created using Smart Forms.)	"IndexSearch Server Control" on page 7-394 For information on searching other content types, see "Web Search Server Control" on page 9-68

Server Control Names	Description	More Information
LanguageAPI	Allows developers to force a language for a Web site.	"LanguageAPI Server Control" on page 14-44
LanguageSelect	Lets user select language of site.	"LanguageSelect Server Control" on page 14-46
ListSummary	Displays a list of content block summaries.	"ListSummary Server Control" on page 9-270
Login	Displays the login or logout button, which lets the user log in and use Ektron CMS400.NET.	"Login Server Control" on page 3-6
Map	Displays a map that flags locations of interest to your site visitors. Each location is a CMS content item to which map information was added.	"Map Server Control" on page 9-247
Membership	Creates a form for site visitors to add themselves to your Membership users list.	"Membership Server Control" on page 16-30
Menu	Calls a defined menu to be used with an XSLT to display the menu.	"Menu Server Control" on page 9-184
MetaData	Adds metadata contained in content blocks to a Web page.	"MetaData Server Control" on page 7-171
MetaDataList	Creates a list of content blocks based on the metadata contained in the content blocks.	"MetaDataList Server Control" on page 7-175
Personalization	Personalization server controls allow you to create a Web page that site users can personalize. The following server controls allow for personalization: - EktronCatalogPart - EktronCommunityCatalogPart - EktronWebPartZone - PersonalizationManager	"Personalization Server Controls" on page -696
Poll	Displays a poll or survey created from an Ektron CMS400.NET form on a Web page.	"Poll Server Control" on page 7-284
RssAggregator	Aggregates an RSS feed from an RSS Web site.	"RssAggregator Server Control" on page 19-17

Server Control Names	Description	More Information
Sitemap	The Sitemap server control utilizes the folder breadcrumb information in the Workarea to display a sitemap of your site.	"SiteMap Server Control" on page 9-298 For information on other Breadcrumb types, see "BreadCrumb Server Control" on page 9-285 and "FolderBreadcrumb Server Control" on page 9-294
SmartMenu	The Smart Menu server control displays a menu on a Web page. This menu style is the most robust of the three delivered with Ektron CMS400.NET.	"Smart Menu Server Control" on page 9-178
WebSearch	The Web Search server control lets you customize the behavior of the search.	"Web Search Server Control" on page 9-68

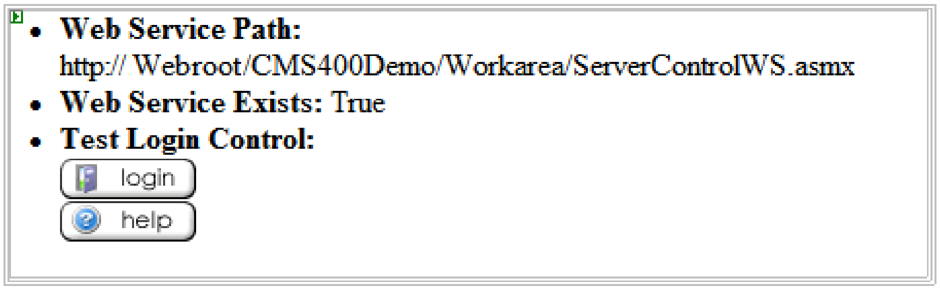
DesignTimeDiagnostic Server Control

Warning! This control is for use in design-time only, nothing is rendered at run-time.

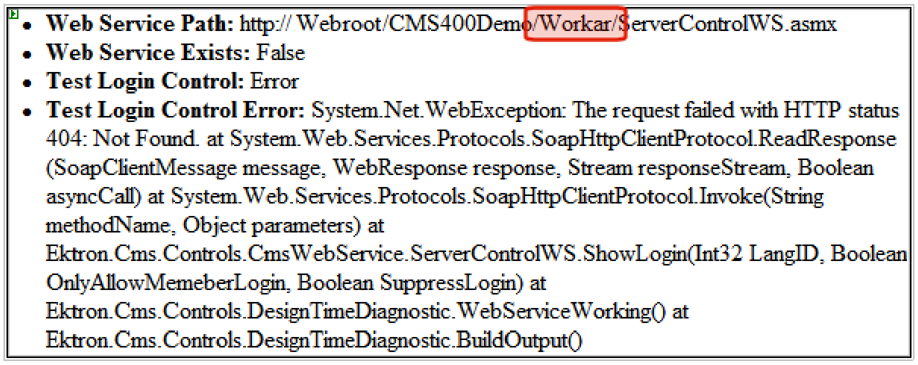
The DesignTimeDiagnostic server control is used to verify the connection to Ektron's server controls Web service. When added to a Web form, this control provides the following information:

- **Web Service Path** - displays the server control Web service path in your web.config file.
- **Web Service Exists** - calls a method in the Web service that returns True when the Web service exists. When it does not, it returns False.
- **Test Login Control** - displays the Login server control to show that the Web service is connected and working properly. When not connecting properly, an error message is displayed.

Below is an example of the control on a page connected to the Web service.



Below is an example of the control on a page not connecting to the Web service. Note that the path is not the correct path. It should be:
`http://192.168.0.82/siteroot/Workarea/ServerControlWS.asmx`



- **Web Service Path:** http:// Webroot/CMS400Demo/Workar/ServerControlWS.asmx
- **Web Service Exists:** False
- **Test Login Control:** Error
- **Test Login Control Error:** System.Net.WebException: The request failed with HTTP status 404: Not Found. at System.Web.Services.Protocols.SoapHttpClientProtocol.ReadResponse (SoapClientMessage message, WebResponse response, Stream responseStream, Boolean asyncCall) at System.Web.Services.Protocols.SoapHttpClientProtocol.Invoke(String methodName, Object parameters) at Ektron.Cms.Controls.CmsWebService.ServerControlWS.ShowLogin(Int32 LangID, Boolean OnlyAllowMemeberLogin, Boolean SuppressLogin) at Ektron.Cms.Controls.DesignTimeDiagnostic.WebServiceWorking() at Ektron.Cms.Controls.DesignTimeDiagnostic.BuildOutput()

DesignTimeDiagnostic Server Control Properties

The DesignTimeDiagnostic server control has no definable ektron properties.

Dreamweaver Extension Support

Ektron CMS400.NET has a custom Adobe® Extension Package, which allows you to not only create your templates in Dreamweaver® or UltraDev™, but also to insert the custom functions through Dreamweaver®.

To do this, all you need is Ektron CMS400.NET, Dreamweaver®/UltraDev™, and to keep reading.

Ektron supports Dreamweaver extensions for the following scripting languages:

- ASP.NET - for .NET pages
- ASP - for Active Server Pages
- CFM - for ColdFusion pages
- JSP - Java Server Pages
- PHP - Hypertext Preprocessor

The following sections are contained in this chapter:

Requirements

To use a Dreamweaver extension supplied by Ektron, you need to have Dreamweaver 7.0.1 or higher installed, as well as Ektron CMS400.NET.

Preparing Dreamweaver for Ektron CMS400.NET Functions

To have Ektron CMS400.NET function symbols appear in Dreamweaver, while editing a Web page, you must edit two PreviewModeCustomTags.edml Dreamweaver files. The steps below explain how to edit the files.

1. In Windows Explorer, navigate to the Translator > ASP.NET_VB location in the Dreamweaver install location. For example:

```
C:\Program Files\Adobe\Dreamweaver X\Configuration\Translators\ASP.NET_VB\
```

Note: In the path above, *X* represents the version of Dreamweaver you are using. For example, Dreamweaver 8 or Dreamweaver MX.

2. Open the PreviewModeCustomTags.edml file using Notepad.
3. Search for the following line of code in the file.

```
<searchPattern
requiredLocation="openTag"><![CDATA[/runat\s*=\s*"?server"?/i]]></searchPattern>
```

4. Add the following line after it.

```
<searchPattern
requiredLocation="tagName"><![CDATA[/^(?!cms:)/i]]></searchPattern>
```

Warning! This line must be inserted after the line above. Order is important.

5. Save and close the file.
6. Navigate to the Translator > ASP.NET_Csharp location in the Dreamweaver install location. For example:

```
C:\Program Files\Adobe\Dreamweaver X\Configuration\Translators\ASP.NET_Csharp\
```

Note: In the path above, *X* represents the version of Dreamweaver you are using. For example, Dreamweaver 8 or Dreamweaver MX.

7. Open the PreviewModeCustomTags.edml file using Notepad.
8. Search for the following line of code in the file.

```
<searchPattern
requiredLocation="openTag"><![CDATA[/runat\s*=\s*"?server"?/i]]></searchPattern>
```

9. Add the following line after it.

```
<searchPattern
requiredLocation="tagName"><![CDATA[/^(?!cms:)/i]]></searchPattern>
```

Warning! This line must be inserted after the line above. Order is important.

10. Save the file.

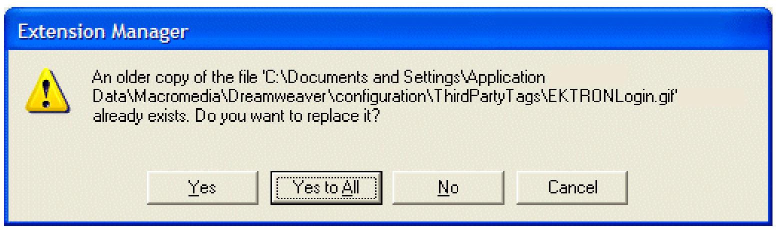
You are now ready to Install the Ektron CMS400.NET extension. See Also: "Installing the Extensions" on page 21-48

Installing the Extensions

There are two extensions that can be installed on your server:

- Ektroncms400.mxp - Adds ASP.NET extensions
- C400_ASP_PHP_CF_JSP.mxp - adds ASP, PHP, CF and JSP extensions

You can have both extensions installed at the same time. The extensions do not affect each other. When you install the second extension, you might receive the following message:



If you see this message or one that say the files are newer, click **Yes to All** to continue. Overwriting the files will not affect the extensions.

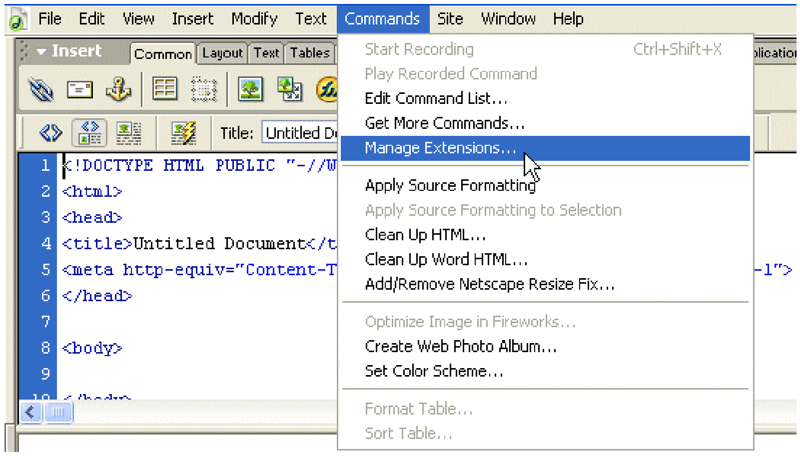
Before you can insert the Ektron CMS400.NET custom functions through Dreamweaver®, you must install at least one of the extensions. Listed below are the steps to install an extension.

Note: For additional information about installing an extension, refer to your Dreamweaver® Manual.

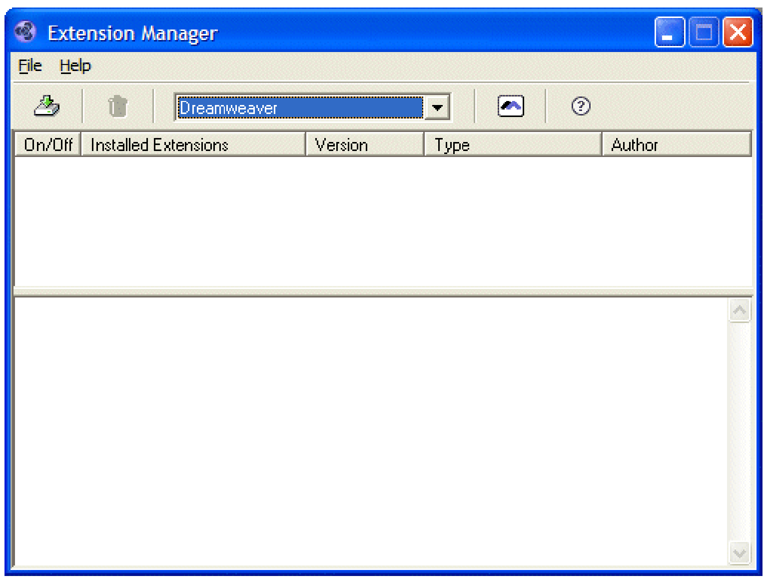
To install an extension, follow these steps.

1. Begin by following the path in Dreamweaver:

   Commands > Manage Extensions...



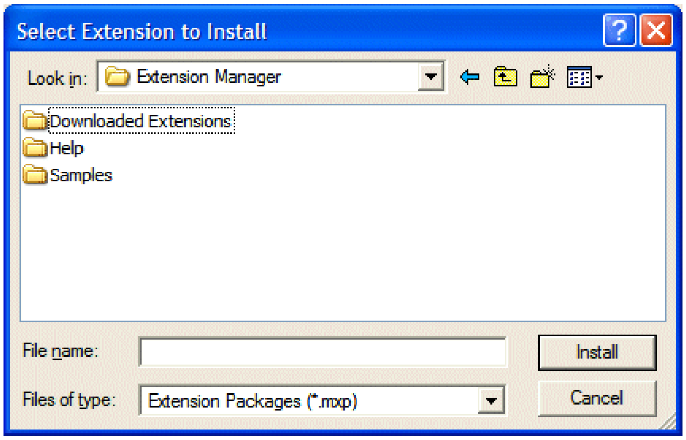
2. The Extension Manager is displayed.



3. From this dialog box, follow the path:

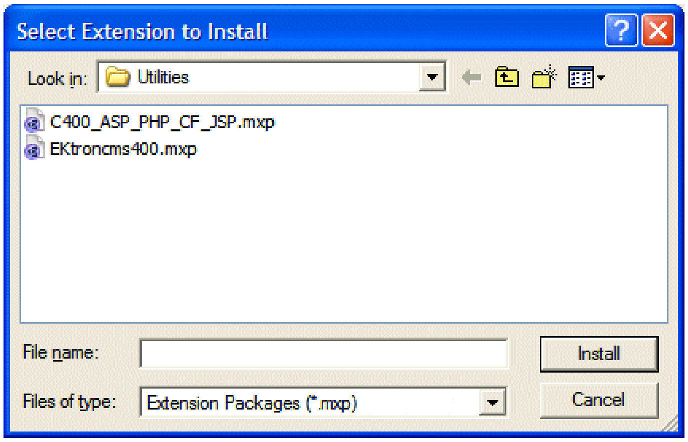
   File > Install Extension...

4. The Select Extension to Install window opens.



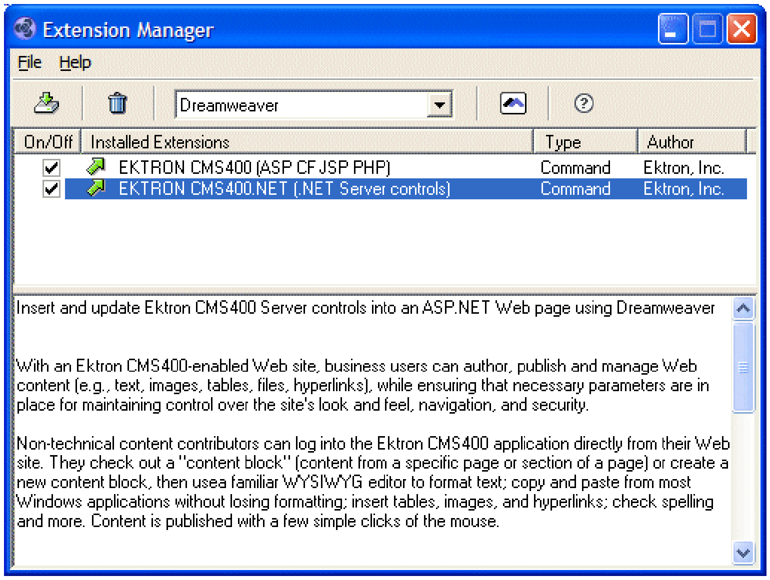
5. Locate the Extension Package (.mxp) file that corresponds to Ektron CMS400.NET. By default, the file gets installed to the following directory:

   C:\Program Files\Ektron\CMS400vXX\Utilities



Note: In the folder path, vXX represents the version of Ektron CMS400.NET you have installed.

6. After you select the file, click the **Install** button.
7. The installation begins with the Extension Manager Disclaimer. Click **Accept**.
8. The extension begins to install. Once installed, you see a confirmation box.
9. Click **OK** to continue.
10. The Extension Manager is again displayed, but with the added extension.



11. If needed, exit Dreamweaver®, then start it back up.

Now you can use the Ektron CMS400.NET Extension Pack.

Refer to "Using the Ektron CMS400.NET Extensions" on page 21-61 for more information on using Dreamweaver® to create and edit templates for Ektron CMS400.NET.

Setup

Before you can use Dreamweaver®/UltraDev™ to create and edit Ektron CMS400.NET templates, you should configure the Ektron CMS400.NET Extension. Listed below are the configurative options for the extension in Dreamweaver:

- Username
- Password
- Domain
- Server File
- Server
- Include
- Check for Include

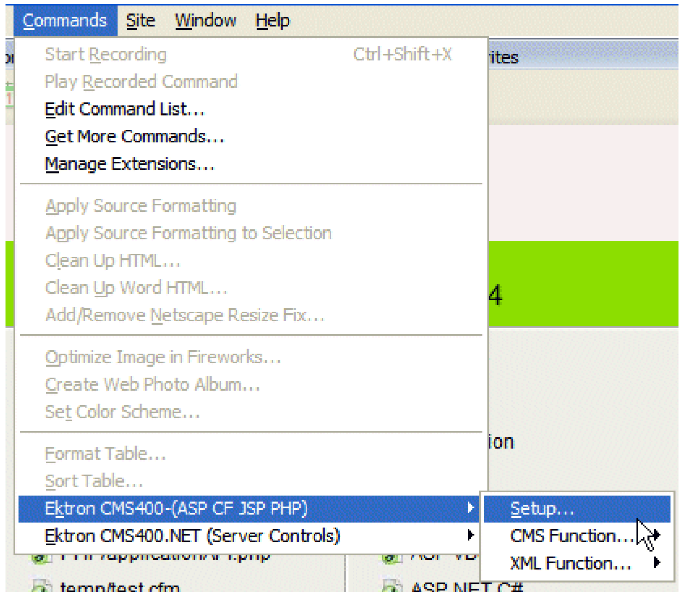
To change these options, follow these steps.

1. If you use ASP, ColdFusion, JSP or PHP, follow this path:

   Commands > Ektron CMS400 - (ASP CF JSP PHP) > Setup...

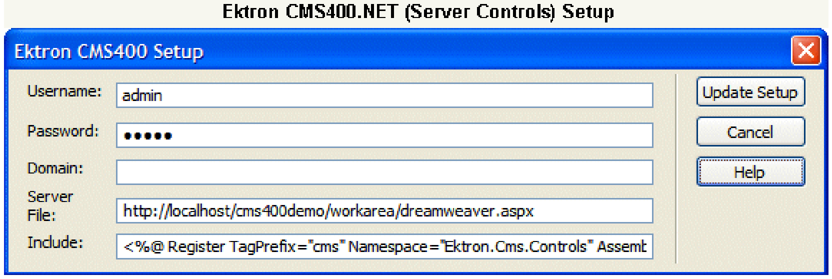
If you use ASP.NET, follow this path:

Commands > Ektron CMS400.NET (Server Controls) > Setup...

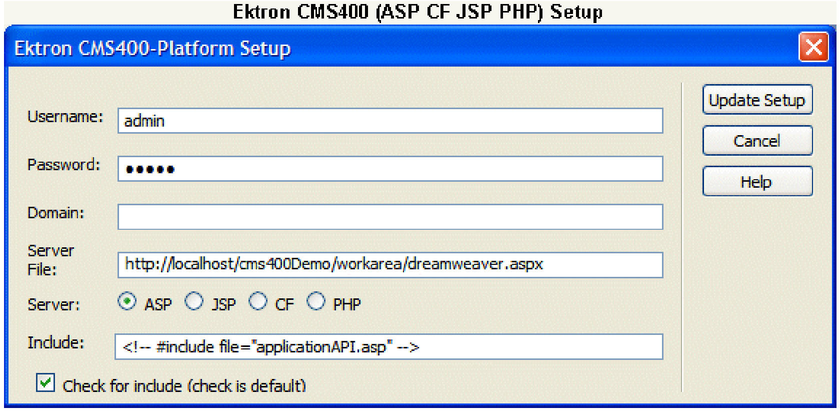


2. The Setup dialog box is displayed on the screen.

Ektron CMS400.NET (Server Controls) Setup



Ektron CMS400 (ASP CF JSP PHP) Setup



3. Use the following table to help you update your setup information. This table refers to **Ektron CMS400.NET** (Server Controls) setup. For Ektron CMS400 - (ASP CF JSP PHP), see "Ektron CMS400 - (ASP CF JSP PHP) Dreamweaver Setup Table." on page 21-53

Ektron CMS400.NET(Server Control) Dreamweaver Setup Table.

Field	Description
Username	Valid username of a user of your Ektron CMS400.NET Web site. When using the extension, the username is used to log in to the database to retrieve information about content blocks and other Web site information
Password	Enter the password for the user.
Domain	Only required if Active Directory has been enabled for your Web site. Enter the domain corresponding to the username entered.
Server File	Specify the location and file name for the dreamweaver.aspx file needed for the extension to properly work and make connection with your Ektron CMS400.NET database.
Include	Each Ektron CMS400.NET template requires an include file to point to the API with the definitions for the custom functions. Here, specify the include file.

Ektron CMS400 - (ASP CF JSP PHP) Dreamweaver Setup Table.

Field	Description
Username	Valid username of a user of your Ektron CMS400.NET Web site. When using the extension, the username is used to log in to the database to retrieve information about content blocks and other Web site information
Password	Enter the password for the user.
Domain	Only required if Active Directory has been enabled for your Web site. Enter the domain corresponding to the username entered.
Server File	Specify the location and file name for the dreamweaver.aspx file needed for the extension to properly work and make connection with your Ektron CMS400.NET database.
Server	Choose the language of the server. - **ASP** - for Active Server Pages - **CFM** - for ColdFusion pages - **JSP** - Java Server Pages - **PHP** - Hypertext Preprocessor Note: If you want to use a different language, you need to run this setup again and choose a different language.

Field	Description
Include	Each template requires an include file to point to the API with the definitions for the custom functions. Here, specify the include file. ■ For ASP use: `<!-- #include file="applicationAPI.asp" -->` ■ For CFM use: Leave blank ■ For JSP use: `<%@ include file="applicationAPI.jsp" %>` ■ For PHP use: `<?php include "applicationAPI.php"; ?>`
Check for Include	If checked the Include statement is added to your page. Checked is the default. ■ **Checked** - include statement added to your page ■ **Unchecked** - include statement is not added to your page

4. Click Update Setup.
5. A message appears.

Note: A message other than this is probably due to an incorrect server file, username, or password. Recheck your settings and try again.

6. Click **OK** to continue.
7. The setup dialog box closes. You are ready to create templates using Dreamweaver.

Editing and Saving Content in Dreamweaver

Making the process of setting up and managing your Web site easier, the Ektron CMS400.NET Dreamweaver extensions allow you to perform content related tasks directly from Dreamweaver saving you time and effort.

Through Dreamweaver, you can perform the following tasks:

- Add new content blocks to Ektron CMS400.NET
- Edit existing Ektron CMS400.NET content block

The following sections explain how to perform these tasks.

Note: The user specified in the setup information for the extension will only be able to perform tasks they have permissions to in Ektron CMS400.NET.

Accessing Manage Content Commands...

To access the CMS Manage commands menu, follow this path:

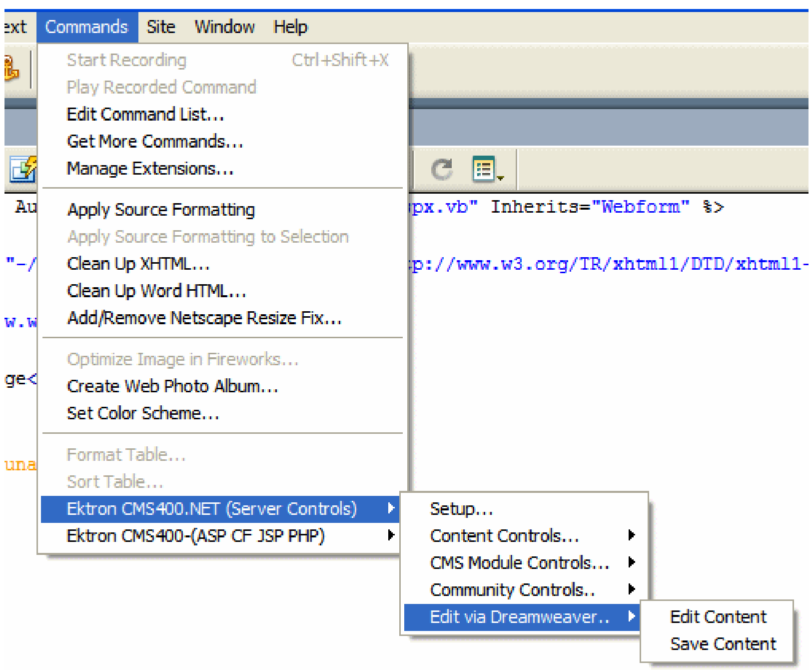
Commands > Ektron CMS400.NET (Server Controls) > Edit via Dreamweaver...

Or

Commands > Ektron CMS400 - (ASP CF JSP PHP) > Edit via Dreamweaver...

The path you follow depends on which Dreamweaver Extension you installed. If you installed both extensions, you can use either one.

A list of all CMS Manage Content commands that can be performed is displayed.



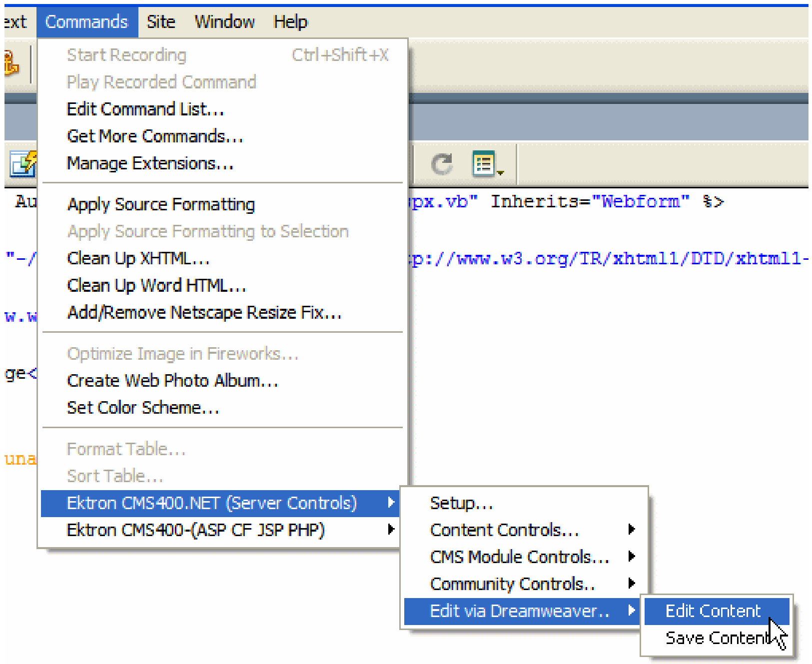
The following sections explain how to use the manage content commands.

Edit Content

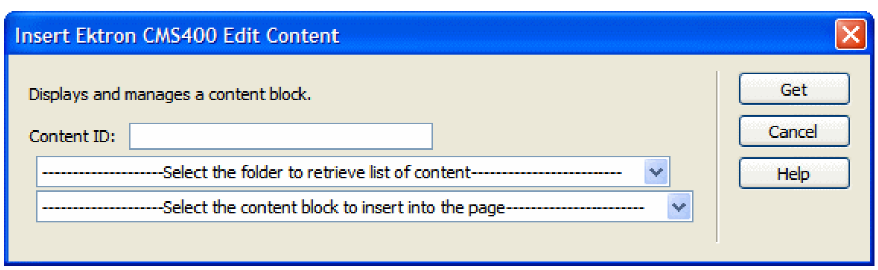
The edit content command allows you to get a content block from the Ektron CMS400.NET Web site, and edit it within Dreamweaver.

To edit a content block within Dreamweaver, perform the following steps:

1. Create a new HTML document in Dreamweaver.
2. In the Ektron CMS400.NET Manage Content menu, click on Edit Content.



The Insert Content tag dialog box is displayed.

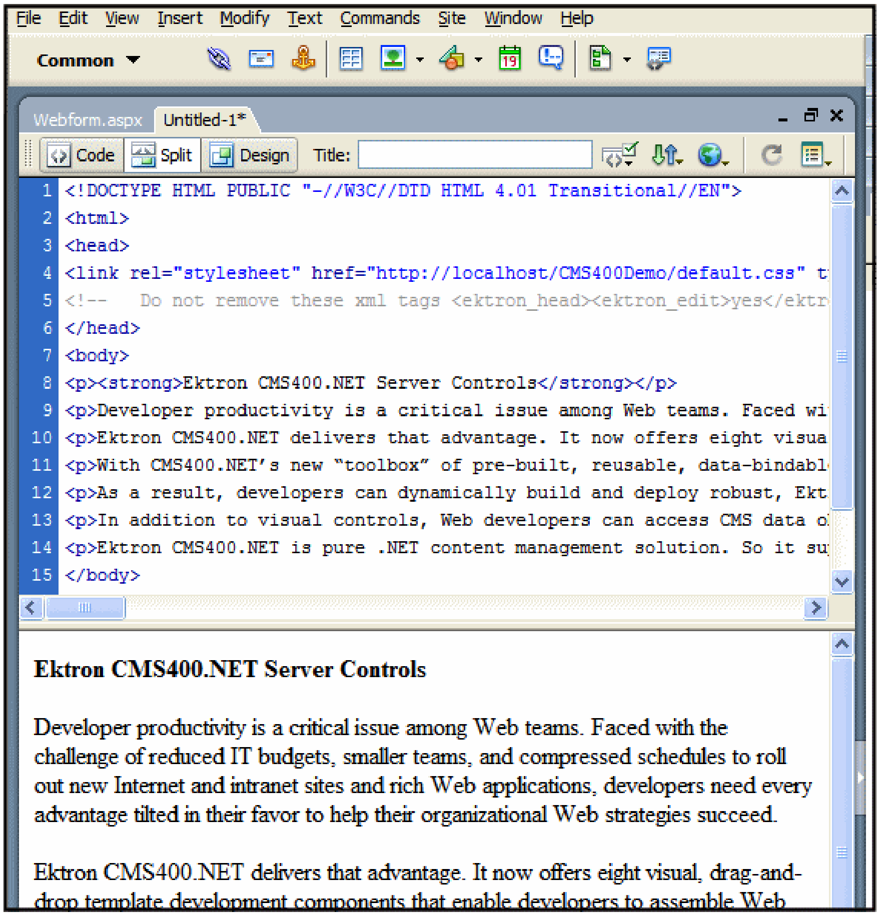


3. Choose the Ektron CMS400.NET content block you would like to edit by:
   - Typing the ID number of the content

or

   - Using the drop down lists to locate the content folder and content block
4. Click **Get** when you have chosen the content block.

   The content block is inserted into Dreamweaver.



5. Make the necessary changes to the content block using Dreamweaver's editing capabilities.

   See "Saving Existing Ektron CMS400.NET Content" on page 21-60 for information about saving the content back to Ektron CMS400.NET.

Save Content

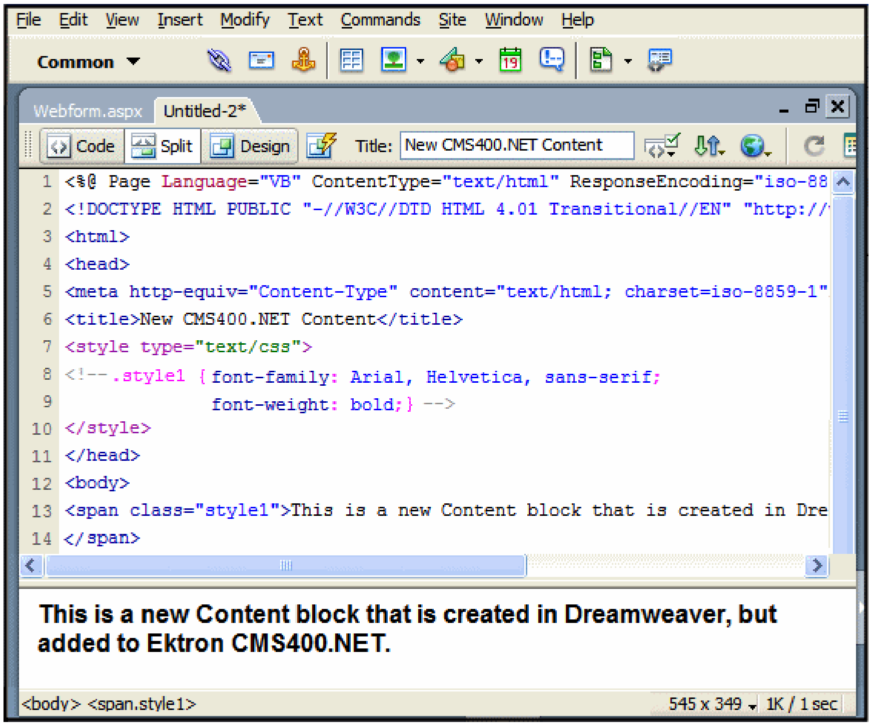
Content that has been created, or edited, in Dreamweaver can be saved to your Ektron CMS400.NET Web site by using the Save Content command.

The following section explains how to save content created, and edited, to Ektron CMS400.NET.

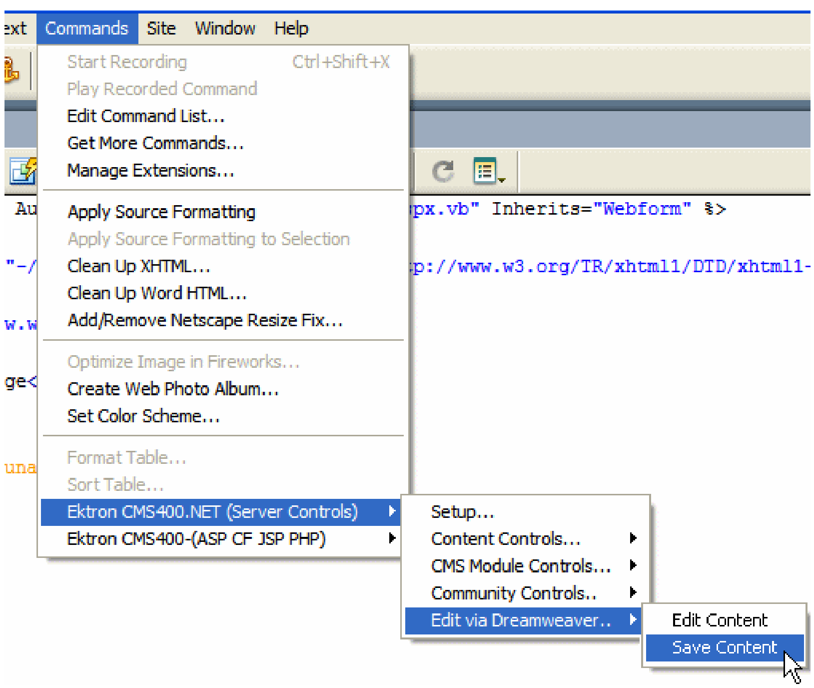
Saving New Content

To save a content block that was created in Dreamweaver, perform the following steps:

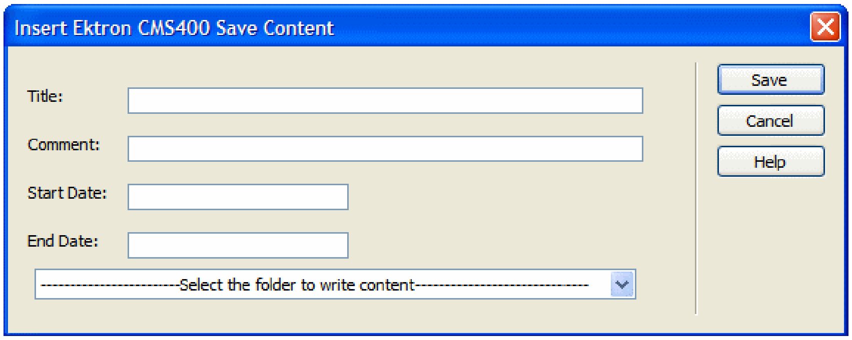
1. If you haven't already, create the new content in Dreamweaver.



2. In the Ektron CMS400.NET Manage Content menu, click on **Save Content.**



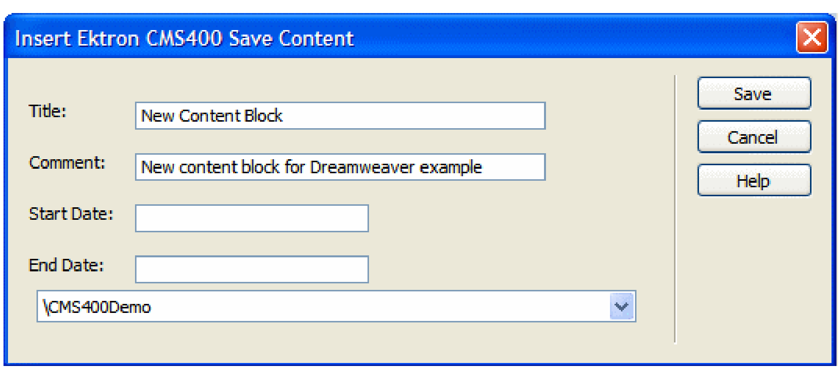
The Save Content dialog box is displayed.



3. Using the following table, enter the necessary information to complete the form.

Field	Description
Title	Type a unique title for the content block.
Comment	Enter a comment for the content block.
Start Date	If desired, type in a start date for the content block. NOTE: Date format MUST match what is set for the ek_dateFormat element, in the Web.config file, located in the site's webroot. By default, this is **dd-mmm-yyyy hh:mm:ss tt** (for example, 24-Dec-2005 10:15:00 AM)
End Date	If desired, type in an end date for the content block. NOTE: Date format MUST match what is set for the ek_dateFormat element, in the Web.config file, located in the site's webroot. By default, this is **dd-mmm-yyyy hh:mm:ss tt** (for example, 24-Dec-2005 10:15:00 AM)
Content Folder	Select the content folder you would like to save the new content block to.

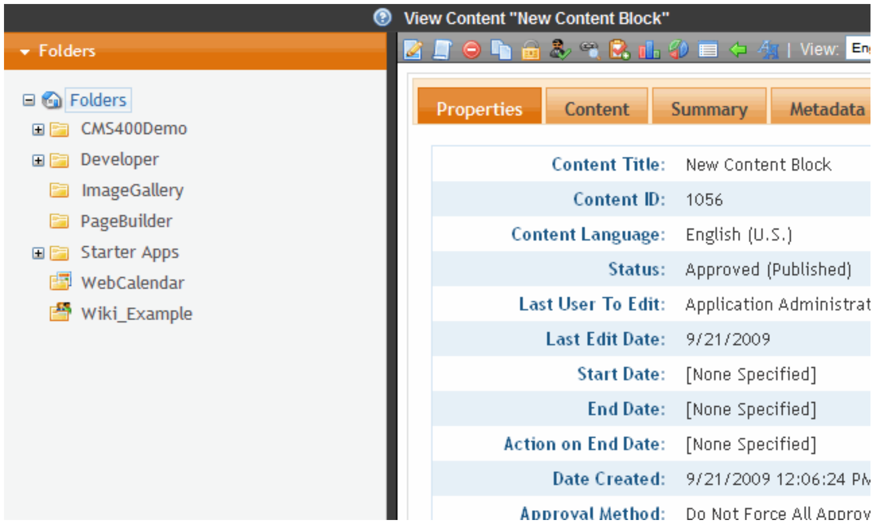
Here is an example of this form filled out.



4. Click **Save** to save and add the new content block the selected content folder in Ektron CMS400.NET.

The content block is added, and a confirmation message is displayed.

Here is the new content block in the Ektron CMS400.NET Workarea.



5. Once the content has been saved to Ektron CMS400.NET, you can close the page in Dreamweaver.

Saving Existing Ektron CMS400.NET Content

When Ektron CMS400.NET content has been edited in Dreamweaver, you can use the save content command to save your changes back to Ektron CMS400.NET.

To save existing Ektron CMS400.NET content, perform the following steps.

1. Make changes to an existing Ektron CMS400.NET content block as described in "Edit Content" on page 21-55.
2. In the Ektron CMS400.NET Manage Content Menu, click on **Save Content.**
3. The Save Ektron Content dialog box is displayed.
4. Use the following table to complete the form.

Field	Description
Title	Editing this field will rename the content block in Ektron CMS400.NET.
Comment	Enter a comment for the content block.
Start Date	If desired, type in a start date for the content block. NOTE: Date format MUST match what is set for the ek_dateFormat element, in the Web.config file, located in the site's webroot. By default, this is **dd-mmm-yyyy hh:mm:ss tt** (for example, 24-Dec-2005

Field	Description
	10:15:00 AM)
End Date	If desired, type in an end date for the content block. NOTE: Date format MUST match what is set for the ek_dateFormat element, in the Web.config file, located in the site's webroot. By default, this is **dd-mmm-yyyy hh:mm:ss tt** (for example, 24-Dec-2005 10:15:00 AM)
Content Folder	Disabled.

5. Click **Save** to save the changes made to the content.

   The content is saved, and a confirmation message is displayed.

Note: If you receive a message other than one confirming your content has been saved, check your settings and try again.

Using the Ektron CMS400.NET Extensions

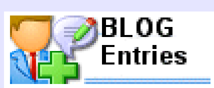
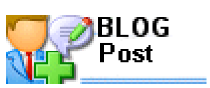
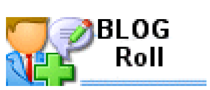
Once the Extension Package has been installed for Dreamweaver, you can create and edit templates for Ektron CMS400.NET.

The following subsections are contained in this section:

- "Custom Function Symbols" on page 21-61
- "Ektron CMS400.NET Command Menus" on page 21-66

Custom Function Symbols

During the process of inserting functions, symbols are used to represent the custom display functions. The following table explains each symbol and for which scripting languages the functions are available.

Symbol	Represents	ASP.NET	ASP - CF JSP - PHP	More Information
	Active Topics	✓		"ActiveTopics" on page 21-73
	Analytics	✓		"Analytics" on page 21-76
	Asset Control	✓		"AssetControl" on page 21-78
	Blog	✓		"Blog" on page 21-81
	BlogArchive	✓		"Blog Archive" on page 21-84
	Blog Calendar	✓		"Blog Calendar" on page 21-87
	Blog Categories	✓		"Blog Categories" on page 21-89
	Blog Entries	✓		"Blog Entries" on page 21-91
	Blog Posts	✓		"Blog Post" on page 21-94
	Blog Recent Posts	✓		"Blog Recent Posts" on page 21-97
	Blog Roll	✓		"Blog Roll" on page 21-99

Symbol	Represents	ASP.NET	ASP - CF JSP - PHP	More Information
	Blog RSS	✓		"Blog RSS" on page 21-102
	BreadCrumb	✓		"BreadCrumb" on page 21-104
	Calendar	✓	✓	"Calendar" on page 21-109
	Collection	✓	✓	"Collection" on page 21-113
	Content Block	✓	✓	"Content Block" on page 21-118
	Content List	✓		"Content List" on page 21-122
	Content Rating	✓		"Content Rating" on page 21-127
	Content XSLT Tag		✓	"Content XSLT Tag..." on page 21-129
	DHTML Menu	✓		"DHTML Menu" on page 21-131
	Directory - Taxonomy	✓		"Directory-Taxonomy" on page 21-137
	Discussion Forum	✓		"Discussion Forum" on page 21-142
	Display by Meta Value	✓		"Display By Meta Value" on page 21-145

Symbol	Represents	ASP.NET	ASP - CF JSP - PHP	More Information
ektron Content Block Dynamic URL pagename?id=xx	Dynamic Content Block		✓	"Dynamic Content Block" on page 21-151
CMS400 Folder BreadCrumb	Folder Bread Crumb	✓		"Folder Bread Crumb" on page 21-153
ektron Form Block	Form Content Block	✓	✓	"Form" on page 21-156
Image Control	Image Control	✓		"ImageControl" on page 21-159
ektron Lang-API	Language API	✓		"Language API" on page 21-161
Language: English (U.S.)	Language Select	✓		"Language Select Box" on page 21-163
ektron List Summary	List Summary	✓	✓	"List Summary" on page 21-165
Login	Login/Logout button	✓	✓	"Login" on page 21-172
Map Control	Map	✓		"Map Control" on page 21-176
Membership	Membership	✓		"Membership Control" on page 21-182
ektron Metadata	Metadata	✓	✓	"Metadata for ASP.NET Pages" on page 21-186 or "Metadata Function for ASP, CF, JSP or PHP Pages " on page 21-190

Symbol	Represents	ASP.NET	ASP - CF JSP - PHP	More Information
ektron Content Block	Multipurpose content block.		✓	"Multipurpose Content Block" on page 21-192
CMS400 POLL	Poll	✓		"Poll" on page 21-194
Post History	Post History	✓		"PostHistory" on page 21-196
ektron Random Content	Random Content		✓	"Random Content" on page 21-199
ektron Random Summary	Random Summary		✓	"Random Summary" on page 21-200
RSS	RSS Aggregator	✓		"RSS Aggregator" on page 21-202
ektron Search Tag	Old Search	✓	✓	"Old Search" on page 21-205
ektron Search Display	Search display function		✓	"Search Display" on page 21-213
ektron Single Summary	Single Summary		✓	"Single Summary" on page 21-215
CMS400 Site Map	Site Map	✓		"Site Map" on page 21-217
ektron Menu	Standard Menu	✓		"Standard Menu" on page 21-224
ektron Menu	Smart Menu	✓		"Smart Menu" on page 21-220

Symbol	Represents	ASP.NET	ASP - CF JSP - PHP	More Information
	Web Search	✓		"Web Search" on page 21-227
	XML Index Search	✓		"XML Index Search" on page 21-232

Ektron CMS400.NET Command Menus

The following section explains how to locate Ektron CMS400.NET commands in Dreamweaver.

There are two Ektron command menus available. One menu is for ASP.NET pages and the other is used for ASP, ColdFusion, JSP and PHP pages:

- **Commands > Ektron CMS400.NET (Server Controls)**
- **Commands > Ektron CMS400 - (ASP CF JSP PHP)**

To locate a command menu in Dreamweaver, perform the following steps:

1. Open Dreamweaver.
2. In the top menu, follow one of these paths:

- If you are using ASP.NET pages, click

  Commands > Ektron CMS400.NET (Server Controls)

- If you are using ASP, ColdFusion, JSP or PHP pages, click

  Commands > Ektron CMS400 - (ASP CF JSP PHP)

  For a list of commands in Ektron CMS400.NET (Server Controls), see "Ektron CMS400.NET (Server Controls) Functions" on page 21-68.

  For a list of commands in Ektron CMS400 - (ASP CF JSP PHP), see "Ektron CMS400 - (ASP CF JSP PHP) Functions" on page 21-71.

3. The Ektron CMS400.NET commands menu is displayed.

   In **Ektron CMS400.NET (Server Controls)** the functions are broken up into the following groups:

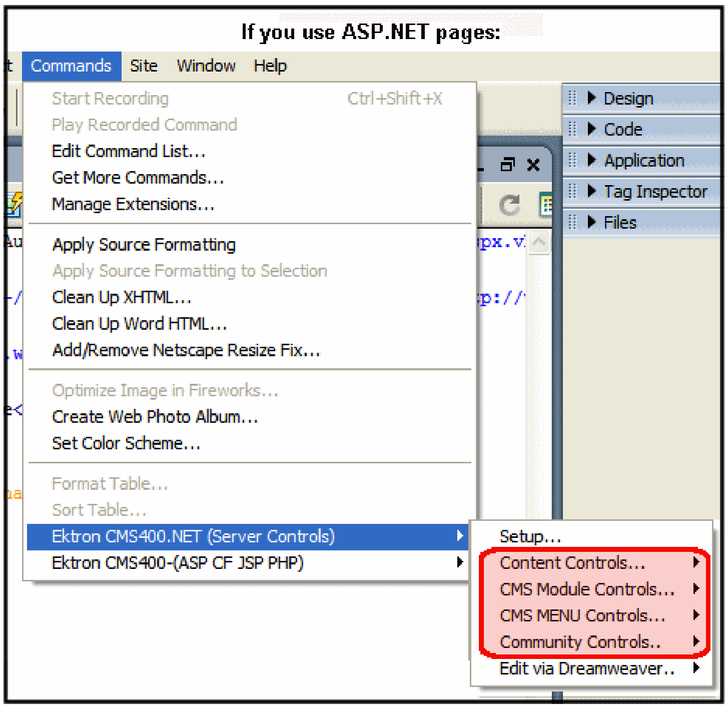
   - Content Controls...
   - CMS Module Controls...
   - Community Controls...

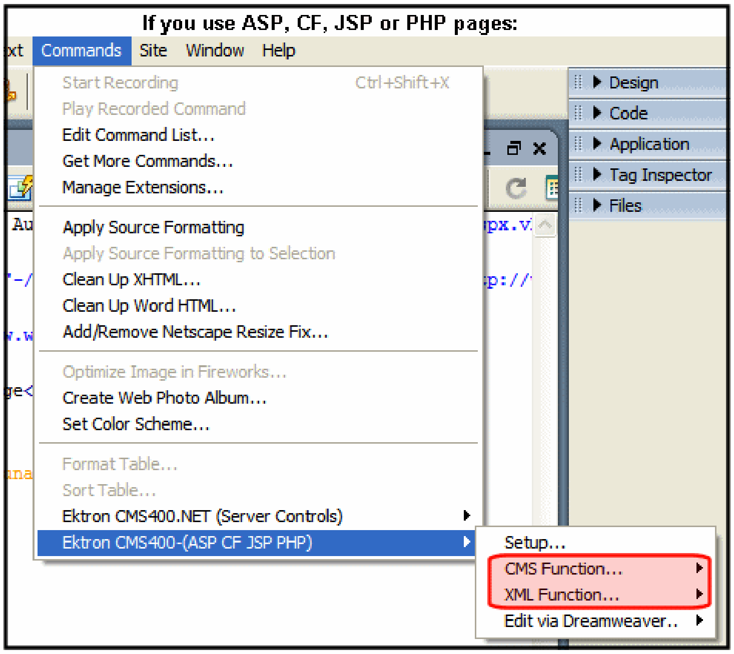
In **Ektron CMS400 - (ASP CF JSP PHP)** the functions are broken up into the following groups:

- CMS Function...
- XML Function...

Note: For a description of the **Setup...** and **Edit via Dreamweaver...** groups, see "Setup" on page 21-51 and "Editing and Saving Content in Dreamweaver" on page 21-54.

Below are images showing the different views.





4. Click on the command for the task you would like to perform.

The following tables explain each command. The first table explains the "Ektron CMS400.NET (Server Controls) Functions" on page 21-68. The second table explains the "Ektron CMS400 - (ASP CF JSP PHP) Functions" on page 21-71.

Ektron CMS400.NET (Server Controls) Functions

Command	Description	More Information
Content Controls...		
Login	Inserts an Ektron CMS400.NET login function into the template.	"Login" on page 21-172
Content	Inserts an Ektron CMS400.NET content block function into the template.	"Content Block" on page 21-118
Form	Inserts an Ektron CMS400.NET form content block into the template.	"Form" on page 21-156
Poll	Displays a poll or survey created from an Ektron CMS400.NET form on a Web page.	"Poll" on page 21-194
Collection	Inserts an Ektron CMS400.NET collection function into the template.	"Collection" on page 21-113

Command	Description	More Information
List Summary	Inserts an Ektron CMS400.NET list summary function into the template.	"List Summary" on page 21-165
Metadata	Inserts an Ektron CMS400.NET metadata function into the template.	"Metadata for ASP.NET Pages" on page 21-186
Display By Meta Value	Inserts an Ektron CMS400.NET display by meta value block into the template.	"Display By Meta Value" on page 21-145
Content List	Displays a list of content blocks created from a comma delimited list.	"Content List" on page 21-122
Language Select	Inserts an Ektron CMS400.NET language select box into the template.	"Language Select Box" on page 21-163
Language API	Inserts an Ektron CMS400.NET Language API into the template.	"Language API" on page 21-161
ContentRating	Place a rating scale on any page of your Web site. The scale lets Ektron CMS400.NET collect feedback by giving site visitors the opportunity to rate a particular content item.	"Content Rating" on page 21-127
WebSearch	The Web Search server control lets you customize the behavior of the search.	"Web Search" on page 21-227
Old Search	Inserts an Ektron CMS400.NET search function into the template.	"Old Search" on page 21-205
XML Index Search	Inserts an Ektron CMS400.NET XML Index Search into the template.	"XML Index Search" on page 21-232
Directory-Taxonomy	Lets you customize the behavior of the Taxonomy feature. You place this control on any Web form to display a taxonomy.	"Directory-Taxonomy" on page 21-137

Command	Description	More Information
CMS Module Controls...		
Analytics	Track statistics about visits to your Web site.	"Analytics" on page 21-76
Calendar	Inserts an Ektron CMS400.NET event calendar function into the template.	"Calendar" on page 21-109
RssAggregator	Aggregates an RSS feed from an RSS Web site.	"RSS Aggregator" on page 21-202
Map Control	Displays a map that flags locations of interest to your site visitors. Each location is a CMS content item to which map information was added.	"Map Control" on page 21-176
CMS MENU Controls...		
Folder Bread Crumb	FolderBreadcrumbs show you the path through the sitemap to the current page.	"Folder Bread Crumb" on page 21-153
BreadCrumb	Creates a breadcrumb trail of where site visitors have been and allows them to navigate back to previous pages.	"BreadCrumb" on page 21-104
SmartMenu	Displays a menu on a Web page. This menu style is the most robust of the three delivered with Ektron CMS400.NET.	"Smart Menu" on page 21-220
DHTML Menu	Inserts an Ektron CMS400.NET DHTML menu into the template.	"DHTML Menu" on page 21-131
Standard Menu	Inserts an Ektron CMS400.NET standard menu into the template.	"Standard Menu" on page 21-224
Site Map	The Sitemap utilizes the folder breadcrumb information in the Workarea to display a sitemap of your site.	"Site Map" on page 21-217
Community Controls...		
Membership	Adds a Membership form to your Web form. This allows site visitors to self-register themselves to your site.	"Membership Control" on page 21-182

Command	Description	More Information
Discussion Forum	Forums provide a Discussion Board where topics can be discussed on your Web site.	"Discussion Forum" on page 21-142
ActiveTopics	Displays either the most active topics or the most recent topics.	"ActiveTopics" on page 21-73
PostHistory	Displays a list of posts for a given users	"PostHistory" on page 21-196
Blog	The Blog function allows you to quickly add a blog to a Web form. It has all of the items commonly found on a blog page in one server control.	"Blog" on page 21-81
Blog Calendar	Display a calendar on a Web page and associate it with a blog.	"Blog Calendar" on page 21-87
Blog Categories	Display the blog categories for a blog on a Web form.	"Blog Categories" on page 21-89
Blog Roll	Display the blog roll for a blog on a Web form.	"Blog Roll" on page 21-99
Blog RSS	Display the icon ( ) for the blog's RSS feed on the Web form.	"Blog RSS" on page 21-102
Blog Entries	Display a list of multiple blog posts on a Web form.	"Blog Entries" on page 21-91
Blog Recent Posts	Display a list of recent blog posts links on a Web form.	"Blog Recent Posts" on page 21-97
Blog Post	Display an individual blog post on a Web form.	"Blog Post" on page 21-94
Blog Archive	Display a list of past months or years that have posts.	"Blog Archive" on page 21-84
AssetControl	The AssetControl server control, when viewed on a Web form, displays a drag and drop box for users to upload assets to CMS400.NET or update an existing asset.	"AssetControl" on page 21-78

Command	Description	More Information
ImageControl	Display a CMS400.NET image on a Web page. In addition, if a user has permission to edit the image, he can right click the image and a drag and drop box appears. This box allows a user to overwrite the existing file.	"ImageControl" on page 21-159

Ektron CMS400 - (ASP CF JSP PHP) Functions

Command	Description	More Information
Content Controls...		
Login	Inserts an Ektron CMS400.NET login function into the template.	"Login" on page 21-172
Content	Inserts an Ektron CMS400.NET content block function into the template.	"Content Block" on page 21-118
Dynamic	Inserts an Ektron CMS400.NET dynamic content block placeholder function into the template.	"Dynamic Content Block" on page 21-151
Collection	Inserts an Ektron CMS400.NET collection function into the template.	"Collection" on page 21-113
List Summary	Inserts an Ektron CMS400.NET list summary function into the template.	"List Summary" on page 21-165
Metadata	Inserts an Ektron CMS400.NET metadata function into the template.	"Metadata for ASP.NET Pages" on page 21-186
Search	Inserts an Ektron CMS400.NET search function into the template.	"Old Search" on page 21-205
Search Display Tag	Inserts an Ektron CMS400.NET search display function into the template.	"Search Display" on page 21-213
Single Summary Tag	Inserts an Ektron CMS400.NET single summary function into the template.	"Single Summary" on page 21-215
Random Content Tag	Inserts an Ektron CMS400.NET random content function into the template.	"Random Content" on page 21-199
Random Summary Tag	Inserts an Ektron CMS400.NET random summary function into the template.	"Random Summary" on page 21-200

Command	Description	More Information
Calendar	Inserts an Ektron CMS400.NET event calendar function into the template.	"Calendar" on page 21-109
Form	Inserts an Ektron CMS400.NET form content block into the template.	"Form" on page 21-156
Multipurpose Tag	Insert a content block or form content block into the template.	"Multipurpose Content Block" on page 21-192
XML Function...		
Content XSLT Tag	Inserts an XML content block with your choice of XSLT in the template. NOTE: Used to insert an XML content block with an XSLT other than the default applied to it.	"Content XSLT Tag..." on page 21-129

Inserting Custom Functions

CMS Function

The CMS Function commands let you insert standard Ektron CMS400.NET display functions into your template.

The following sections explain how to insert each function.

ActiveTopics

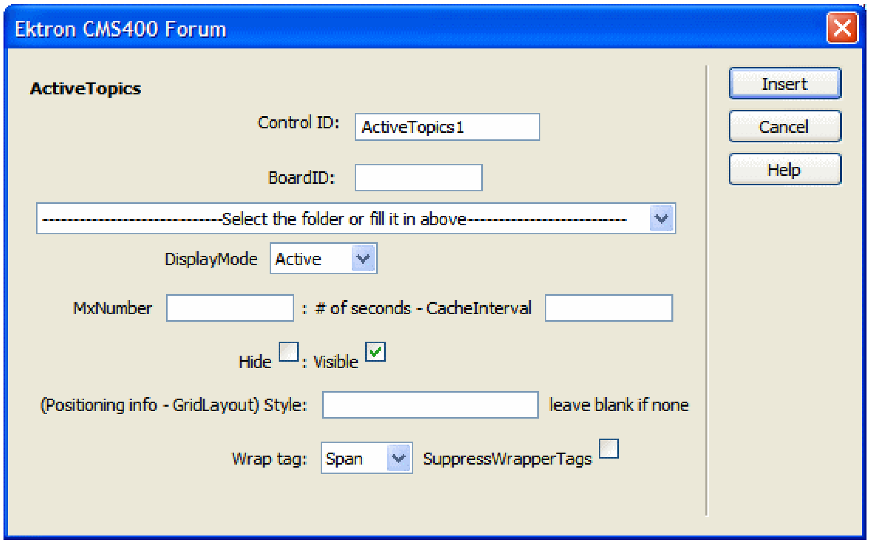
For a description of the ActiveTopics function, see See "ActiveTopics Server Control" on page 7-677 .

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Forums**

To insert the ActiveTopics function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **ActiveTopics**.
3. The Insert Ektron CMS400.NET ActiveTopics box appears.



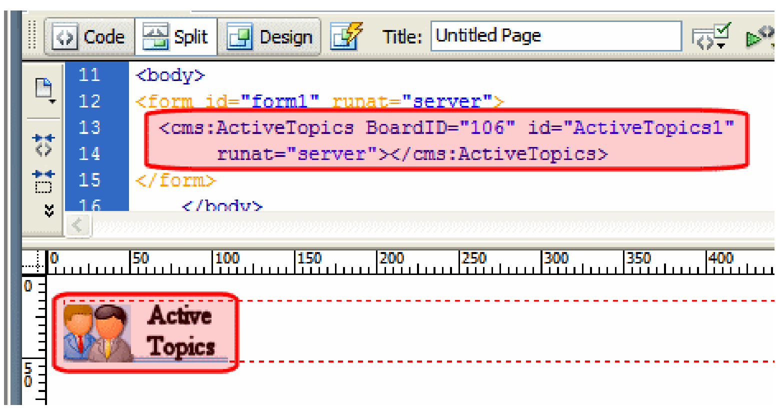
4. Use the following table to assist you with inserting the ActiveTopics function.

Field	Description
Control ID	A unique name for the function you are inserting.
BoardID	The ID of the Discussion Board. If you do not know the board ID, you can navigate to it using the Select folder drop down box.
DisplayMode	Choose between Active or Recent. In Active mode, the server control displays the most active topics. In Recent mode, the server control displays the topics with the most recent posts. The default is **Active**.
MaxNumber	The maximum number of topics listed.
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function

Field	Description
	Unchecked = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   An ActiveTopics icon appears to indicate the location of the active topics list.



Shown below is an example of the code that is inserted: ***

Platform	Code View
.NET	`<cms:ActiveTopics BoardID="106" id="ActiveTopics1" runat="server"></cms:ActiveTopics>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.

Platform	Code View
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

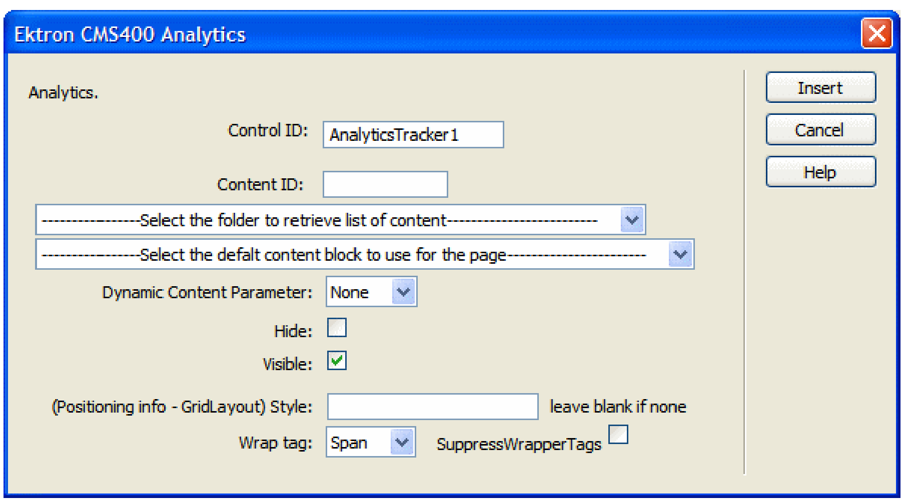
Analytics

This tag appears on the following menu:

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Module Controls...**

To insert the Analytics function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Analytics**.
3. The Insert Ektron CMS400.NET Analytics box appears.



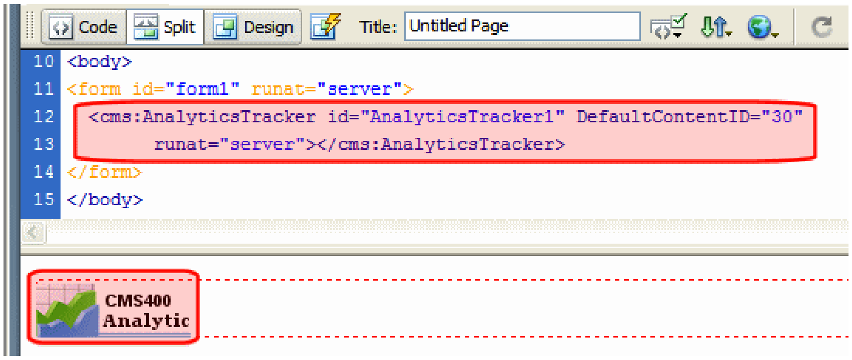
4. Use the following table to assist you with inserting the Analytics function.

Field	Description
Control ID	A unique name for the function you are inserting.

Field	Description
Content ID	Specify the ID number of a content item being tracked by this function. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content drop down boxes.
Dynamic Content Parameter	To make this content analytic control dynamic, select **id**. When you do, this server control is attached to the content block passed as a URL parameter.
Hide	Used to hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   An Analytic icon appears to indicate that content is being tracked. If you are logged in as a CMS user and visit the web page, you see the Analytic information. If you are not logged in, you see nothing.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:AnalyticsTracker id="AnalyticsTracker1" DefaultContentID="30" runat="server"></cms:AnalyticsTracker>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

AssetControl

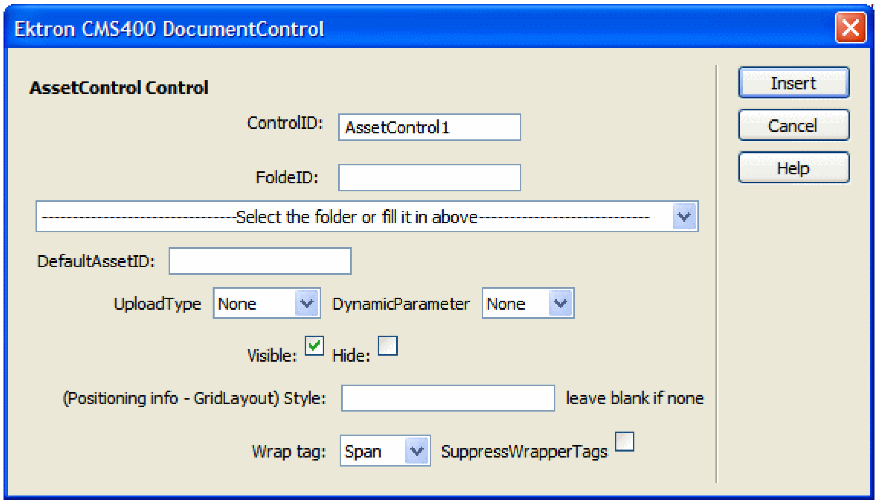
For a description of the AssetControl function, see "AssetControl Server Control" on page 7-486.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls...**

To insert the AssetControl function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **AssetControl**.
3. The Insert Ektron CMS400.NET AssetControl box appears.



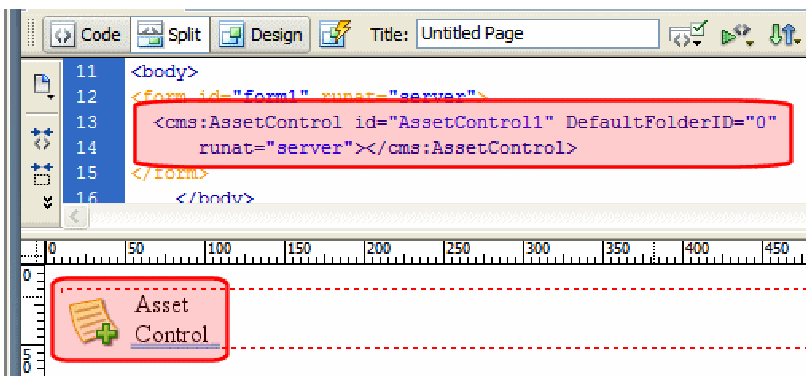
4. Use the following table to assist you with inserting the AssetControl function.

Field	Description
Control ID	A unique name for the function you are inserting.
FolderID	The ID of the folder where assets are added. This property is used when the `UploadType` property is set to Add. See Also: "UploadType" on page 21-79 If you do not know the Folder ID, you can navigate to it using the Select Folder drop down box.
DefaultAssetID	The ID of the asset you want to update. This property is use when the `UploadType` property is set to Update. See Also: "UploadType" on page 21-79"UploadType" on page 21-79
UploadType	Select whether the control adds new assets or update existing ones. Select Add to add assets and use the `FolderID` property. See Also: "FolderID" on page 21-79. Select Update to update assets and use the DefaultAssetID. See Also: "DefaultAssetID" on page 21-79. The default is **None**.
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.

Field	Description
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   An AssetControl icon appears and indicates the AssetControl's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:AssetControl id="AssetControl1" DefaultFolderID="0" runat="server"></cms:AssetControl>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.

Platform	Code View
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog

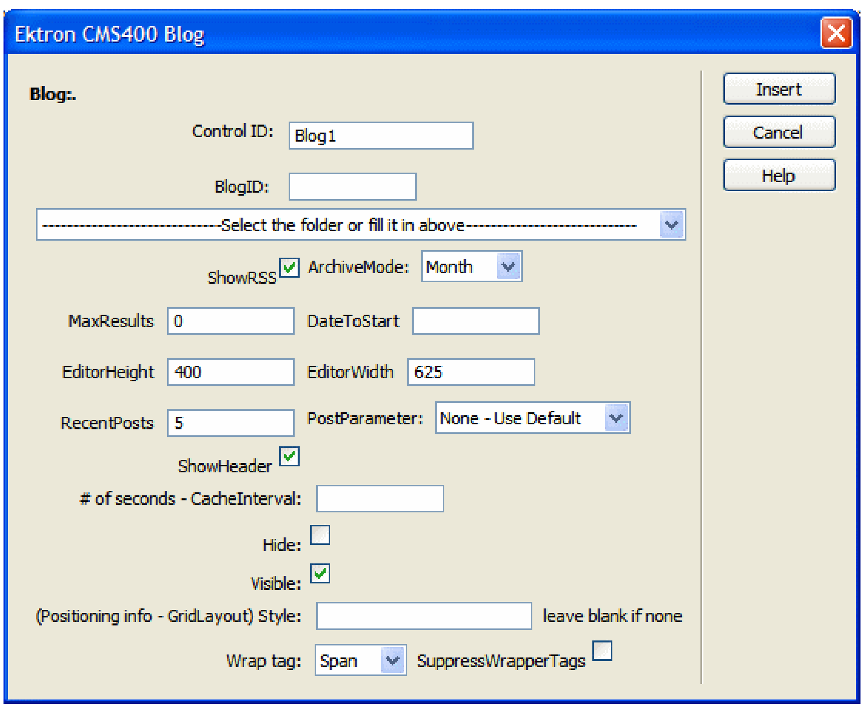
For a description of the Blog function, see See "Blog Server Control" on page 7-533 and "Introduction to Blog Server Controls" on page 7-532.

This tag appears on the following menu(s):

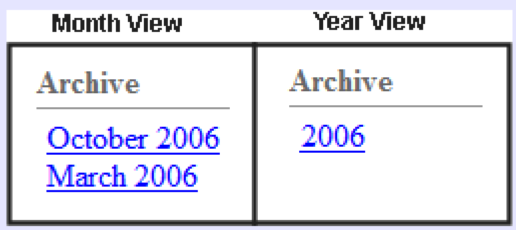
- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog**.
3. The Insert Ektron CMS400.NET Blog box appears.



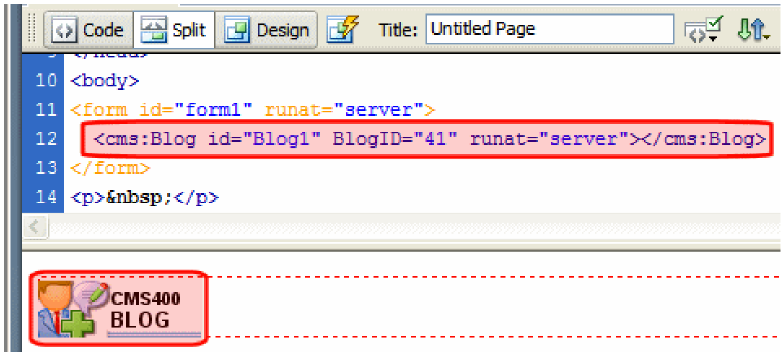
4. Use the following table to assist you with inserting the Blog function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
ShowRSS	Displays the icon for the RSS feed ( ) when the box is checked. The default is **Checked**. **Checked** = Display RSS feed **Unchecked** = Do not display RSS feed
ArchiveMode	Select whether the archive appears in *month* format or *year* format. The default is **month**. 
MaxResults	Set the maximum number of posts to display. If set to 0 (zero), there is no limit. If set to -1, all posts for the day are shown. If set to -2, the all post for the month are shown, If set to -3, the control uses the **# of Post Visible** setting in the Workarea. The default is **-3**. For information on the Workarea setting **# of post visible**, see "Blog Properties" on page 7-497.
DateToStart	The date of the last blog entries you want to appear. For example, if you want to display blog entries for January 1, 2006 and before, you enter 1/1/2006. Clicking the dropdown box provides you with a calendar.
EditorHeight	Sets the height of the blog editor in pixels.
EditorWidth	Sets the width of the blog editor in pixels.
RecentPosts	The number of post links contained in the Recent Posts list. The default is 5 (five).
PostParameter	Works like the `DynamicParameter` for content blocks. When `id` is selected, this server control passes the blog post ID as a URL parameter. The default setting is **id**. **Blank** - the list of blog posts is static. The links in the blog posts are inactive. **id** - the id of the blog post is passed to the URL as a parameter. **None use default** - the list of blog posts is static. The links in the blog posts are inactive.

Field	Description
ShowHeader	Shows the title and tagline when this box is checked. The default is Checked. **Checked** = show title and tagline **Unchecked** = do not show header and tagline
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31.
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Blog icon appears and indicates the Blog's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Blog id="Blog1" BlogID="41" runat="server"></cms:Blog>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Archive

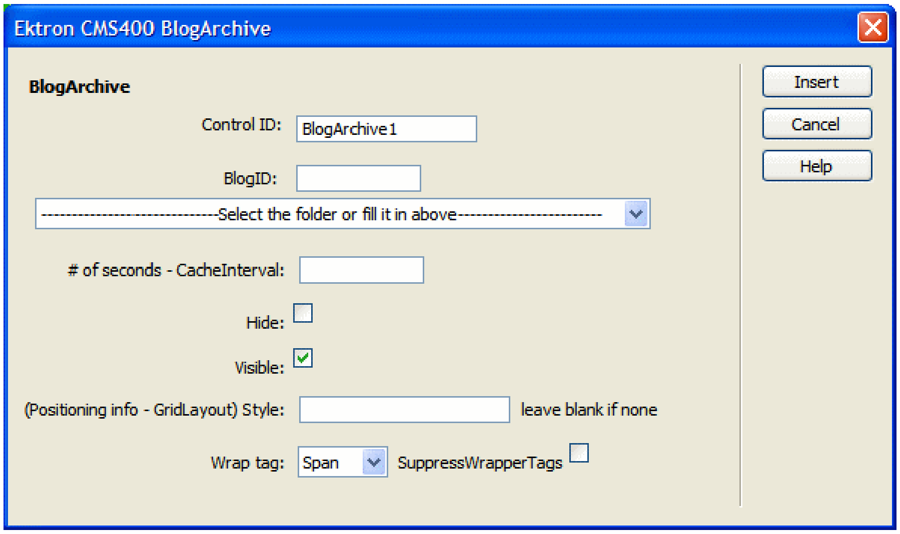
For a description of the Blog Archive function, see "BlogArchive Server Control" on page 7-548.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Archive function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Archive**.
3. The Insert Ektron CMS400.NET Blog Archive box appears.



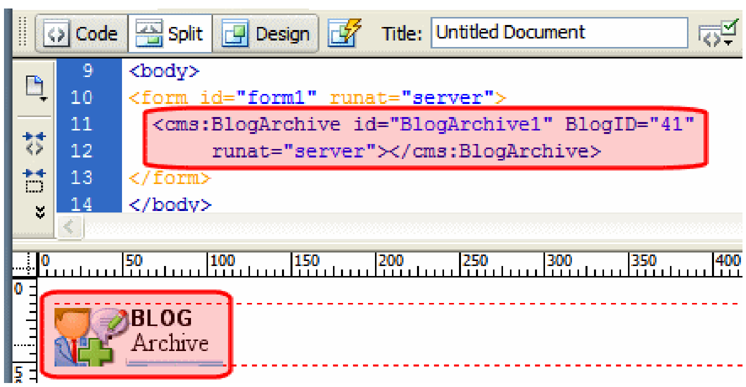
4. Use the following table to assist you with inserting the Blog Archive function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A BlogArchive icon appears and indicates the Blog Archive's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	<cms:BlogArchive id="Blogarchive1" BlogID="41" runat="server"></cms:BlogArchive>
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Calendar

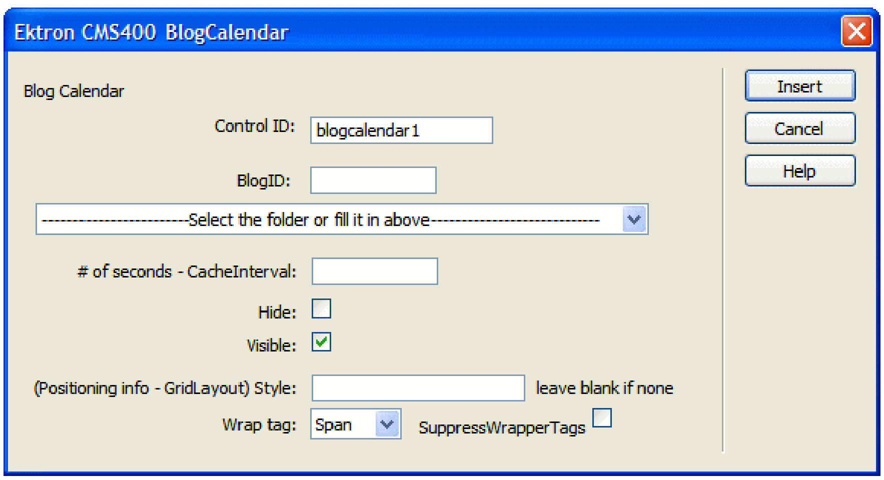
For a description of the Blog Calendar function, see See "BlogCalendar Server Control" on page 7-542.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Calendar function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Calendar**.
3. The Insert Ektron CMS400.NET Blog Calendar box appears.



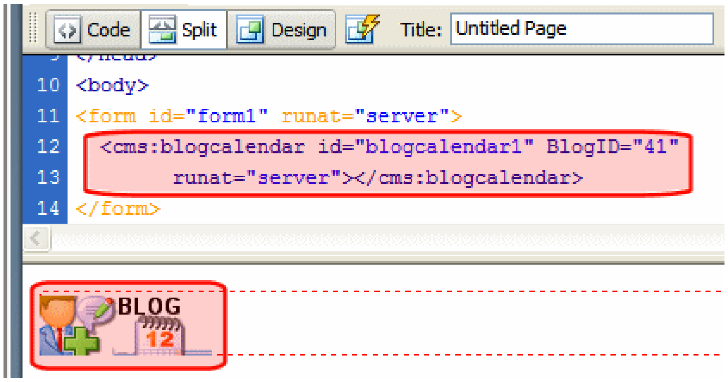
4. Use the following table to assist you with inserting the Blog Calendar function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31

Field	Description
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Blog Calendar icon appears and indicates the Blog Calendar's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:blogcalendar id="blogcalendar1" BlogID="41" runat="server"></cms:blogcalendar>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Categories

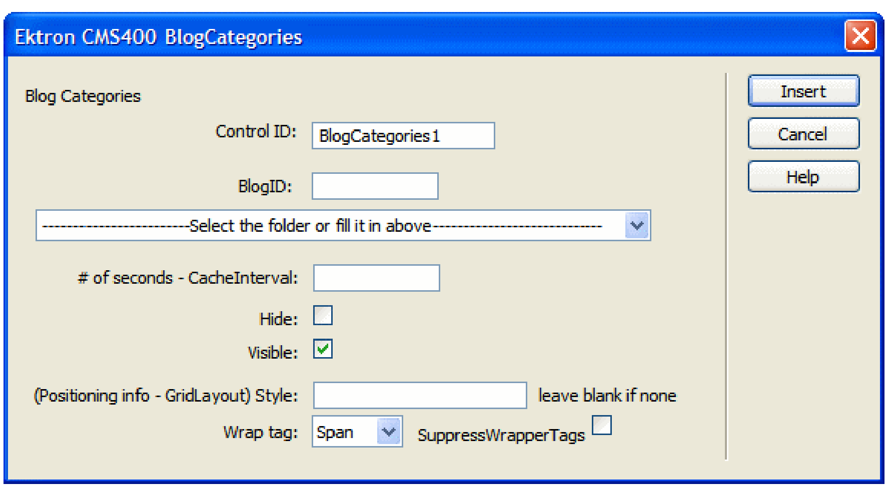
For a description of the Blog Categories function, see "BlogCategories Server Control" on page 7-545.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Categories function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Categories**.
3. The Insert Ektron CMS400.NET Blog Categories box appears.

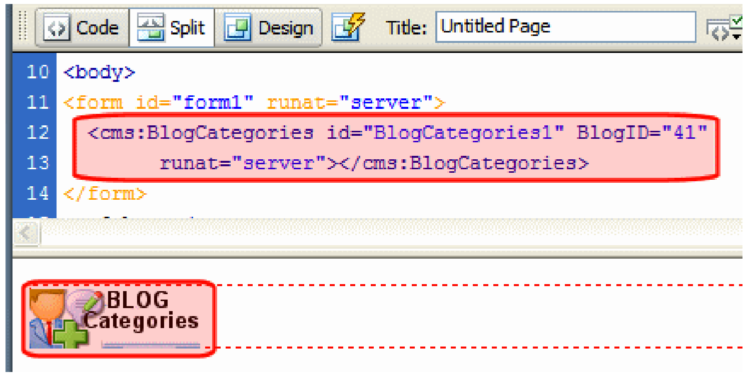


4. Use the following table to assist you with inserting the Blog Categories function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Blog Categories icon appears and indicates the Blog Categories' location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BlogCategories id="BlogCategories1" BlogID="41" runat="server"></cms:BlogCategories>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Entries

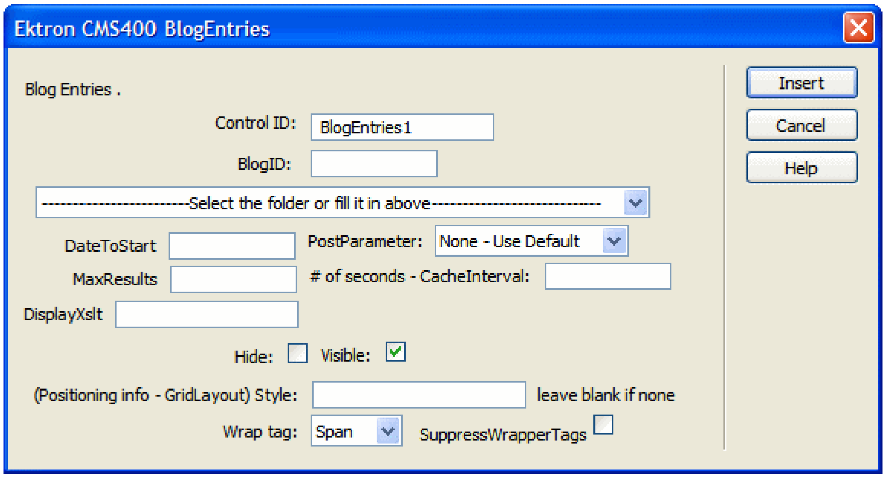
For a description of the Blog Entries function, see "BlogEntries Server Control" on page 7-537.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Entries function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Entries**.
3. The Insert Ektron CMS400.NET Blog Entries box appears.



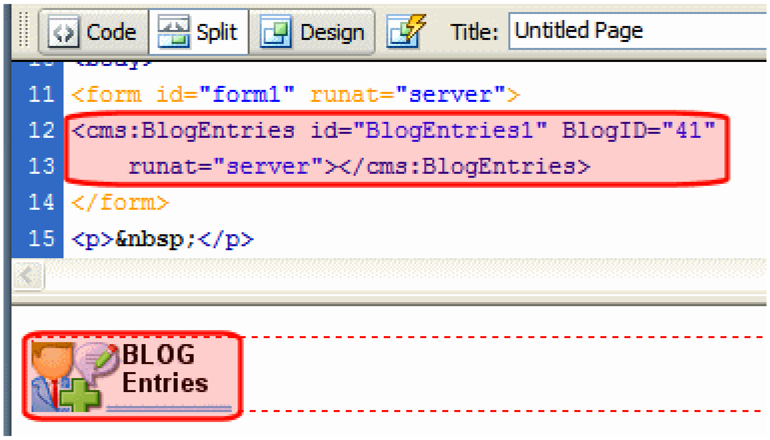
4. Use the following table to assist you with inserting the Blog Entries function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
DateToStart	The date of the last blog entries you want to appear. For example, if you want to display blog entries for January 1, 2006 and before, you enter 1/1/2006. Clicking the dropdown box provides you with a calendar.
PostParameter	Works like the `DynamicParameter` for content blocks. When `id` is selected, this server control passes the blog post ID as a URL parameter. If you do not set this parameter to id, you will not be forwarded to the blog post's page when you click on any links in the post. The default setting is **id**. **Blank** - the list of blog posts is static. The links in the blog posts are inactive. **id** - the id of the blog post is passed to the URL as a parameter and **None use default** - the list of blog posts is static. The links in the blog posts are inactive.
MaxResults	Set the maximum number of posts to display. If set to 0 (zero), there is no limit. If set to -1, all posts for the day are shown. If set to -2, the all post for the month are shown, If set to -3, the control uses the **# of Post Visible** setting in the Workarea. The default is **-3**. For information on the Workarea setting **# of post visible**, see "# of Visible Posts" on page 648.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this

Field	Description
	property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
DisplayXslt	Specify an external XSLT file. See Also: "The OverrideXslt and DisplayXslt Properties" on page 7-207. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Blog Entries icon appears and indicates the Blog Entries' location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BlogEntries id="BlogEntries1" BlogID="41" runat="server"></cms:BlogEntries>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Post

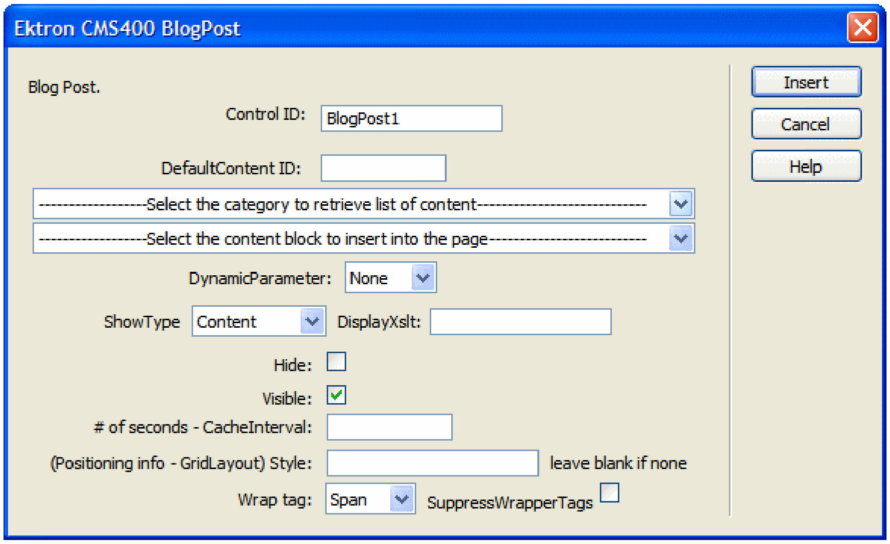
For a description of the Blog Post function, see "BlogPost Server Control" on page 7-540.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Post function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Post**.
3. The Insert Ektron CMS400.NET Blog Post box appears.



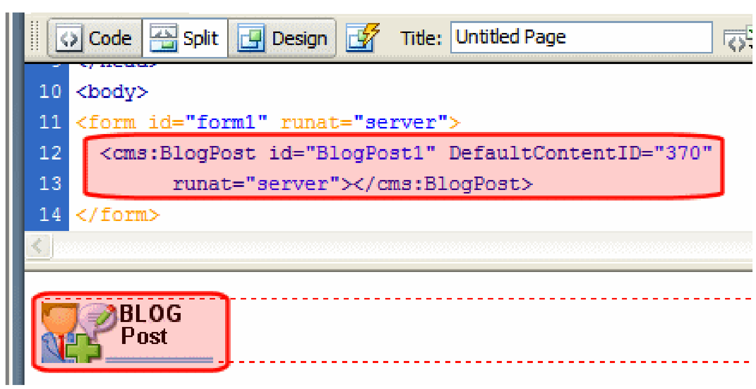
4. Use the following table to assist you with inserting the Blog Post function.

Field	Description
Control ID	A unique name for the function you are inserting.
DefaultContent ID	The ID of a blog post in CMS400.NET. If you do not know the Blog Post's ID, you can navigate to it using the Select Category and Select Content drop down boxes.
DynamicParameter	To make this blog post dynamic, select **id**. When you do, this server control uses the blog post passed as a URL parameter.
ShowType	Shows a blogpost's content and it's comments or just the blogpost' comments. The default is **Content**. **Content** - Show a blogpost's content and its comments. **Description** - Show a blogpost's comments only.
DisplayXslt	Specify an external XSLT file. See Also: "The OverrideXslt and DisplayXslt Properties" on page 7-207 **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.

Field	Description
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 43.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Blog Post icon appears and indicates the Blog Post's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BlogPost id="BlogPost1" DefaultContentID="370" runat="server"></cms:BlogPost>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Recent Posts

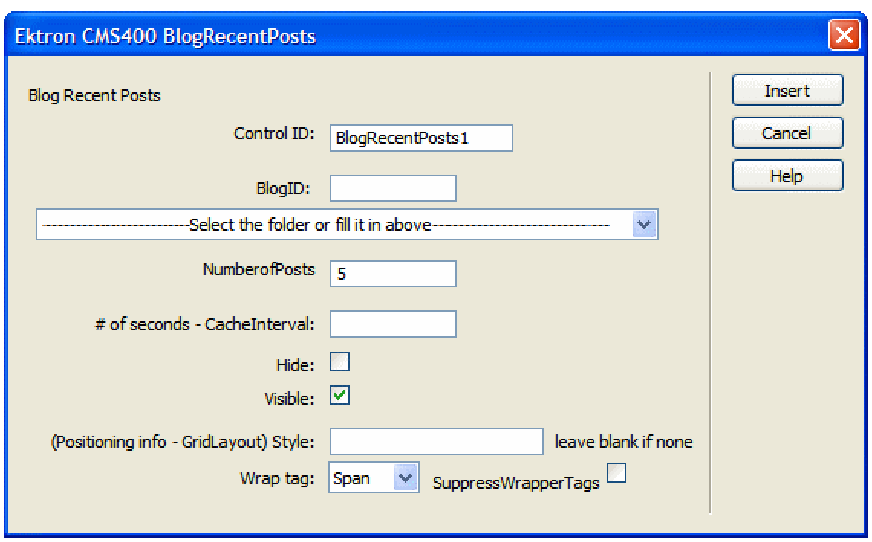
For a description of the Blog Recent Posts function, see "BlogRecentPosts Server Control" on page 720.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Recent Posts function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Recent Posts**.
3. The Insert Ektron CMS400.NET Blog Recent Posts box appears.

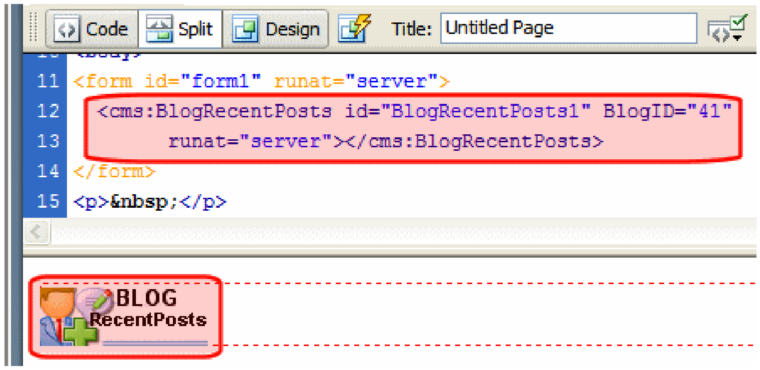


4. Use the following table to assist you with inserting the Blog Recent Posts function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
NumberofPosts	Sets the number of post links to display.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Blog Recent Posts icon appears and indicates the Blog Recent Posts' location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BlogRecentPosts id="BlogRecentPosts1" BlogID="41" runat="server"></cms:BlogRecentPosts>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog Roll

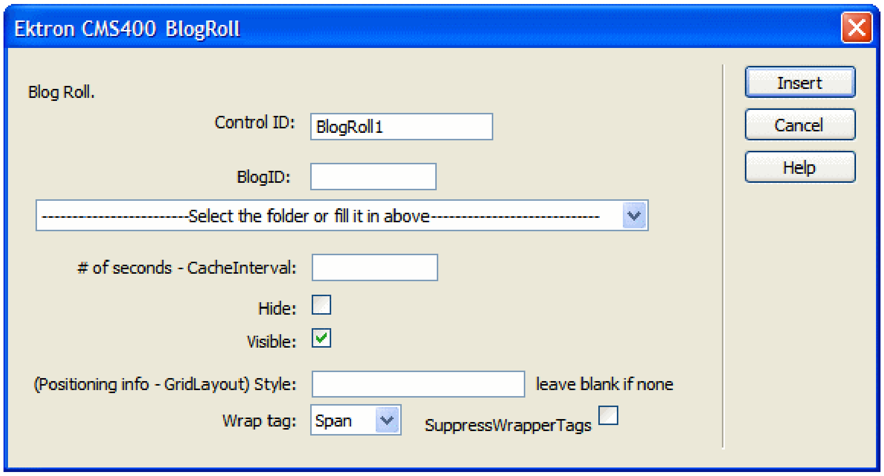
For a description of the Blog Roll function, see "BlogRoll Server Control" on page 7-543.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog Roll function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog Roll**.
3. The Insert Ektron CMS400.NET Blog Roll box appears.



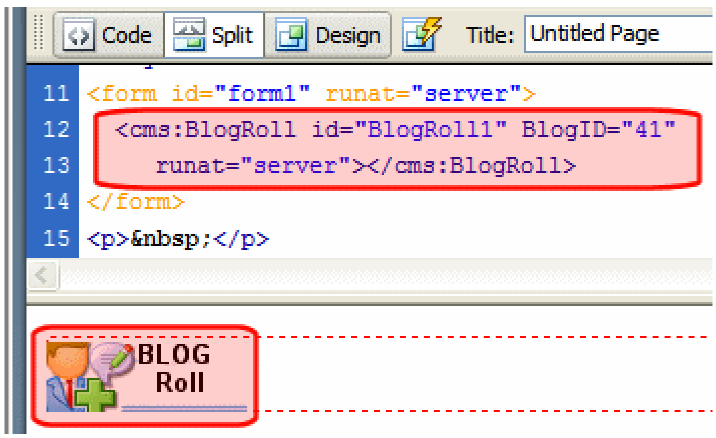
4. Use the following table to assist you with inserting the Blog Roll function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **Insert**.

   A Blog Roll icon appears and indicates the Blog Roll's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BlogRoll id="BlogRoll1" BlogID="41" runat="server"></cms:BlogRoll>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Blog RSS

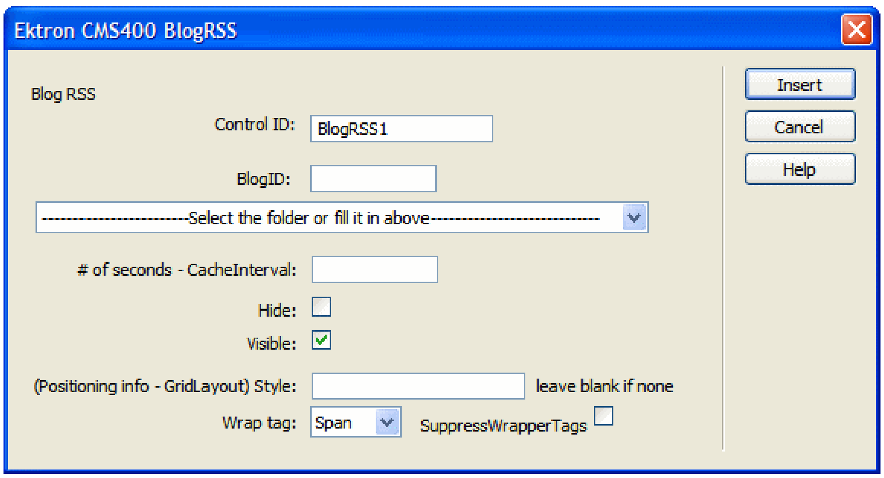
For a description of the Blog RSS function, see "BlogRSS Server Control" on page 7-547.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Blogs**

To insert the Blog RSS function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Blog RSS**.
3. The Insert Ektron CMS400.NET Blog RSS box appears.



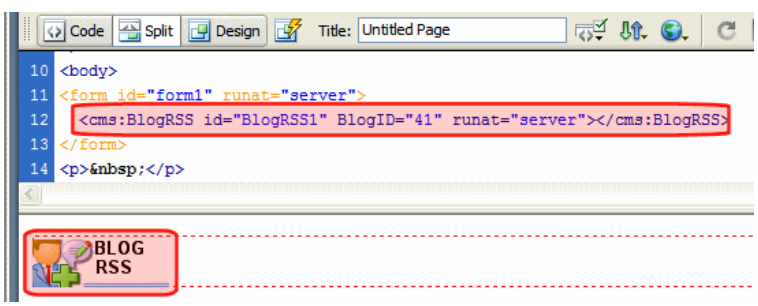
4. Use the following table to assist you with inserting the Blog RSS function.

Field	Description
Control ID	A unique name for the function you are inserting.
Blog ID	The ID of the blog in CMS400.NET. If you do not know the Blog ID, you can choose it from the Select Folder drop down box.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31

Field	Description
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **Insert**.

   A Blog RSS icon appears and indicates the Blog RSS's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BlogRSS id="BlogRSS1" BlogID="41" runat="server"></cms:BlogRSS>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

BreadCrumb

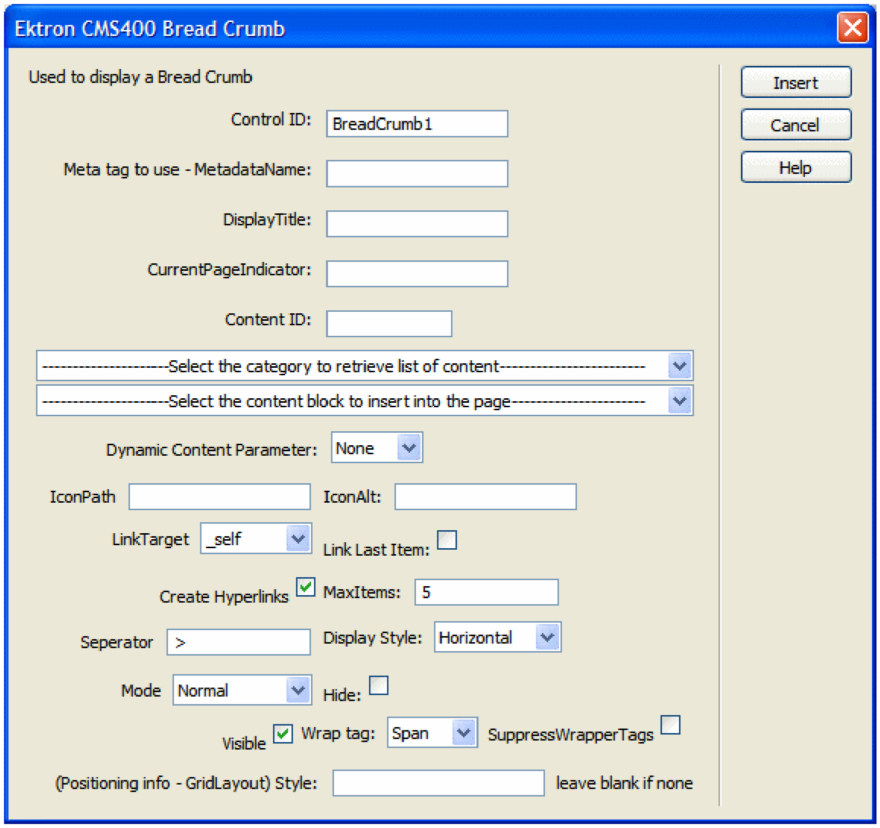
For a description of the BreadCrumb function, see "BreadCrumb Server Control" on page 9-285.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS MENU Controls...**

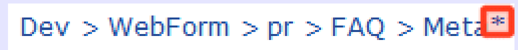
To insert a BreadCrumb Trail:

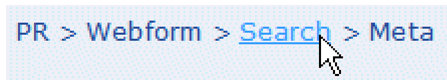
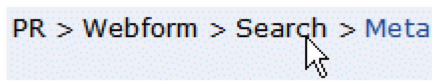
1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **BreadCrumb**.
3. The BreadCrumb dialog box appears.

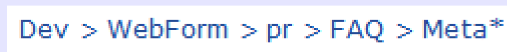
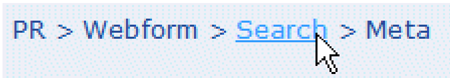
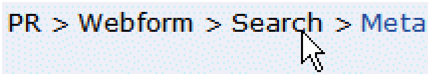


4. Use the following table to assist you with inserting a BreadCrumb Trail.

Field	Description
Control ID	A unique name for the function you are inserting.
Meta tag to use - MetadataName	Specify the name of a Metadata Type that you want to associate with the page. For more information, see "BreadCrumb Metadata Type" on page 9-292
DisplayTitle	Enter text to describe this Web form when it appears in the breadcrumb trail. For example, if the Web form whose properties you are defining is used for all Human Resources pages on your site, enter **Human Resources**. See Also: "BreadCrumb Properties Apply to Web Forms, Not Web Pages" on page 9-287 The default is **Title**. If you define an image in the `IconPath` property below, the image appears in the trail, followed by this text.
CurrentPageIndicator	If desired, enter one or more symbols or characters that identify the current page in the breadcrumb trail. See example below.

Field	Description
	 These characters appear *after* the image or title that identifies the current page in the breadcrumb trail.
Content ID	Gets or Sets the ContentID for the BreadCrumb display title. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content drop down boxes.
Dynamic Content Parameter	Gets or sets the QueryString parameter to read a content ID dynamically.
IconPath	If you want the breadcrumb trail to display an image to identify this Web form, enter the path to the image. **Warning!** The image location must be relative to the Web root. For example: `\CMS400Developer\Workarea\Images\bc_meta_icon.gif`
IconAlt	If you define an image in the `IconPath` property, enter any "Alt" text that should appear when a site visitor hovers the cursor over that image. Here is an example. 
LinkTarget	Determines the type of window that appears on this Web form when a user clicks an item in the breadcrumb trail. The default is **_self**. **_Self** -opens in same window **_Top** - opens in parent window **_Blank** - opens in new window **_Parent** - opens in the parent frame

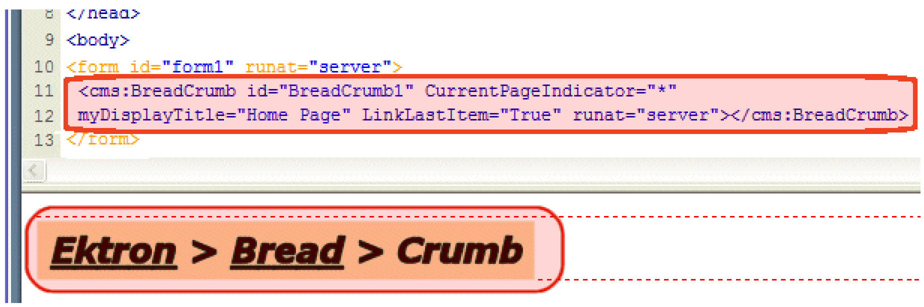
Field	Description
Link Last Item	Use this property to determine whether the last breadcrumb item appears as a hyperlink on this Web form. If this property box is checked, and a user clicks the item, the current page reappears. **Checked** = last item is a hyperlink **Unchecked** = last item is an image and/or text only; the user cannot click on it
Create Hyperlinks	Unchecking this box makes the breadcrumb trail appear as non-hyperlinked plain text. The default is Checked. **Checked** = breadcrumb trail is hyperlinked  **Unchecked** = breadcrumb trail is plain text 
MaxItems	Enter the maximum number of items in the breadcrumb trail on this Web form. The default is **5**. If you set a value of 1 or greater and the user navigates beyond that number of pages, only the most recent pages appear. The older pages disappear from the trail. To allows an unlimited number of breadcrumb trail items on this Web form, enter zero (**0**).
Separator	Enter one or more characters to separate the items in a breadcrumb trail on this Web form. The default character is the greater than sign (**>**). 

Field	Description
DisplayStyle	Indicate how to display the breadcrumb trail: horizontally or vertically. The default is Horizontal. This is an example of **Horizontal.**  This is an example of **Vertical**. 
Mode	Allows you to make the breadcrumb trail appear as non-hyperlinked plain text. The default is **Normal**. **Normal** = breadcrumb trail is hyperlinked  **DisplayOnly** = breadcrumb trail is plain text 
Hide	Used to hide a BreadCrumb in design time and run time. **Checked** = Hide BreadCrumb **Unchecked** = Show BreadCrumb **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**.

Field	Description
	Checked = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

5. When completed, click **Insert**.

   A graphic defines where the BreadCrumb Trail appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:BreadCrumb id="BreadCrumb1" CurrentPageIndicator="*" myDisplayTitle="Home Page" LinkLastItem="True" runat="server"></cms:BreadCrumb>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Calendar

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

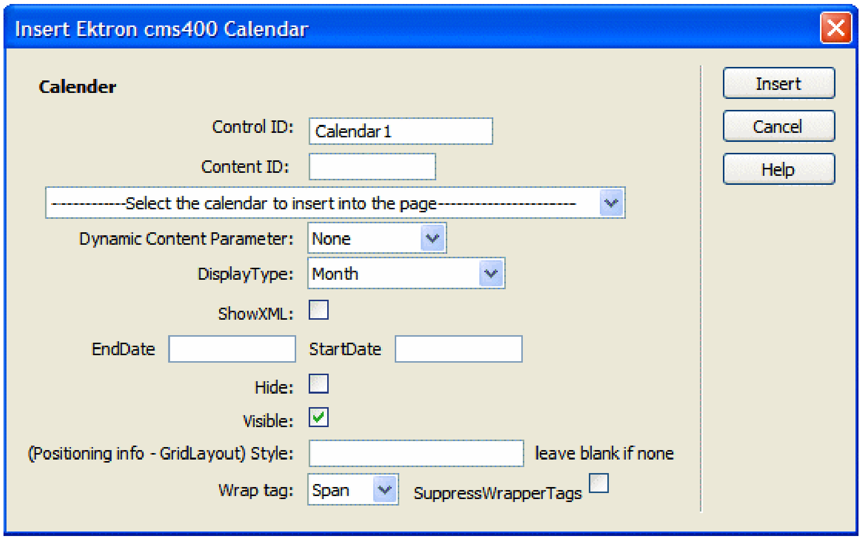
or

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Modules Controls...**

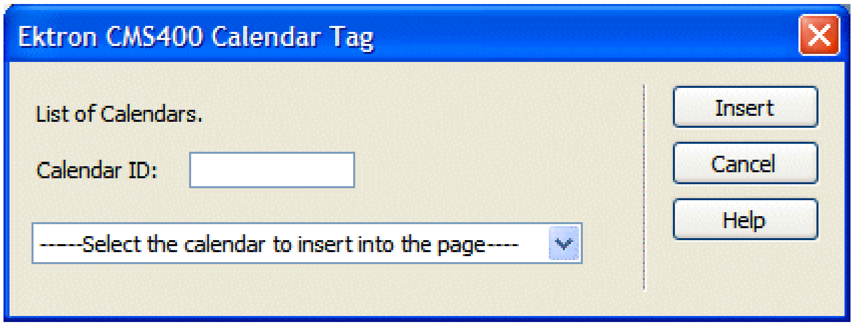
To insert an Calendar function:

Note: Inserting a calendar function does not add a reference to a calendar style sheet. This step must be performed manually.

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click on **Calendar**
3. The Insert Calendar box is displayed.



Warning! When inserting an event calendar using ASP, CF, JSP or PHP, the dialog box that appears only allows you to set the Calendar ID or choose one from the list.



4. Use the following table to assist you with inserting a calendar.

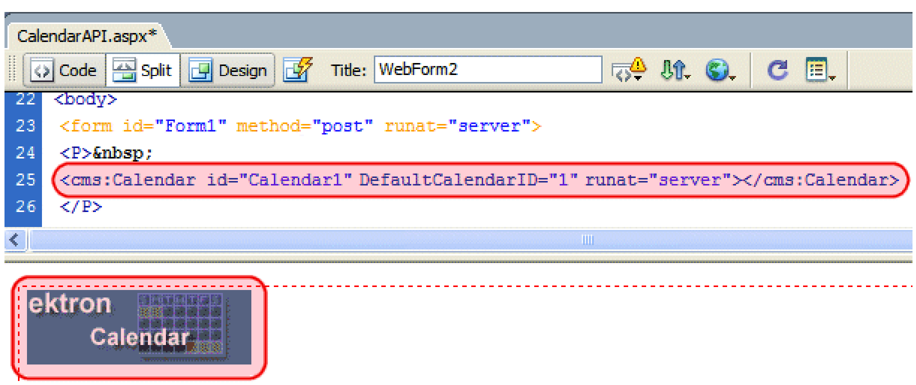
Field	Description
Control ID	A unique name for the function you are inserting.

Field	Description
Warning! Used in ASP.NET only.	
Content ID	Type in the Content ID of the calendar that you want to insert. If you do not know the Content ID, you can navigate to it using the Select Calendar drop down box.
Select Calendar	The drop-down box is populated with a list of all the calendar titles. When a title is selected, the content ID textbox is filled with that content block's id number. If you insert the calendar ID, you do not need to select a calendar.
Dynamic Content Parameter **Warning!** Used in ASP.NET only.	To make this calendar dynamic, select **calendar_id**. When you do, this server control uses the calendar passed as a URL parameter.
DisplayType **Warning!** Used in ASP.NET only.	Specify the Calendar view type. The default is **Month**. - **Month** - A 30 day calendar month view. - **Day** - Single day view. - **Inline** - Display events that occur from the start date of the calendar through the end date. - **MonthUpWithEvent** - Displays a month calendar. Events appear to the right of the calendar when you click on a day.
ShowXML **Warning!** Used in ASP.NET only.	At runtime, output the raw XML data instead of the calendar. With this XML data, you can apply your own XSL to create your own custom display formats. Default is **Unchecked.** **Checked** = Show raw XML data **Unchecked** = Show Calendar
EndDate **Warning!** Used in ASP.NET only.	Specify the end date the calendar displays. Used in conjunction with the `StartDate` property. For example, you have a calendar that shows only classes for the next three month semester.
StartDate **Warning!** Used in ASP.NET only.	Specify the start date the calendar displays. Used in conjunction with the `EndDate` property. For example, you have a calendar that shows only classes for the next three month semester.
Hide **Warning!** Used in ASP.NET only.	Used to hide a calendar in design time and run time. **Checked** = Hide calendar **Unchecked** = Show calendar **Note:** If `Hide` and `Visible` are both checked, the property is hidden.

Field	Description
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

   A graphic defines where the calendar appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	`<cms:Calendar id="Calendar1" DefaultCalendarID="1" runat="server"></cms:Calendar>`

Platform	Code View
ASP	<% ecmEvtCalendar (1) %>
ColdFusion	<cfmodule Calendar_id="1" template="#request.ecm.AppPath#ecmEvtCalendar.cfm">
JSP	<%= ecmEvtCalendar(1) %>
PHP	<?php ecmEvtCalendar (1); ?>

Collection

For a description of the Collection function, see "Collection Server Control" on page 9-118

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

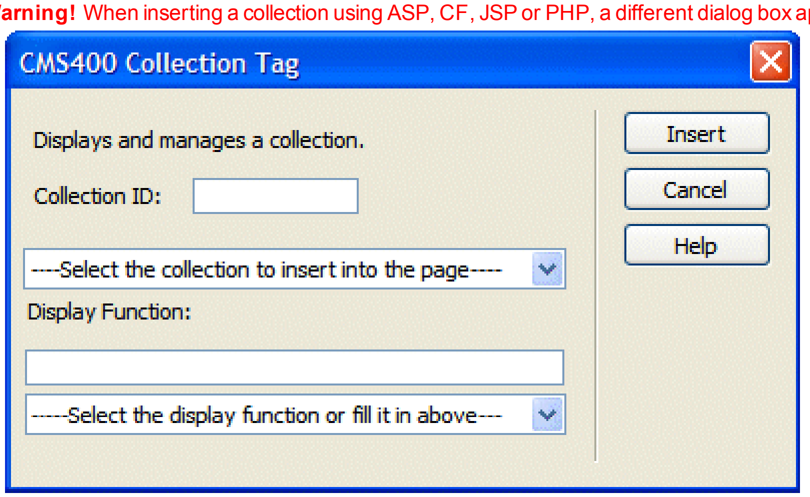
or

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a collection:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Collection**.
3. The Insert Ektron Collection box is displayed.

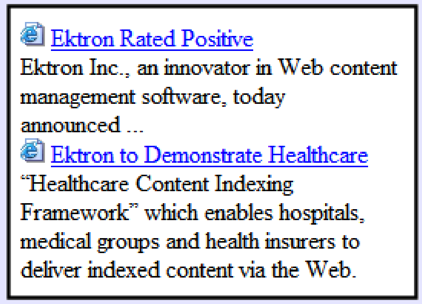
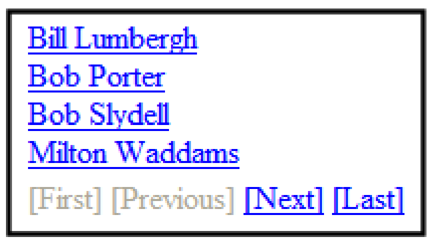
Warning! When inserting a collection using ASP, CF, JSP or PHP, a different dialog box appears.

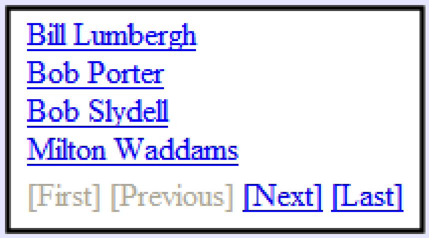


4. Use the following table to assist you with inserting a Collection.

Field	Description
Control ID **Warning!** Used in ASP.NET only.	A unique name for the function you are inserting.
Collection ID	If you know the collection ID, enter it into the textbox. If you do not know the Collection ID, you can navigate to it using the Select Collection drop down box.
Select Collection	The drop-down list is filled with a list of all the Collection titles that you have privileges to. When a title is selected, the Collection ID textbox is filled with that Collection's id number. If you insert the Collection ID, you do not need to select a category.
DisplayXslt	Determines how the information on the page is displayed. **None** - databind only **ecmNavigation** - lists the title of every content block in the collection See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the collection plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Displayxslt` property value is ignored.
LinkTarget **Warning!** Used in ASP.NET only.	Defines the way a link acts when a link is clicked. Choices are: **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned BASE target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.
Dynamic Content Parameter **Warning!** Used in ASP.NET only.	Checks the QueryString for this value and replaces the collection with a content block when specified. Leave blank to always display the collection.

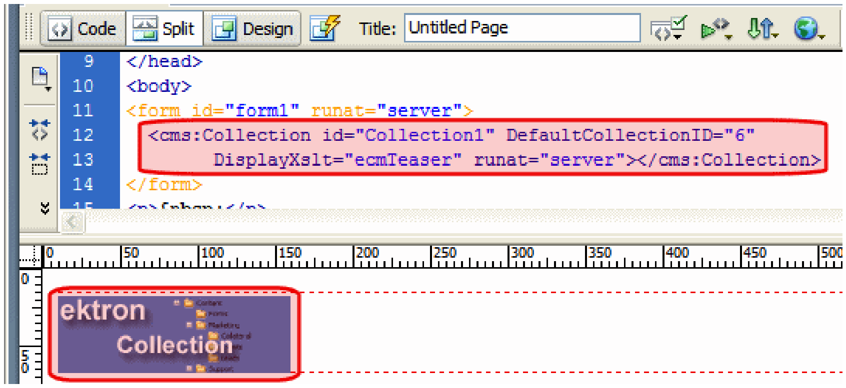
Field	Description
Dynamic Collection Parameter **Warning!** Used in ASP.NET only.	To make this collection dynamic, select **coll_id**. When you do, the function uses the collection passed as a URL parameter.
GetHtml **Warning!** Used in ASP.NET only.	Check this box if you want to retrieve and display content (html body) for all content blocks in the collection. For example, to display content inside a web server control such as a GridView. **Checked** = retrieve and display content (html body) for all content blocks in the collection **Unchecked** = do not retrieve and display content (html body) for all content blocks in the collection
Random **Warning!** Used in ASP.NET only.	Check this box if you want to randomly display one collection item. The item changes each time a site visitor views the page. **Checked** = randomly display one collection item **Unchecked** = display collection list
# of seconds - CacheInterval **Warning!** Used in ASP.NET only.	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31 **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.
MarkupLanguage **Warning!** Used in ASP.NET only.	Identify the template markup file that controls the display of the collection. For example, mycollectionmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `..\CMS400Developer\workarea\customfiles\markup\mycollectionmarkup.ekml`. See Also: "Introduction to EKML" on page 21-414 and "collection.ekml" on page 21-441 **Note**: If you enter a valid EkML file, the `Displayxslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.

Field	Description
IncludeIcons **Warning!** Used in ASP.NET only.	Choose whether to display icons next to the collection list's links. **Warning!** This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. 
EnablePaging **Warning!** Used in ASP.NET only.	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of collection items while controlling the amount of screen space. To accomplish this, the collection display is limited to the number set in the `MaxResults` property. If you set this property box is checked, and the number of collection items exceeds the `MaxResults` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below.  So, for example, if a collection has 9 items and the `MaxResults` property is set to 4, the screen displays only the first four items. When the site visitor clicks **[Next]**, he sees items 5, 6, 7 and 8, etc. **Checked** = enable paging **Unchecked** = disable paging **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.

Field	Description
MaxResults **Warning!** Used in ASP.NET only.	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter zero (0). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, check the `EnablePaging` property box. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below. 
Hide **Warning!** Used in ASP.NET only.	Used to hide a collection in design time and run time. **Checked** = Hide collection **Unchecked** = Show collection **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper **Warning!** Used in ASP.NET only.	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

   A graphic defines where the collection appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	<cms:Collection id=”Collection1” DefaultCollectionID=”6” DisplayXslt=”ecmTeaser” runat=”server”></cms:Collection>
ASP	<% ecmCollection 6,"ecmNavigation" %>
ColdFusion	<cfmodule id="6" displayFunction="ecmNavigation" template="#request.ecm.AppPath#ecmCollection.cfm">
JSP	<%= ecmCollection(6,"ecmTeaser") %>
PHP	<?php ecmCollection(6,"ecmNavigation"); ?>

Content Block

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

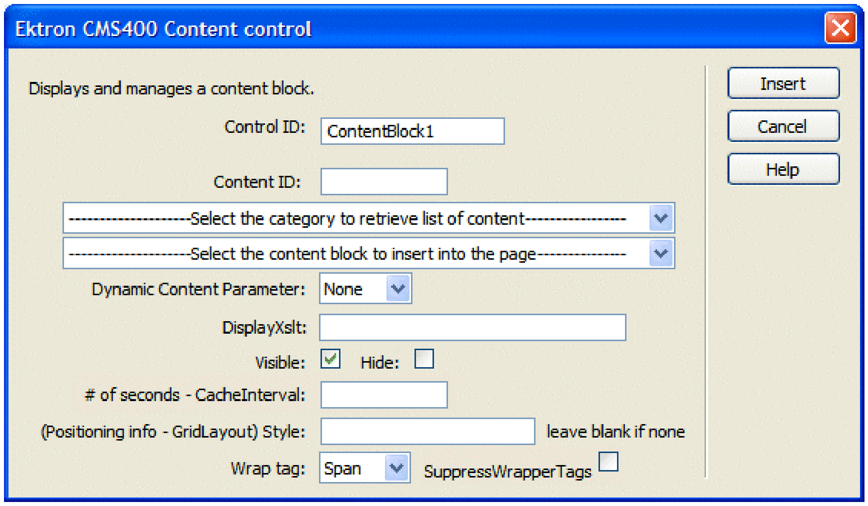
or

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

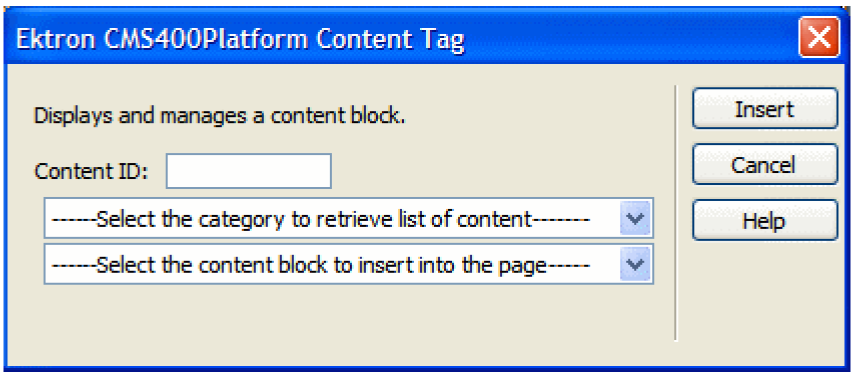
For a description of the Content Block function, see "ContentBlock Server Control" on page 7-201.

To insert a content block:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Content**.
3. The Insert Content box is displayed



Warning! When inserting a Content Block using ASP, CF, JSP or PHP, a different dialog box appears.



4. Use the following table to help you insert a content block.

Field	Description
Control ID **Warning!** Used in ASP.NET only.	A unique name for the function you are inserting.
Content ID	Specify the ID number of the content block that you wish to use as a content block on the Web page. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content drop down boxes.
Select Category	Choose the folder where the content is located. If you insert the content ID, you do not need to select a category.
Select Content	Select the content block to use from the list. If you insert the content ID, you do not need to select content.

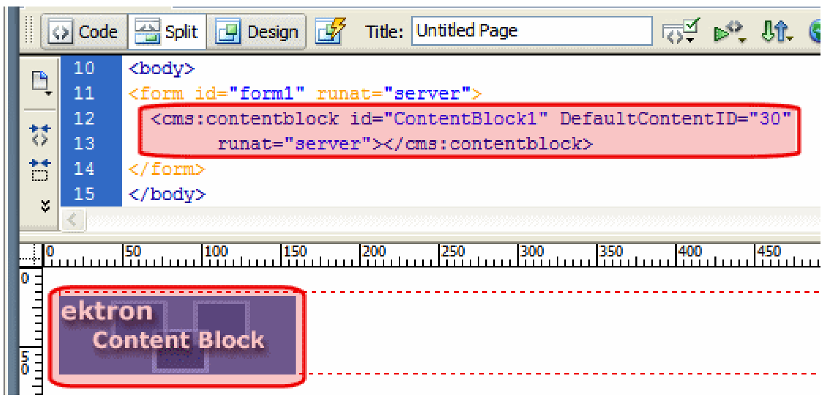
Field	Description
Dynamic Content Parameter **Warning!** Used in ASP.NET only.	Determines if content is displayed as static or passed dynamically. By making content dynamic, when the content displayed on a Web page contains a link to another piece of content, you can display the second piece of content in the same Web page space. **None**: Displays a static content block. **id**: Content block is passed as a URL parameter. **Warning!** If you are using an ASP, CF, JSP or PHP page, you must use the Dynamic Content Block Tag to create a dynamic content block. See "Dynamic Content Block" on page 21-151
DisplayXslt **Warning!** Used in ASP.NET only.	Specify an external XSLT file. See Also: "The OverrideXslt and DisplayXslt Properties" on page 7-207 **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.
Hide **Warning!** Used in ASP.NET only.	Used to hide a collection in design time and run time. **Checked** = Hide collection **Unchecked** = Show collection **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
# of seconds - CacheInterval **Warning!** Used in ASP.NET only.	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: See "Caching with Server Controls" on page 21-31
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.

Field	Description
SuppressWrapper **Warning!** Used in ASP.NET only.	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

Note: You see only the list of Ektron CMS400.NET content blocks if you are working online.

5. Click **insert**.

   A graphic indicates the static content block's location on the template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	<cms:contentblock id="ContentBlock1" DefaultContentID="12" runat="server"></cms:contentblock>
ASP	<% ecmContentBlock(1) %>
ColdFusion	<cfmodule id="1" template="#request.ecm.AppPath#ecmContentBlock.cfm">
JSP	<%= ecmContentBlock(12) %>
PHP	<?php ecmContentBlock(1); ?>

Content List

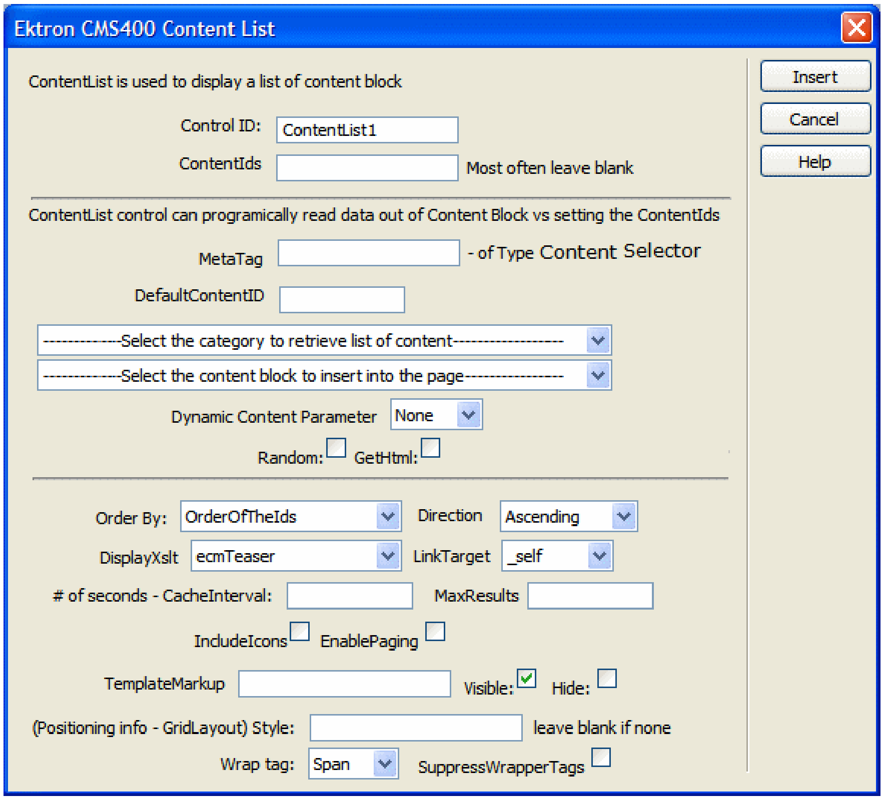
For a description of the Content List function, see See "ContentList Server Control" on page 7-210 .

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert the Content List function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Content List**.
3. The Insert Ektron CMS400.NET Content List box appears.

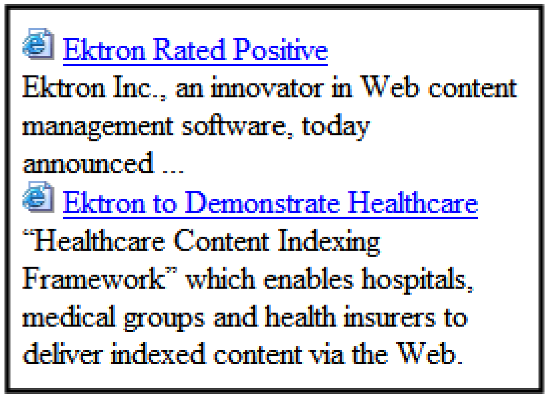


4. Use the following table to assist you with inserting the Content List function.

Field	Description
Control ID	A unique name for the function you are inserting.
ContentIds	A comma delimited list of content blocks IDs. See Also: "Using the ContentID Property to Display a Content List" on page 7-218
MetaTag	Specify a Metadata definition whose type is Content Selector. When you do, the associated list of content items will appear where you place the server control. **Warning!** You cannot insert other metadata types.

Field	Description
	This works with the `DefaultContentID` property. See Also: "Using Metadata to Display an Associated Content List" on page 7-215 For more information about using metadata to assign a list of related content to a content item, see "Related Content Metadata" on page 7-151.
DefaultContentID	Set content id value. Once set, content IDs are generated from the MetaTag value for this content. If you do not know the content's ID, you can navigate to it using the Select Category and Select Content drop down boxes.
DynamicParameter	To make the content dynamic, select **id**. When you do, this server control uses the content passed as a URL parameter.
Random	Check this box if you want to randomly display one content list item. The item changes each time a site visitor views the page. **Checked** = randomly display one content list item **Unchecked** = display the content list
GetHtml	Check this box if you want to retrieve and display content (html body) for all content blocks in the content list. For example, to display content inside a web server control such as a GridView. **Checked** = retrieve and display content (html body) for all content blocks in the content list **Unchecked** = do not retrieve and display content (html body) for all content blocks in the content list
Order By	Sort the list by one of the values below. - **Title** - the order of the content's title. - **Date Modified** - the last date the content was modified. - **Date Created** - the date the content was created. - **Last Author First Name** - the last editor's first name. - **Last Author Last Name** - the last editor's last name. - **OrderOfTheIds** - preserves the content ID order based on the list in the `ContentIds` property.
Direction	Choose whether the list is sorted in Ascending or Descending order.

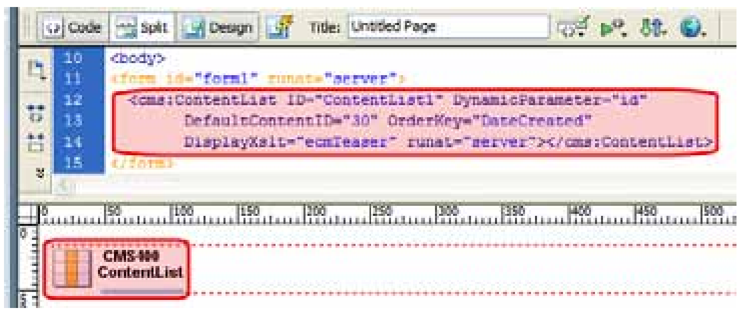
Field	Description
DisplayXslt	Determines how information on the page is displayed. **None**-databind only **ecmNavigation** - lists the title of each content block See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of each content block plus the content summary See Also: See "Example of ecmTeaser Display" on page 9-124 **ecmUnOrderedList** - sorts the list in no particular order. Shows the title and content summary **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Warning!** If you enter a valid EkML file at the `MarkupLanguage` property, the `Displayxslt` property value is ignored.
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31

Field	Description
IncludeIcons	Choose whether to display icons next to the content list's links. **Warning!** This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. 
MarkupLanguage	Identify the template markup file that controls the display of the content list. For example, mycontentlistmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `..\CMS400Developer\workarea\customfiles\markup\mycontentlistmarkup.ekml`. See Also: . "Ektron Markup Language" on page 35 and "contentlist.ekml" on page 75 **Note**: If you enter a valid EkML file, the `DisplayXslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page.

Field	Description
	For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Content List icon appears and indicates the Content List's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	<cms:ContentList ID="ContentList1" DynamicParameter="id" DefaultContentID="30" OrderKey="DateCreated" DisplayXslt="ecmTeaser" runat="server"></cms:ContentList>
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Content Rating

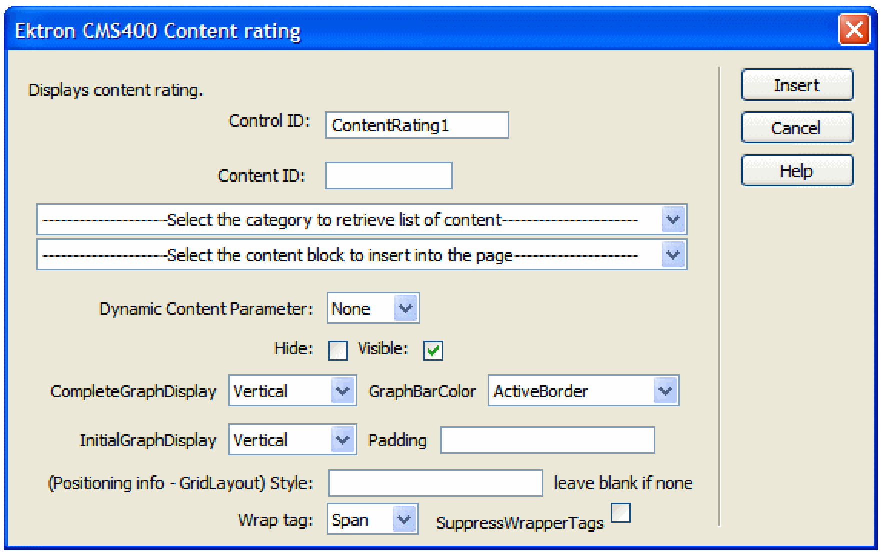
For a description of the Content Rating function, see See "ContentRating Server Control" on page 7-747 .

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert the Content Rating function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **ContentRating**.
3. The Insert Ektron CMS400.NET Content Rating box appears.



4. Use the following table to assist you with inserting the Content Rating function.

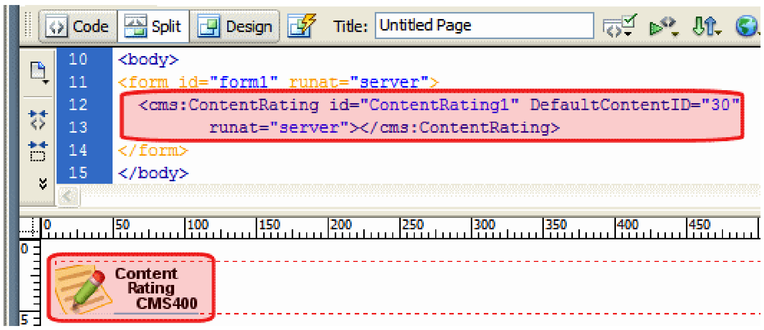
Field	Description
Control ID	A unique name for the function you are inserting.
Content ID	Specify the ID number of a content item being tracked by this function. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content drop down boxes.
Dynamic Content Parameter	To make this content rating control dynamic, select **id**. When you do, this server control is attached to the content block passed as a URL parameter.

Field	Description
CompleteGraph Display	Specify a value to indicate how the ratings graph appears if a site visitor has already rated content. ▪ **horizontal** - graph appears to the right of the AlreadyRatedMessage ▪ **vertical** - graph appears below the AlreadyRatedMessage ▪ **none** - graph does not appear
GraphBarColor	The color of the bars in the graph.
InitialGraphDisplay	Specify a value to indicate how the ratings graph appears if a site visitor has not yet rated content. ▪ **horizontal** - graph appears to the right of the content rating scale ▪ **vertical** - graph appears below the content rating scale ▪ **none** - graph does not appear
Padding	Enter the number of pixels used to create space between the rating scale and the graph. **Note:** If you do not display the graph, this setting has no effect.
Hide	Used to hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.

Field	Description
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   An Content Rating icon appears and indicates the Content Rating's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:ContentRating id="ContentRating1" DefaultContentID="30" runat="server"></cms:ContentRating>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Content XSLT Tag...

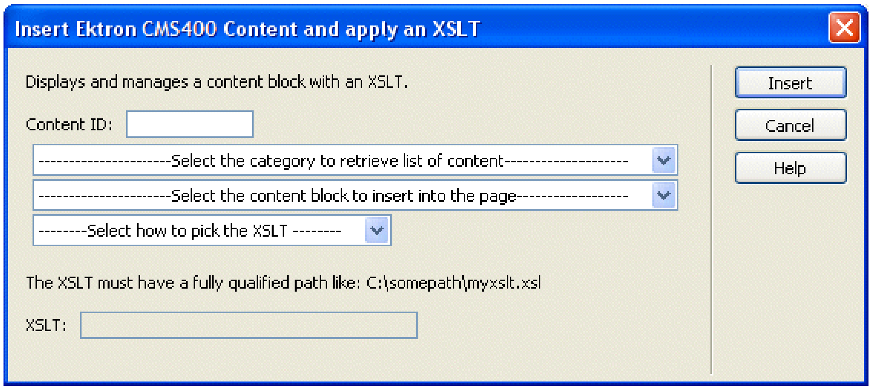
The insert content XSLT command allows you to insert an XML content block, and specify an XSLT (other than the default) to be applied to it.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > XML Function...**

To insert a content XSLT tag, perform the following steps:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET XML functions, click on **Insert Content XSLT Tag...**
3. The Insert Ektron CMS400.NET Content and Apply an XSLT Tag box is displayed.

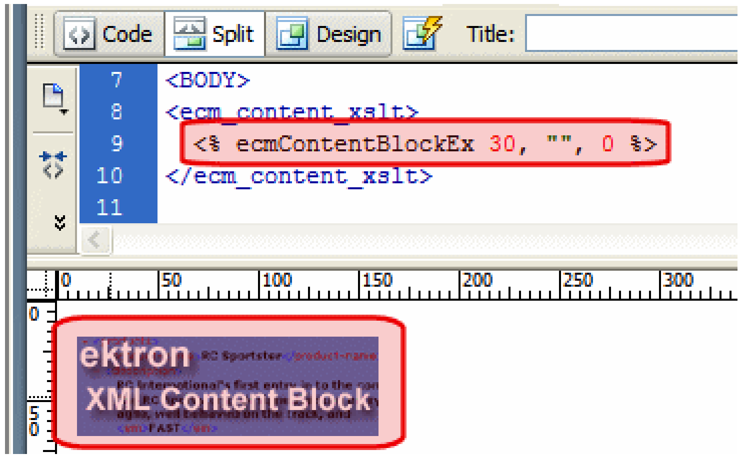


4. Use the following table to assist you with this form.

Field	Description
Content ID	Either type in, or select from the drop down lists, the ID number of the XML content to insert.
Select XSLT	From the drop down list, select the XSLT you would like to apply to the XML content block.
Enter XSLT	If "Enter XSLT" is selected, you can insert the path and file name of the XSLT to apply to the content. **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.

5. Click **insert**.

   A graphic showing you where the XML content block will be placed on the template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View
.NET	This function is not available as an Ektron Dreamweaver Extension for .NET.
ASP	`<% ecmContentBlockEx 30, "", 1 %>`
ColdFusion	`<cfmodule id="5" xsltpath="" xslttype="1" template="#request.ecm.AppPath#ecmContentBlockEx.cfm">`
JSP	`<%= ecmContentBlockEx(24, "", 0 ) %>`
PHP	`<?php ecmContentBlockEx (5, "", 1); ?>`

DHTML Menu

For a description of the DHTML Menu function, see See "DhtmlMenu Server Control" on page 9-191 .

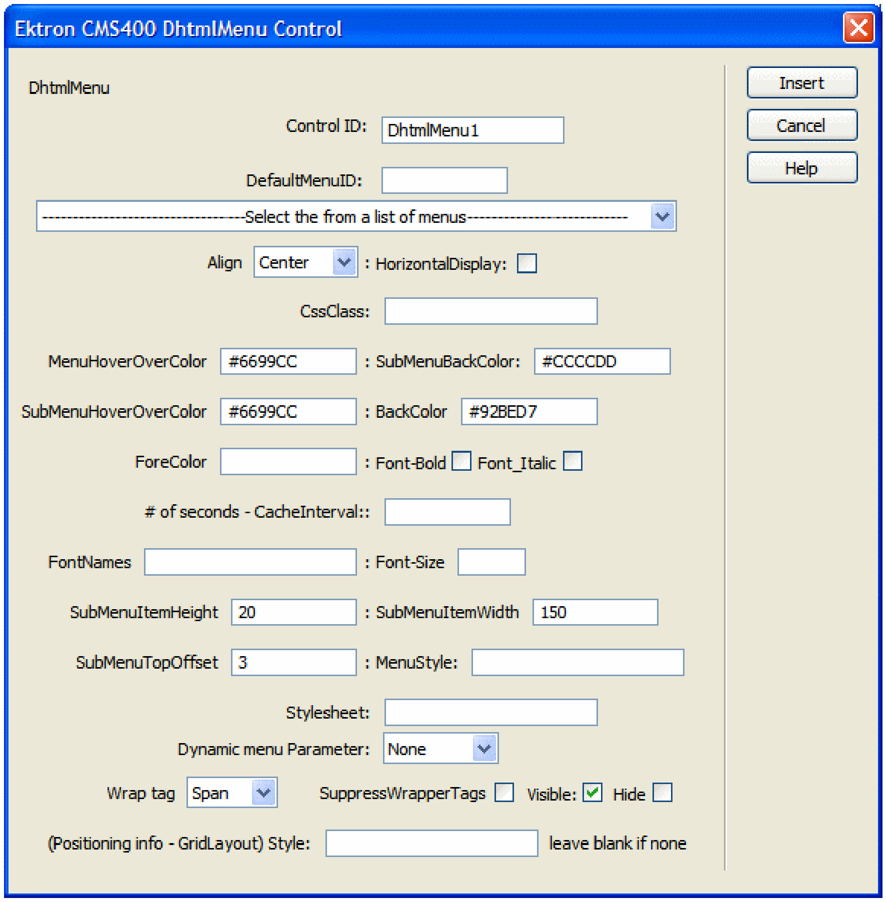
This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS MENU Control...**

To insert a DHTML Menu:

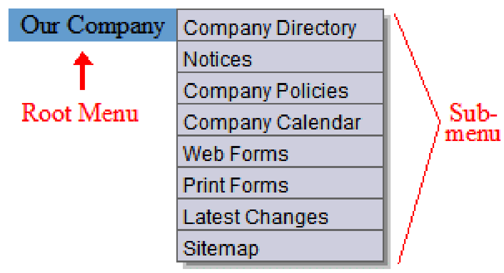
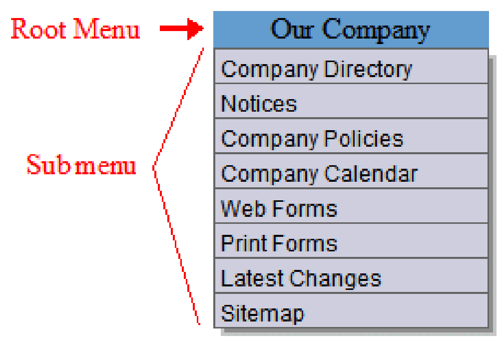
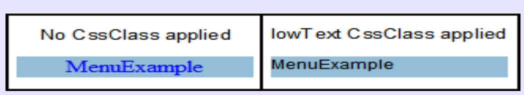
1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **DHTML Menu**

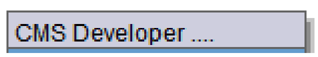
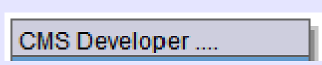
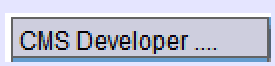
   The DHTML Menu Control box appears.

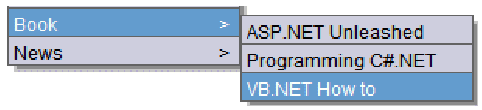
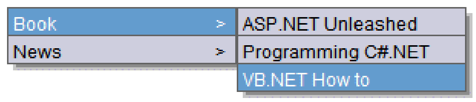
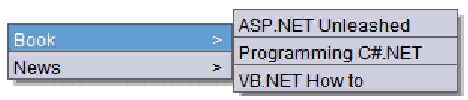


3. Use the following table to assist you with inserting a DHTML Menu.

Field	Description
Control ID	A unique name for the function you are inserting.
DefaultMenuID	The numeric id of the menu that you want to insert. If you do not know the DefaultMenuID path, you can navigate to it using the Select Menu drop down box.
Select Menu	Select a menu to be used. When a menu is selected, the DefaultMenuID textbox is filled with that menu's id number. If you insert the DefaultMenuID, you do not need to select a menu.
Align	Specifies the horizontal alignment of the root menu text. The default is **Center.** **NotSet** - Use the default setting. **Left** - Aligns text to the left. **Center** - Aligns text to the center. **Right** - Aligns text to the right.

Field	Description
	Justify - Aligns text justified to both margins.
HorizontalDisplay	Displays submenu to the right of the root menu. This only affects the first submenu of the root menu. All subsequent submenus appear to the right of each submenu. The default is Unchecked **Checked** = Submenu appears to the right of the root menu  **Unchecked**= Submenu appears below the root menu 
CssClass	Apply a .css class to the root menu. Enter the class name from the .css defined in the `Stylesheet` property. Since `pop_style.css` is the default style sheet, you can use its classes without defining it in the `Stylesheet` property. For example, if you enter `lowtext` in the property, the root menu changes as shown below. 

Field	Description
MenuHoverOverColor	Sets the background color for the root menu when hovering over it.
SubMenuBackColor	Sets the background color for the submenu.
SubMenuHoverOverColor	Sets the background color for the submenu when hovering over it.
BackColor	Sets the background color for the root menu. This property appears in the **Appearance** category
ForeColor	Sets the color of the font for the root menu. This property appears in the **Appearance** category.
Font-Bold	Checking this box allows the font to appear **bold**.
Font_Italic	Checking this box allows the font to appear *italics.*
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
FontNames	Enter the name of a font to use.
Font-Size	The size of the font.
SubMenuItemHeight	Sets the height of each submenu item in pixels. The Default is 20 Example set to 20:  Example set to 30: 
SubMenuItemWidth	Sets the width of each submenu item in pixels. The Default is 150 Example set to 150:  Example set to 130: 

Field	Description
SubMenuTopOffset	Sets the location of the top of the submenu. This number is in pixels. The default is 3 Example set to 5:  Example set to 0 (zero):  Example set to -10: 
MenuStyle	A specified inline style that defines the root menu. For example, if you enter the following in the `MenuStyle` property box: `font: bold 18px Arial;color:royalblue; background-color:slateblue` 
StyleSheet	Specify the location and style sheet for the submenu. For example: `\Workarea\csslib\mytest.css`. Leave blank to use the default. `pop_style.css` is the default style sheet. It is located in `\webroot\CMS400Developer\Workarea\csslib`. The `Stylesheet` property can be used in conjunction with the `CssClass` property to define the root menu.
Dynamic Menu Parameter	Checks the QueryString for the menu value and replaces the menu with content when ID is specified. Leave blank to always display the menu. **None** - Use Default **menu_ID** - The control uses the menu passed as a URL parameter.

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Hide	Used to hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

4. When completed, click **insert**.

   A graphic defines where the DHTML Menu appears on your template.

Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:DhtmlMenu id="DhtmlMenu1" DefaultMenuID="16" ForeColor="" runat="server"></cms:DhtmlMenu>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.

Platform	Code View
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Directory-Taxonomy

For a description of the Directory-Taxonomy function, see "Directory Server Control" on page 9-241.

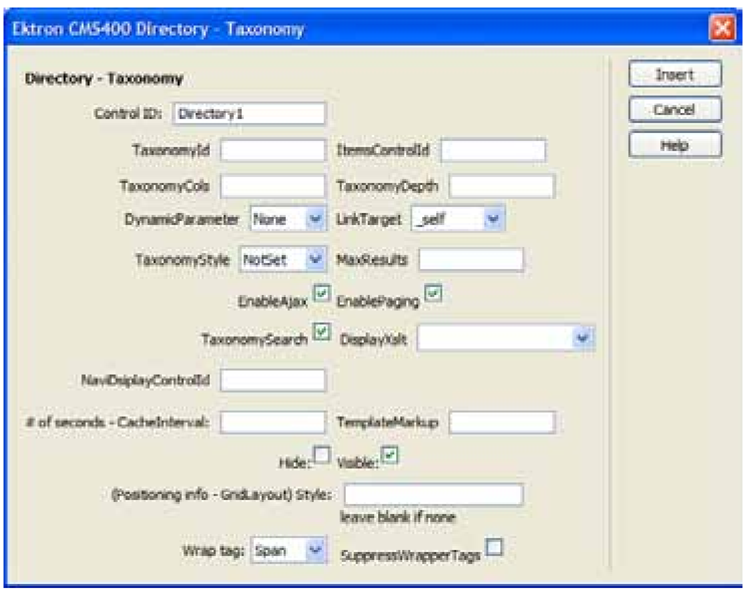
This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a Directory-Taxonomy:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Directory-Taxonomy**

   The Directory-Taxonomy Control box appears.



3. Use the following table to assist you with inserting a Directory-Taxonomy.

Field	Description
Control ID	A unique name for the function you are inserting.

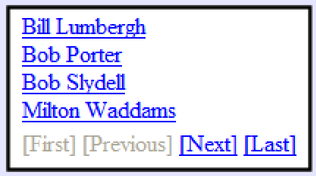
Field	Description
TaxonomyId	Enter the ID number of the taxonomy or category to appear in this server control. If you don't know the number, click the button and navigate to the taxonomy or category. When you select one, it appears in the center of the Visual Studio window.
ItemsControlId	Specify the id of the `<span>` or `<div>` tag you will use to format the display of taxonomy items.
TaxonomyCols	Enter the number of columns in which this taxonomy/category will appear on the page.
TaxonomyDepth	Enter the number of taxonomy levels to retrieve below each taxonomy/category. Only the top level is displayed in the control. The rest of the levels are available through XML in code behind. For example, if the taxonomy is **Businesses > Restaurants > Pizza**, and you set **Taxonomy Depth** to **2**, only Business and Restaurants are available in code behind. To retrieve the all of the categories for a taxonomy recursively, enter -1. A depth greater than 1 or using -1 is only useful if you create a custom output using the Taxonomy's XML. The default value is 1 **Warning!** For a live site, Ektron strongly recommends leaving this value at **1**. Increasing this value can slow down your live Web server. However, for testing on a staging server, you can increase the depth.
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically.
Link Target	Defines the way a link acts when it is clicked. The choices are: **_blank** - loads the link in a new blank window. This window is not named. **_self** - loads the link in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - loads the link in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - loads the link in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>MaxResults</td><td>Enter the maximum number of items to appear in the initial display of this server control.

To set no maximum, enter zero (0).

To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, check the `EnablePaging` property box.

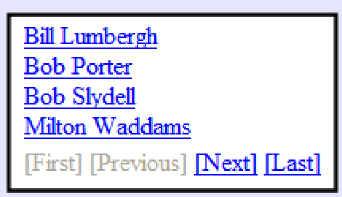
If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below.


</td></tr>
<tr><td>EnableAjax</td><td>Check this box to enable Ajax searches. When enabled, the `MaxResults` property determines the maximum number of results per page.

Checked = Enable Ajax Search

Unchecked = Original HTML Search</td></tr>
<tr><td>EnablePaging</td><td>This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of taxonomy items while controlling the amount of screen space. To accomplish this, the taxonomy display is limited to the number set in the `MaxResults` property.

If you check this property box, and the number of taxonomy items exceeds the `MaxResults` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below.

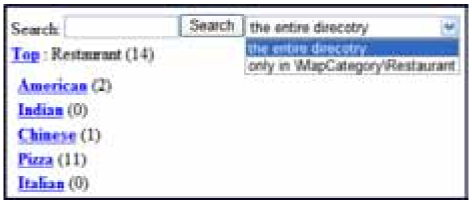


So, for example, if a taxonomy has 9 items and the `MaxResults` property is set to 3, the screen displays only the first three items. When the site visitor clicks **[Next]**, he sees items 4, 5 and 6, etc.

Checked = enables paging

Unchecked = disables paging

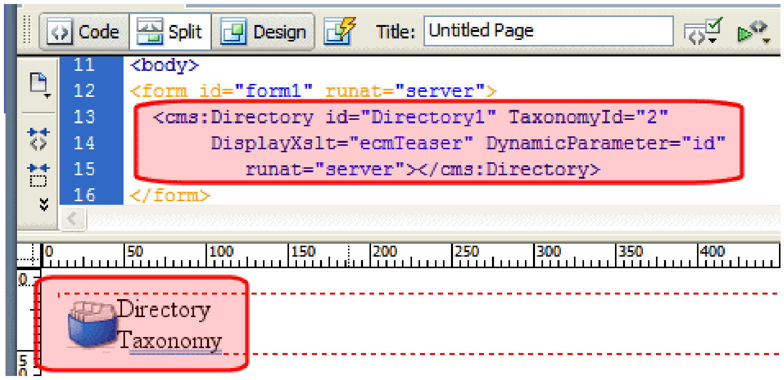
Warning! If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.</td></tr>
</table>

Field	Description
TaxonomySearch	Check this box if you want a search box (shown below) to appear above this taxonomy display. A site visitor can use the search to find content within a taxonomy/category that includes terms of interest. **Checked** = a search box appears above the taxonomy display **Unchecked** = suppress the search box 
DisplayXslt	Determines how the information on the page is displayed. Options are **None** - databind only **ecmNavigation** - lists the title of every content block in the folder See Also: . "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. Note: If an EkML file is inserted into the `MarkupLanguage` property, this value is ignored.
NaviDisplayControlId	Specify the id of the `<span>` or `<div>` tag to format the display of this taxonomy's navigation. Here is an example. **Top** : **Restaurant** : Italian (0)
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31 **Warning!** the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.

Field	Description
MarkupLanguage	Identify the template markup file that controls the display of the taxonomy. For example, mytaxonomymarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\CMS400Developer\workarea\customfiles\markup\mytaxonomymarkup.ekml`. See Also: . "Ektron Markup Language" on page 21-414 and "taxonomy.ekml" on page 21-467 **Note:** If you enter a valid EkML file, the `Displayxslt` property value is ignored.
Hide	Used to hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

4. When completed, click **insert**.

   A graphic defines where the Directory-Taxonomy appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Directory id="Directory1" TaxonomyId="2" DisplayXslt="ecmTeaser" DynamicParameter="id" runat="server"></cms:Directory>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Discussion Forum

For a description of the Discussion Forum function, see "Discussion Board Server Controls" on page 7-665.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Forums**

To insert the Discussion Forum function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Discussion Forum**.
3. The Insert Ektron CMS400.NET Discussion Forum box appears.

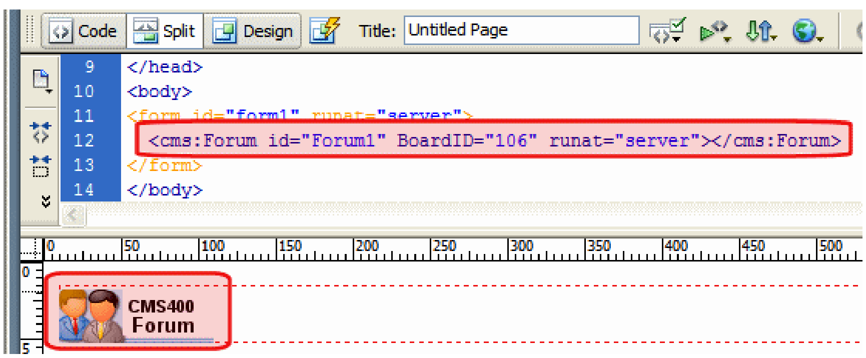
4. Use the following table to assist you with inserting the Blog function.

Field	Description
Control ID	A unique name for the function you are inserting.
Board ID	The ID of the Discussion Board in CMS400.NET. If you do not know the Board ID, you can choose it from the Select Folder drop down box.
JavascriptEditorToolbar	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Decide which buttons are available in the JavaScript Editor.
JavascriptEditorWidth	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Set the width in pixels for the editor. The default is **625**.
JavascriptEditorHeight	**Note:** As of version 7.6, the JavaScript editor has been removed from CMS400.NET. This property has been deprecated. Set the height in pixels for the editor. The default is **400**.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function

Field	Description
	Unchecked = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Discussion Forum icon appears and indicates the Discussion Forum's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Forum id="Forum1" BoardID="106" runat="server"></cms:Forum>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.

Platform	Code View
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Display By Meta Value

For a description of the Display By Meta Value function, see "MetaDataList Server Control" on page 7-175.

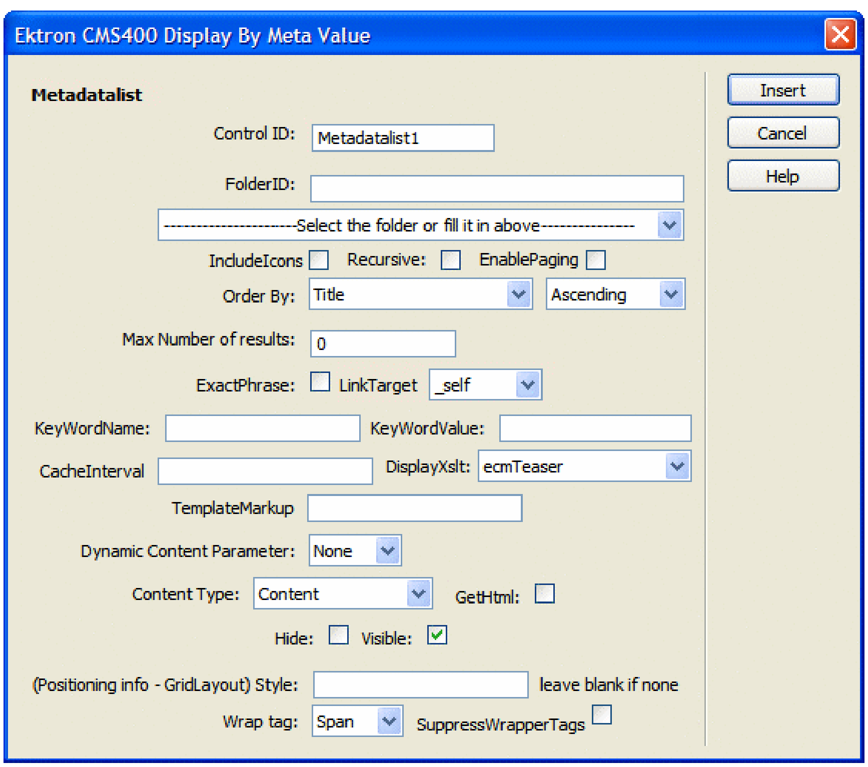
This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert Display By Meta Value:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Display By Meta Value**

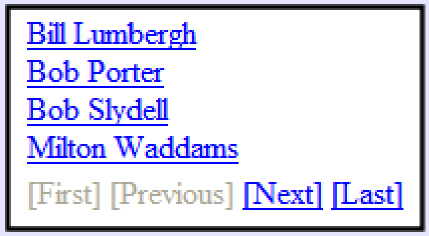
   The Display By Meta Value box appears.



3. Use the following table to assist you with inserting Display By Meta Value.

Field	Description
Control ID	A unique name for the function you are inserting.
FolderID	The numeric id of the folder that you want to use. If you do not know the folder ID, you can navigate to it using the Select folder drop down box.
Select Folder	Select a folder path to be used. When a folder is selected, the folderID textbox is filled with that folder's id number. If you insert the Folder ID, you do not need to select a folder.
IncludeIcons	Choose whether to display icons next to the metadatalist's links. **Warning!** This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. Ektron Rated Positive Ektron Inc., an innovator in Web content management software, today announced ... Ektron to Demonstrate Healthcare "Healthcare Content Indexing Framework" which enables hospitals, medical groups and health insurers to deliver indexed content via the Web.
Recursive	Determines whether the Display By Meta Value control uses this folder's child folders.
EnablePaging	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of taxonomy items while controlling the amount of screen space. To accomplish this, the taxonomy display is limited to the number set in the `MaxResults` property. If you check this property box, and the number of taxonomy items exceeds the `MaxResults` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below. Bill Lumbergh Bob Porter Bob Slydell Milton Waddams [First] [Previous] [Next] [Last] So, for example, if a taxonomy has 9 items and the `MaxResults` property

Field	Description
	is set to 3, the screen displays only the first three items. When the site visitor clicks **[Next]**, he sees items 4, 5 and 6, etc. **Checked** = enables paging **Unchecked** = disables paging **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.
Order By	Specify how you want to order the results that are generated. Also specify if you want the results in ascending or descending order. - **Title - The title of the content block** - **Date Created** - The date the content block was created - **Date Modified** - The date the content block was last modified - **Last Author Last Name** - The last author's last name - **Last Author First Name** - The last author's first name - **ID - The content blocks ID** - **Ascending** - Alphabetic or numerical order - **Descending** - Reverse alphabetic or numerical order

Field	Description
MaxResults	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter zero (0). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, check the `EnablePaging` property box. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below. 
ExactPhrase	Determines whether the KeyWordValue needs to match the phrase exactly. For example, if "site" is the KeyWordValue and the title of a content block is "Welcome to the site" and the ExactPhrase box is checked, you would not see the content block in the metadata list. This is because "site" does not equal "Welcome to the site". **Checked** = Match the exact phrase **Unchecked** = Doesn't need to match exact phrase
LinkTarget	Defines the way a link acts when a link is clicked. Choices are: **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned BASE target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.

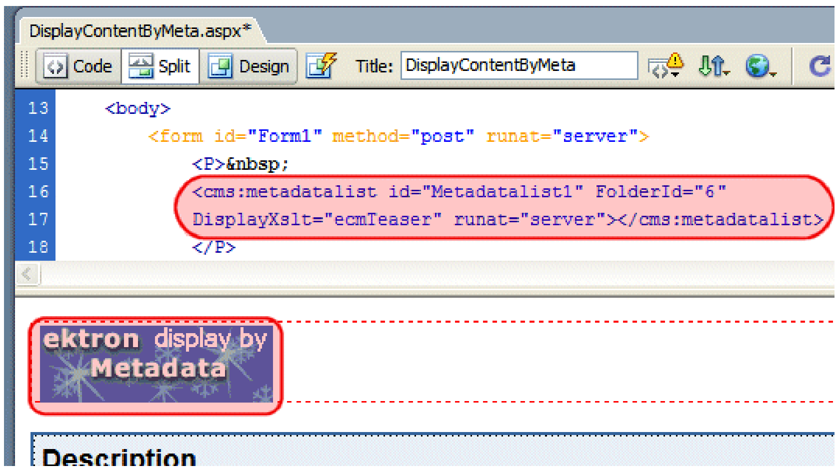
<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>KeyWordName</td><td>The KeyWordName is the container where the KeyWordValues are located.
Some examples of a KeyWordName might be “Keywords or Title.”
For information on creating KeyWordNames for Metadata, see the Ektron CMS400.NET Administrators Manual > “Managing Content” > “Metadata” > “Managing Metadata Definitions” > “Adding a Metadata Definitions”</td></tr>
<tr><td>KeyWordValue</td><td>The value that is associated with the KeyWordName.
Some examples of a KeyWordValue might be “Home; page; or company”</td></tr>
<tr><td>CacheInterval</td><td>Sets the amount of time the server control’s data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control’s data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Warning! If the <code>EnablePaging</code> property is set to True, the <code>CacheInterval</code> property is disabled.</td></tr>
<tr><td>DisplayXslt</td><td>Determines how the information on the page is displayed.
None-databind only
ecmNavigation - lists the title of every content block in the folder
See Also: "Example of ecmNavigation Display" on page 9-124
ecmTeaser - lists the title of every content block in the folder plus the content summary
See Also: "Example of ecmTeaser Display" on page 9-124
Warning! If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.
Warning! If you enter a valid EkML file at the <code>MarkupLanguage</code> property, the <code>Displayxslt</code> property value is ignored.</td></tr>
<tr><td>MarkupLanguage</td><td>Identify the template markup file that controls the display of the metadata list. For example, mymetadatalistmarkup.ekml.
If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example,
<code>..\CMS400Developer\workarea\customfiles\</code>
<code>markup\mymetadatalist.ekml</code>.
See Also: "Introduction to EKML" on page 21-414 and "metadatalist.ekml" on page 21-465
Note: If you enter a valid EkML file, the <code>DisplayXslt</code> property value is ignored. If the EkML file contains the <code>[$ImageIcon]</code> variable, the <code>IncludeIcons</code> property acts as True.</td></tr>
</table>

Field	Description
Dynamic Content Parameter	Checks the QueryString for the content block ID value and replaces the Display By Meta Value Control with content when an ID is specified. Leave blank to always display the Display By Meta Value Control. **None** - Use Default **ID** - The control uses the content block passed as a URL parameter.
Content Type	Defines what type of list summary appears. **Content** - Displays only content blocks in the folder. **All Types** - Displays all content in the folder. **Forms** - Displays only forms in the folder. **Archive_Content** - Displays archived content from the folder. **Archive_Forms** - Displays archived forms from the folder.
GetHtml	Check this box if you want to retrieve and display content (html body) for all content blocks in the collection. For example, display content inside a web server control such as a GridView. **Checked** = retrieve and display content (html body) for all content blocks in the metadata list **Unchecked** = do not retrieve and display content (html body) for all content blocks in the metadata list
Hide	Used to hide the function in design time and run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.

Field	Description
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

4. When completed, click **insert**.

   A graphic defines where the Display By Meta Value appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:metadatalist id="Metadatalist1" FolderId="6" DisplayXslt="ecmTeaser" runat="server"></cms:metadatalist>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Dynamic Content Block

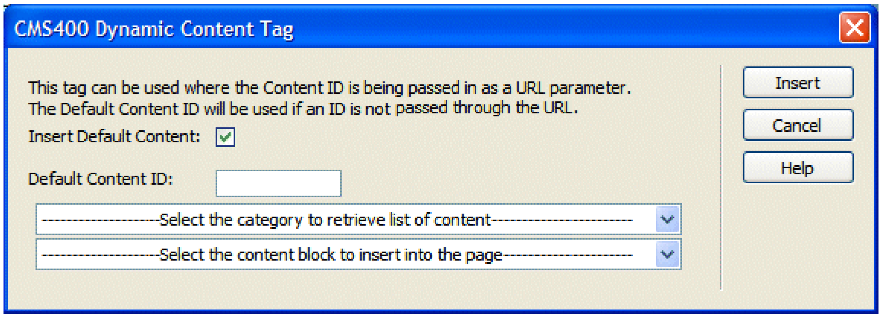
This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

For a description of a dynamic content block, see "Dynamic Content Block" on page 21-254

To insert a dynamic content block tag:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click on **Dynamic Tag...**
3. The Insert Ektron Dynamic Tag box is displayed

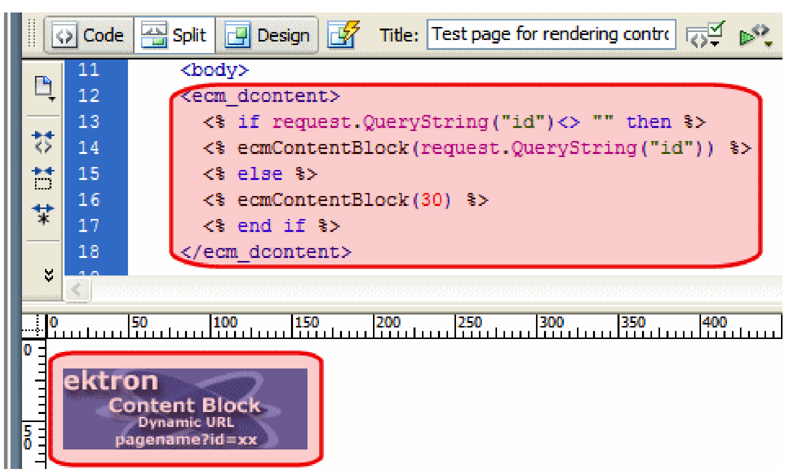


4. Use the following table to assist you with inserting a dynamic content block function.

Field	Description
Insert Default Content	If you want a static content block to be displayed if no ID is passed through the URL, place a check in this box.
Default Content ID	Specify the ID number of the content block that you wish to use as a default content block on the Web page.
Select Content	If you are working online, you may select the content block to use as a default content block from the list.

5. When completed, click **Insert**.

   A graphic to define where the dynamic content block has been placed on your template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View
.NET	For ASP.NET pages, use the CMS400.NET (Server Control) Content Block tag and set the dynamic parameter to id. See "Content Block" on page 21-118
ASP	`<% if request.QueryString("id")<> "" then ecmContentBlock(request.QueryString("id")) else ecmContentBlock(1) end if %>`
ColdFusion	`<cfif isdefined("url.id")> <cfmodule id="#url.id#" template="#request.ecm.AppPath#ecmContentBlock.cfm"> <cfelse> <cfmodule id="1" template="#request.ecm.AppPath#ecmContentBlock.cfm"> </cfif>`
JSP	Inserting a Dynamic Content Block using Ektron's Dreamweaver Extensions is not supported in JSP.
PHP	`<?php $id =GetURL_Id(1); ecmContentBlock($id); ?>`

Folder Bread Crumb

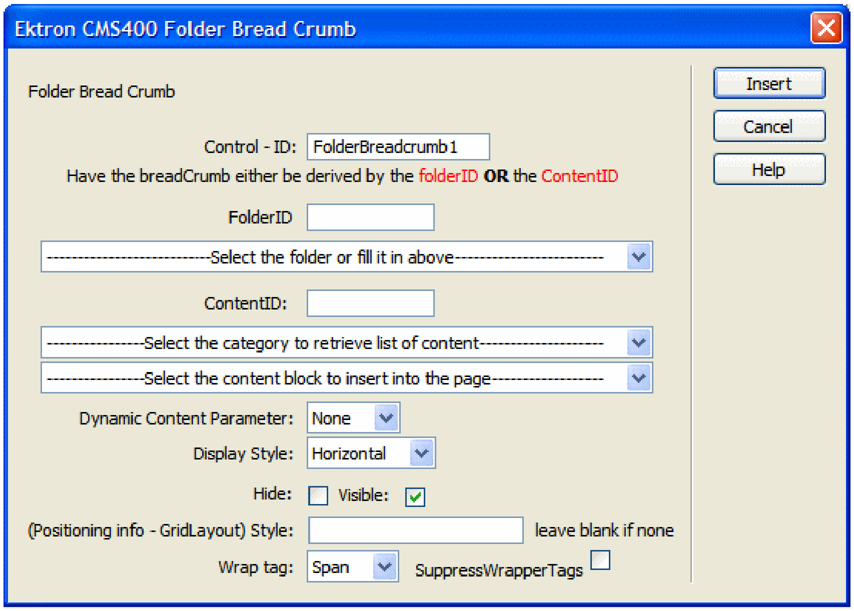
For a description of the Folder Bread Crumb function, see "FolderBreadcrumb Server Control" on page 9-294.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS MENU Controls...**

To insert a Folder Bread Crumb Trail:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Folder BreadCrumb**.
3. The Folder Bread Crumb dialog box appears.



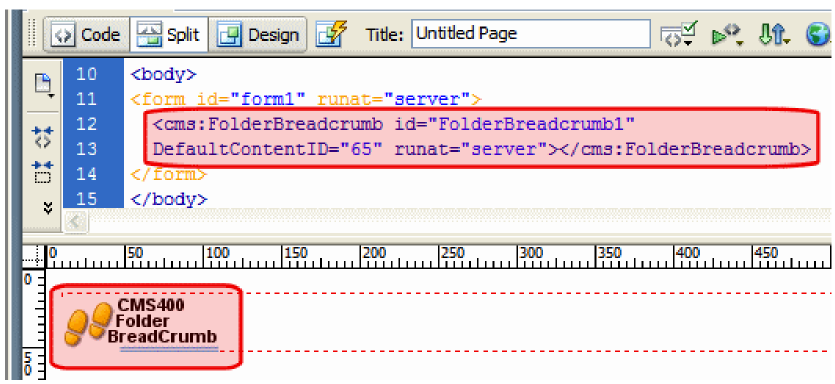
4. Use the following table to assist you with inserting a Folder Bread Crumb.

Field	Description
Control ID	A unique name for the function you are inserting.
FolderID	The numeric id of the folder that you want to use. If you do not know the folder ID, you can navigate to it using the Select folder drop down box.
Content ID	Gets or Sets the ContentID. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content drop down boxes.
DynamicParameter	Gets or sets the QueryString parameter to read a content ID dynamically.
DisplayStyle	Indicate how to display the folder bread crumb: horizontally or vertically. The default is Horizontal.
Hide	Used to hide a FolderBreadcrumb in design time and run time. **Checked** = Hide FolderBreadcrumb **Unchecked** = Show FolderBreadcrumb **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.

Field	Description
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags

5. When completed, click **Insert**.

   A graphic defines where the Folder Bread Crumb appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:FolderBreadcrumb id="FolderBreadcrumb1" DefaultContentID="65" runat="server"></cms:FolderBreadcrumb>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.

Platform	Code View
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Form

For a description of the Form function, see "FormBlock Server Control" on page 7-281

This tag appears on the following menu(s):

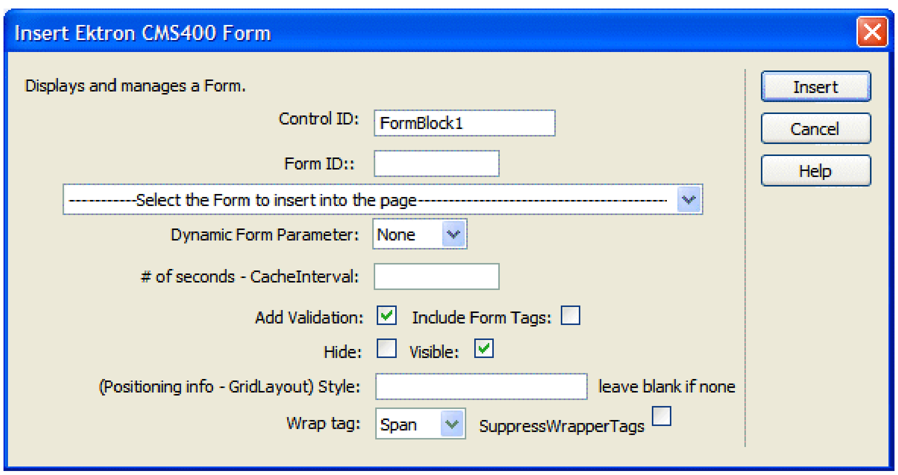
- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

or

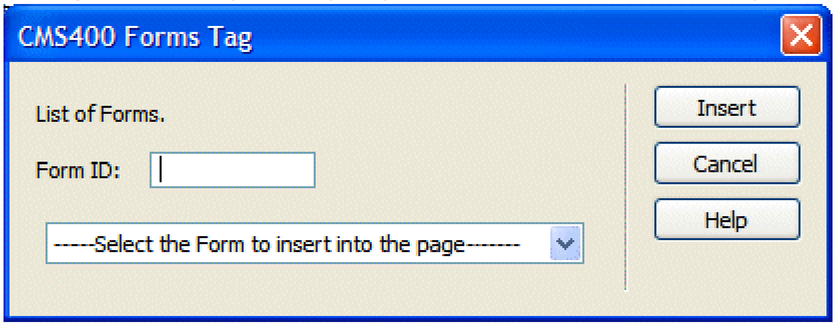
- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a form:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click **Form**
3. The Insert Form box is displayed.



Warning! When inserting a form tag using ASP, CF, JSP or PHP, a different dialog box appears.



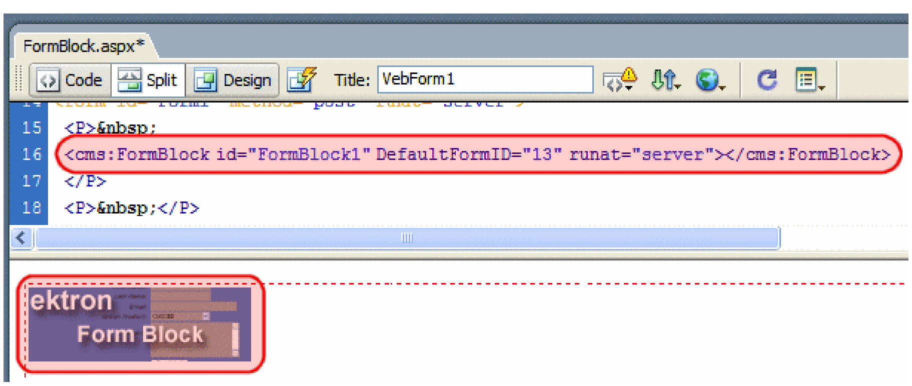
4. Use the following table to assist you with inserting a form.

Field	Description
Control ID **Warning!** Used in ASP.NET only.	A unique name for the function you are inserting.
Form ID	Type in the form ID that you want to insert. If you do not know the Form ID, you can navigate to it using the Select Form drop down box.
Select Form	The drop-down box is populated with a list of all the form titles. When a title is selected, the form ID textbox is filled with that form's id number. If you insert the Form ID, you do not need to select a form.
Dynamic Form Parameter **Warning!** Used in ASP.NET only.	To make this form block dynamic, select **ekfrm**. When you do, this control uses the form block passed as a URL parameter.
# of seconds - CacheInterval **Warning!** Used in ASP.NET only.	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Add Validation **Warning!** Used in ASP.NET only.	When **checked**, adds Validation to your main runat=server form. **Checked** = add validation **Unchecked** = Do not add validation
Include Form Tags **Warning!** Used in ASP.NET only.	Determines if tags are generated automatically or manually. See Also: "Automatic versus Manual Generation of Form Tags" on page 7-284 **Checked** = automatically generate form tags **Unchecked** = generate form tags manually

Field	Description
Hide **Warning!** Used in ASP.NET only.	Used to hide a form in design time and run time. **Checked** = Hide form **Unchecked** = Show form **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **Insert**.

   A graphic defines where the form appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	<cms:FormBlock id="FormBlock1" DefaultFormID="13" runat="server"></cms:FormBlock>
ASP	<% ecmFormBlock (1) %>
ColdFusion	<cfmodule id="1" template="#request.ecm.AppPath#ecmFormBlock.cfm">
JSP	<%= ecmFormBlock(1) %>
PHP	<?php ecmFormBlock (1); ?>

ImageControl

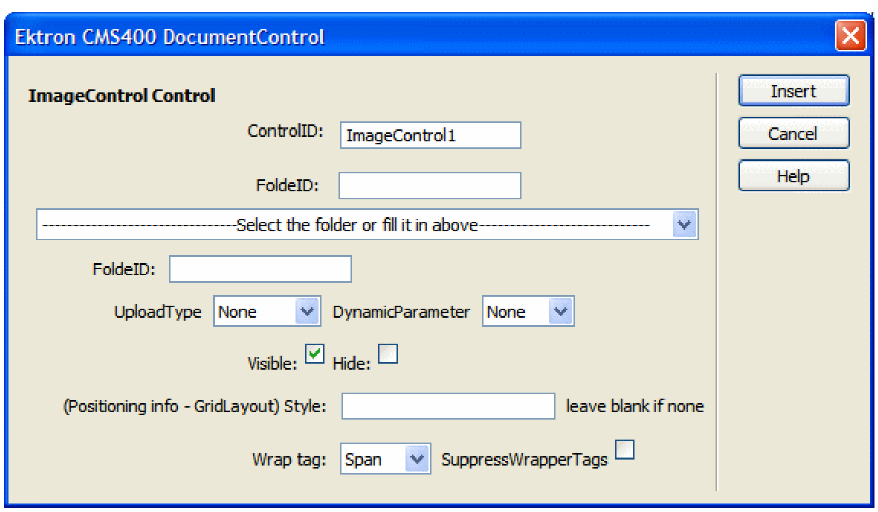
For a description of the ImageControl function, see "AssetControl Server Control" on page 7-486.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls...**

To insert the ImageControl function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **ImageControl**.
3. The Insert Ektron CMS400.NET ImageControl box appears.

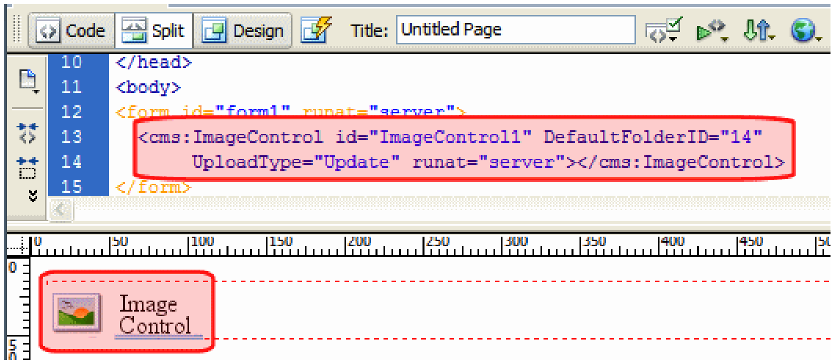


4. Use the following table to assist you with inserting the ImageControl function.

Field	Description
Control ID	A unique name for the function you are inserting.
FolderID	The ID of the folder where Images are located. This property is used when the `UploadType` property is set to Update. If you do not know the Folder ID, you can navigate to it using the Select Folder drop down box.
UploadType	Select whether the control adds new assets or update existing ones. Select Add to add assets and use the `FolderID` property. The default is **None**.
Hide	Used to hide a function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   An ImageControl icon appears and indicates the ImageControl's location on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:ImageControl id="ImageControl1" DefaultFolderID="14" UploadType="Update" runat="server"></cms:AssetControl>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Language API

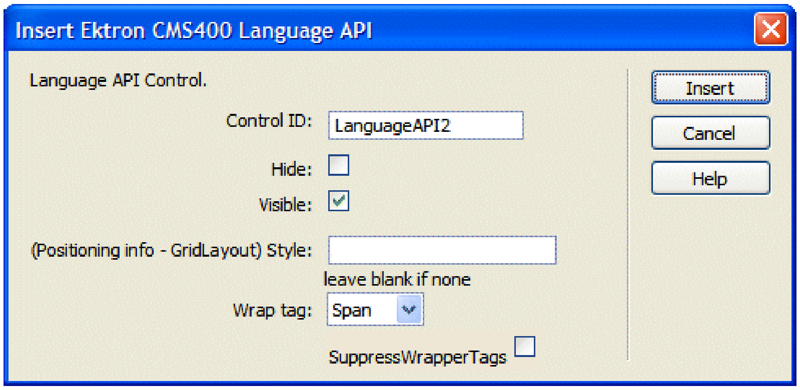
For a description of the Language API function, see "LanguageAPI Server Control" on page 58.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a Language API:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Language API**
3. The Language API box appears.

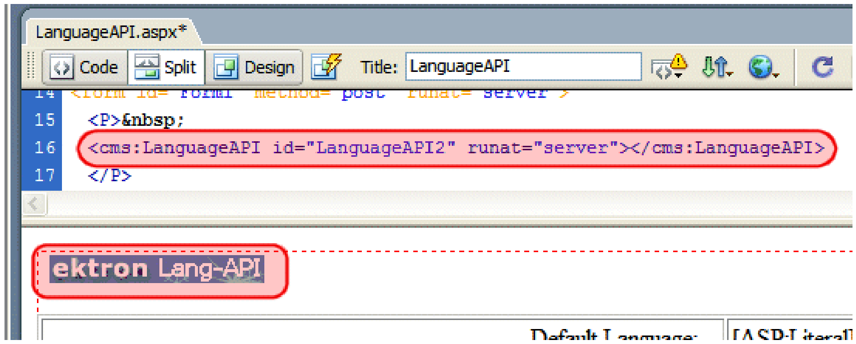


4. Use the following table to assist you with inserting a Language API box.

Field	Description
Control ID	A unique name for the function you are inserting.
Hide	Used to hide a Language API in design time and run time. **Checked** = Hide Language API **Unchecked** = Show Language API **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

A graphic defines where the Language API appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:LanguageAPI id="LanguageAPI2" runat="server"></cms:LanguageAPI>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Language Select Box

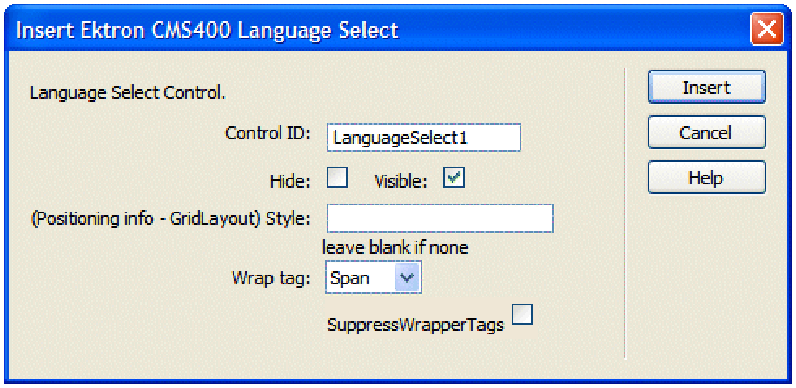
For a description of the Language Select Box, see "LanguageSelect Server Control" on page 14-46.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a Language Select Box:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Language Select**
3. The Language Select box appears.

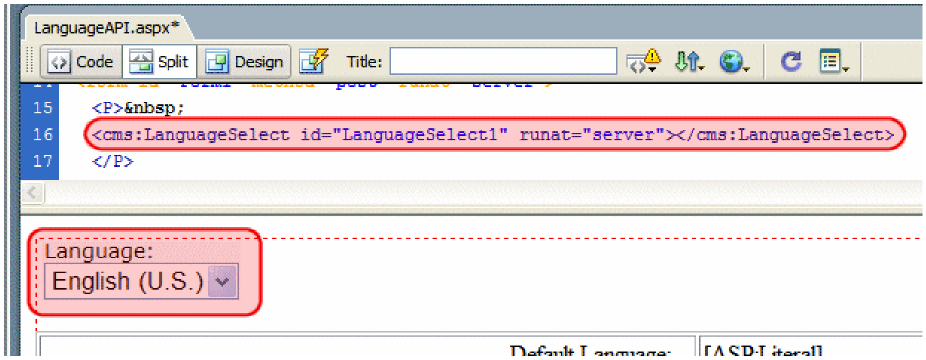


4. Use the following table to assist you with inserting a Language Select box.

Field	Description
Control ID	A unique name for the function you are inserting.
Hide	Used to hide a function in design time and run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If Hide and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

A graphic defines where the Language Select appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	`<cms:LanguageSelect id="LanguageSelect1" runat="server"></cms:LanguageSelect>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

List Summary

For a description of the List Summary function, see "ListSummary Server Control" on page 9-270.

This tag appears on the following menu(s):

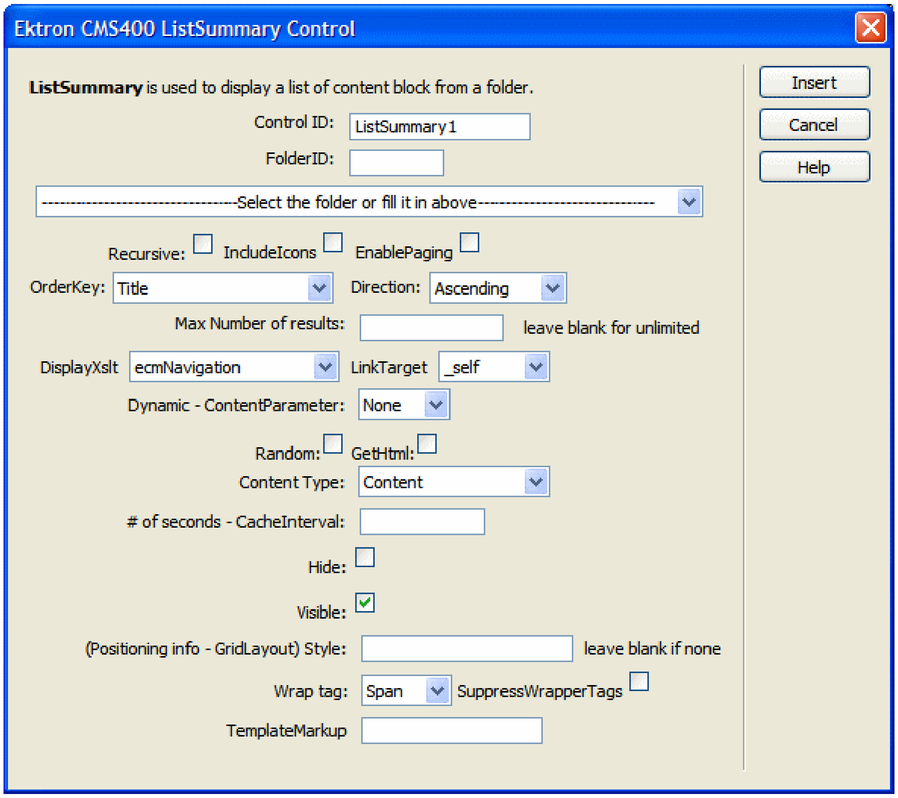
- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

or

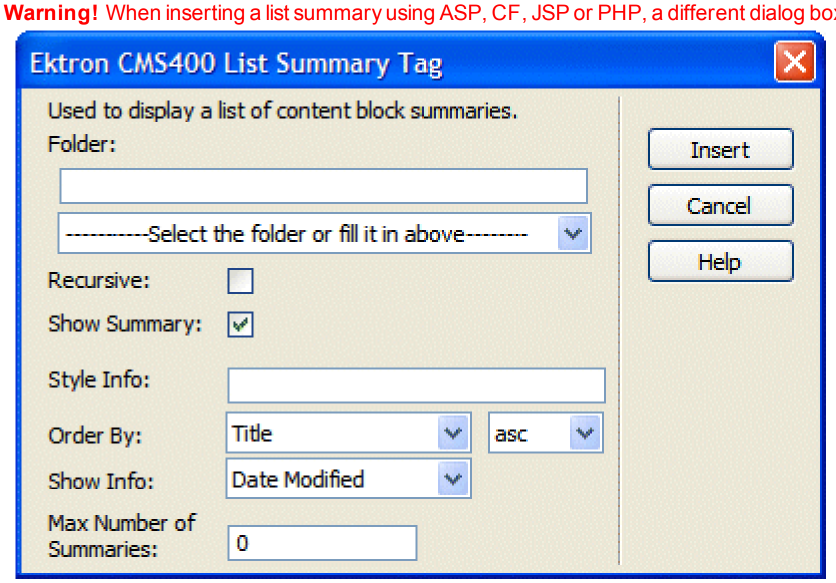
- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a list summary:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **List Summary**.
3. The Insert Ektron List Summary box is displayed.

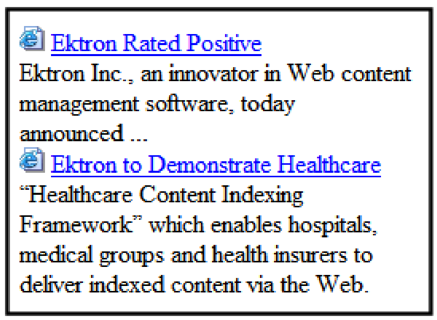


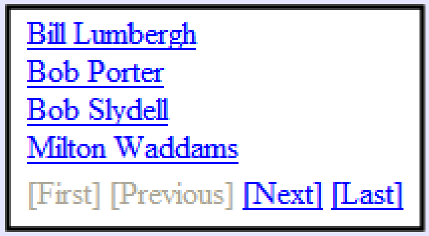
Warning! When inserting a list summary using ASP, CF, JSP or PHP, a different dialog box appears.

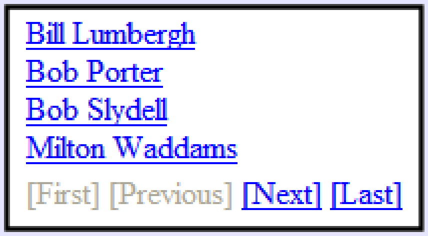


4. Use the following table to assist you with inserting a metadata control.

Field	Description
Control ID	A unique name for the function you are inserting.

Field	Description
Warning! Used in ASP.NET only.	
Folder ID	Enter the folder ID. If you do not know the folder path, you can navigate to it using the Select folder drop down box.
Select Folder	Select the folder the summary information comes from. The folder drop-down contains folders from your site. If you insert the folder path, you do not need to select a folder from the dropdown box.
Recursive	If checked, summary information is gathered from the folder selected and all of its child folders.
IncludeIcons **Warning!** Used in ASP.NET only.	Choose whether to display icons next to the list summary list's links. **Warning!** This property only works when ecmSummary or ecmTeaser are used in the `DisplayXslt` property. When the `[$ImageIcon]` variable is used in an EkML file and that file is assigned to the `MarkupLanguage` property, this property acts as True. 

Field	Description
EnablePaging **Warning!** Used in ASP.NET only.	This property, in conjunction with the `MaxResults` property, lets site visitors view an unlimited number of taxonomy items while controlling the amount of screen space. To accomplish this, the taxonomy display is limited to the number set in the `MaxResults` property. If you check this property box, and the number of taxonomy items exceeds the `MaxResults` number, navigation aids appear below the last item. The site visitor uses the aids to view additional items. See example below.  So, for example, if a taxonomy has 9 items and the `MaxResults` property is set to 3, the screen displays only the first three items. When the site visitor clicks **[Next]**, he sees items 4, 5 and 6, etc. **Checked** = enables paging **Unchecked** = disables paging **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.
OrderKey	Specify how the summaries are ordered. Sort by the following criteria. - **Title** - The title of the content block - **Date Created** - The date the content block was created - **Date Modified** - The date the content block was last modified - **Last Author Last Name** - The last author's last name - **Last Author First Name** - The last author's first name - **Ascending** - Alphabetic or numerical order - **Descending** - Reverse alphabetic or numerical order

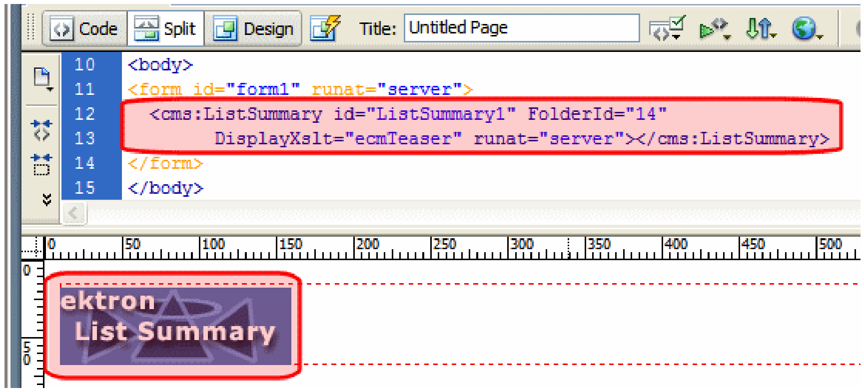
Field	Description
Max Number of results **Warning!** Used in ASP.NET only.	Enter the maximum number of items to appear in the initial display of this server control. To set no maximum, enter zero (0). To let site visitors view more than the maximum but limit the amount of space being occupied, enter the maximum number of results per page here. Then, check the `EnablePaging` property box. If you do and more than the number of `MaxResults` are available, navigation aids appear below the last item to help the site visitor view additional items. See example below. 
DisplayXslt **Warning!** Used in ASP.NET only.	Determines how the information on the page is displayed. Select: **None** - databind only **ecmNavigation** - lists the title of every content block in the folder See Also: See "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. **Note:** If an .ekml file is inserted into the `MarkupLanguage` property, this value is ignored.

Field	Description
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.
Dynamic Content Parameter **Warning!** Used in ASP.NET only.	Checks the QueryString for this value and replaces the list summary with a content block when specified. Choose **None** to always display List Summary.
Random Output **Warning!** Used in ASP.NET only.	Displays random content within a list summary. **Checked** = display random content from list summary **Unchecked** = show a list summary
GetHtml **Warning!** Used in ASP.NET only.	Check this box if you want to retrieve and display content (html body) for all content blocks in the collection. For example, to display content inside a web server control such as a GridView. **Checked** = retrieve and display content (html body) for all content blocks in the collection **Unchecked** = do not retrieve and display content (html body) for all content blocks in the collection
Content Type **Warning!** Used in ASP.NET only.	Defines what type of list summary appears. **Content** - Displays only content blocks in the folder. **All Types** - Displays all content in the folder. **Forms** - Displays only forms in the folder. **Archive_Content** - Displays archived content from the folder. **Archive_Forms** - Displays archived forms from the folder.
# of seconds - CacheInterval **Warning!** Used in ASP.NET only.	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31 **Warning!** If the `EnablePaging` property is set to True, the `CacheInterval` property is disabled.

Field	Description
Hide **Warning!** Used in ASP.NET only.	Used to hide a list summary in design time and run time. **Checked** = Hide list summary **Unchecked** = Show list summary **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags
MarkupLanguage **Warning!** Used in ASP.NET only.	Identify the template markup file that controls the display of the list summary. For example, `mylistsummary.ekml`. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `..\CMS400Developer\workarea\customfiles\markup\mylistsummary.ekml`. See Also: "Ektron Markup Language" on page 35 and "listsummary.ekml" on page 77 **Note**: If you enter a valid EkML file, the `Displayxslt` property value is ignored. If the EkML file contains the `[$ImageIcon]` variable, the `IncludeIcons` property acts as True.

5. When completed, click **insert**.

   A graphic defines where the list summary appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	<cms:ListSummary id="ListSummary1" FolderId="14" DisplayXslt="ecmTeaser" runat="server"></cms:ListSummary>
ASP	<% ecmListSummary "\Human Resources",1,1,"","DateModified,desc", "DateCreated",0,"","" %>
ColdFusion	<cfmodule template="#request.ecm.AppPath#ecmListSummary.cfm" Folder="\Human Resources" MaxNumber="0" Recursive="1" ShowSummary="1" StyleInfo="" OrderBy="DateModified,desc" ShowInfo="DateCreated">
JSP	<%= ecmListSummary("\Human Resources",0,1,"", "Title,asc","DateModified",0,"","") %>
PHP	<?php ecmListSummary("\Human Resources",1,1,"", "DateModified,desc","DateCreated",0,"",""); ?>

Login

For a description of the Login button, see "Login Server Control" on page 3-6.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

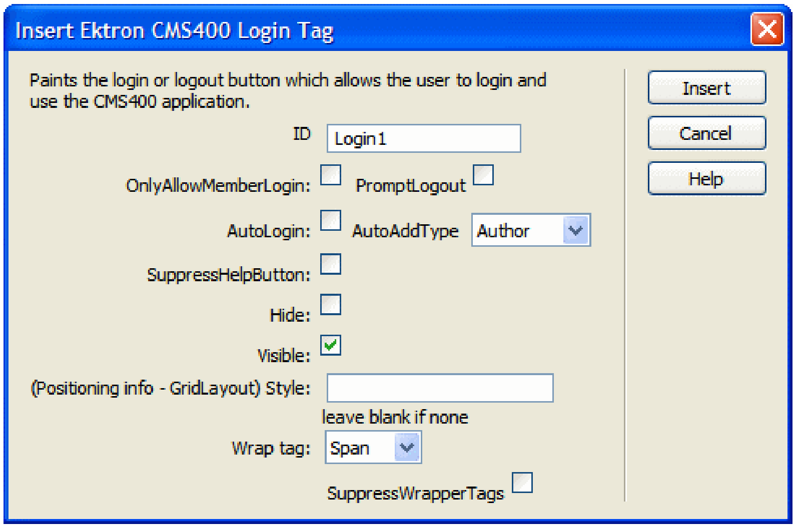
or

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Content Controls...**

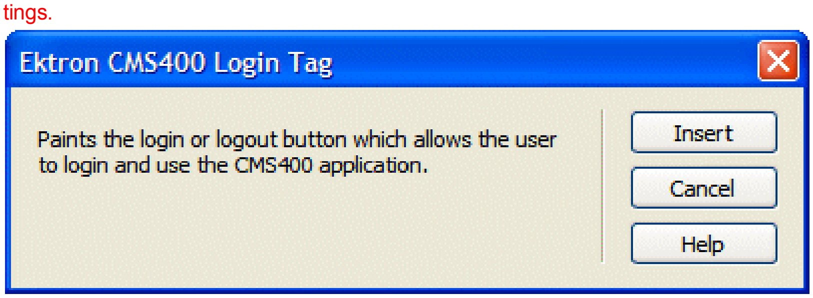
To insert a login button:

1. Move the blinking cursor to the area that you want to place it.

2. From the list of Ektron CMS400.NET functions, click **Login**.
3. The Insert Ektron CMS400.NET Login box appears.

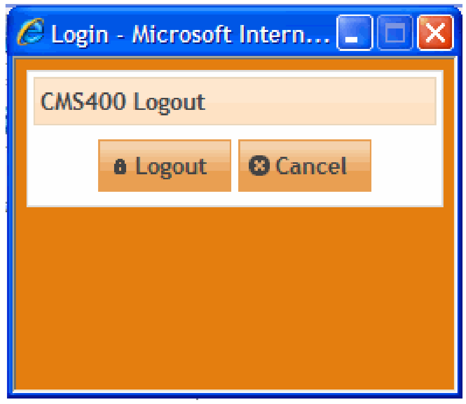


Warning! When inserting a login function using ASP, CF, JSP or PHP, the dialog box that appears has no settings.



4. Use the following table to assist you with inserting a Login button.

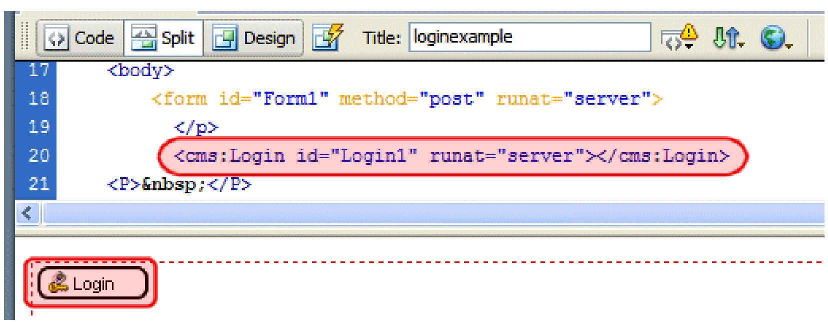
Field	Description
ID **Warning!** Used in ASP.NET only.	A unique name for the function you are inserting.
OnlyAllowMemberLogin **Warning!** Used in ASP.NET only.	This changes the Login button so only membership users can log in. This prevents someone from trying to login as an Ektron CMS400.NET user and gain access to the Ektron CMS400.NET Workarea. The default is Unchecked. **Checked** = Allow only membership users to login. **Unchecked** = Allow Ektron CMS400.NET users and membership users to login.

Field	Description
PromptLogout **Warning!** Used in ASP.NET only.	When set to False, the logout process will not include the Logout Prompt window (shown below).  **True** = Users must click the Logout button in the Logout prompt window before they are logged out. **False** = Users are logged out without having to use the Logout prompt window.
AutoLogin **Warning!** Used in ASP.NET only.	When this box is checked, users are automatically logged in using Active Directory authentication. They do not need to enter a username or password. The default is Unchecked. **Checked** = Use Active Directory authentication when logging in. **Unchecked** = Do not use Active Directory authentication when logging in. **Warning!** For this property to function properly, you must be using Active Directory authentication with your CMS400.NET Site.
AutoAddType **Warning!** Used in ASP.NET only.	Set this type to define automatically added users as membership users or CMS400.NET content authors. **Author** = CMS400.NET content authors **Member** = membership users
SuppressHelpButton **Warning!** Used in ASP.NET only.	Hides the Help button that appears below the Login button when this box is checked. The default is Unchecked. **Checked** = Do not display the Help button. **Unchecked** = Display Help button.
Hide **Warning!** Used in ASP.NET only.	Used to hide a Login button at run time. **Checked** = Hide Login button **Unchecked** = Show Login button **Note:** If Hide and Visible are both checked, the property is hidden.

Field	Description
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If Hide and Visible are both checked, the property is hidden.
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper **Warning!** Used in ASP.NET only.	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A login icon indicates where the Login button appears on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Login id="Login1" runat="server"></cms:Login>`
ASP	`<% ecmlogin %>`

Platform	Code View
ColdFusion	`<cfmodule template="#request.ecm.AppPath#ecmLogin.cfm”>`
JSP	`<%= ecmLogin() %>`
PHP	`<?php ecmlogin() ?>`

Map Control

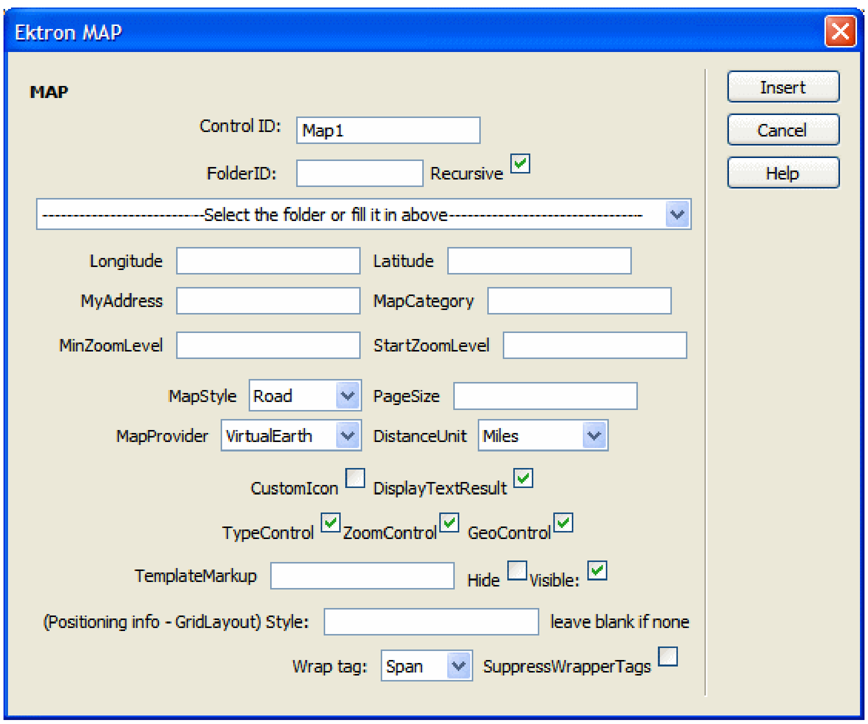
For a description of the Map Control, see See "Map Server Control" on page 9-247 .

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Module Controls...**

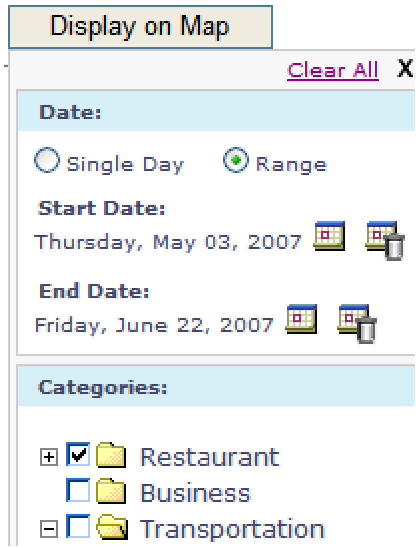
To insert a Map Control button:

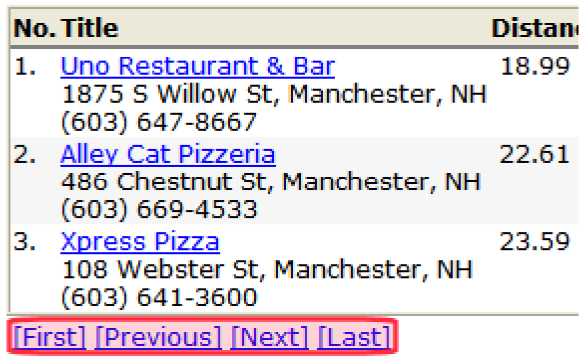
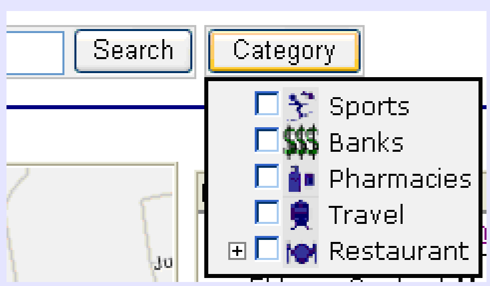
1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Map Control**.
3. The Ektron Map Control dialog box appears.

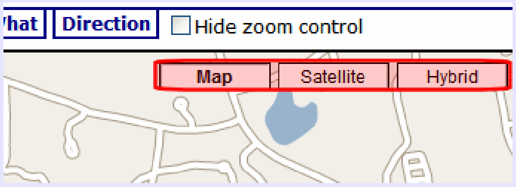


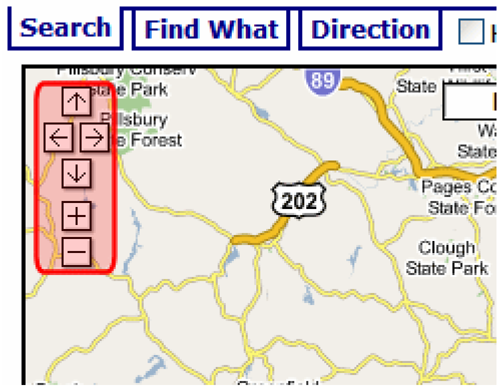
4. Use the following table to assist you with inserting a Map Control.

Field	Description
Control ID	A unique name for the function you are inserting.
Folder ID	Enter the folder ID. If you do not know the folder path, you can navigate to it using the Select folder drop down box.
Recursive	In the `FolderID` property, you specify a folder whose content is searched on this map. To extend the search to all folders below this folder, check this box.
Latitude	To set a default map center via latitude and longitude (as opposed to an address), enter the latitude here.
Longitude	To set a default map center via latitude and longitude (as opposed to an address), enter the longitude here.
MyAddress	To set a default map center, enter its address here. If you only enter a zip code, the map centers on its post office. The address appears in the **Search** field when the map first displays.  If you enter an address, the `latitude` and `longitude` properties are ignored.
MapCategory	Enter the ID number of the taxonomy whose categories appear when a site visitor clicks this map's **Display on Map** button. When a map first appears, all eligible content appears. If a site visitor clicks the **Display on Map** button, he can choose one or more categories and limit the map to items assigned to them. For example, the user could view restaurants only (as shown below). As another example, your map could display all campuses in your state's college system. A site visitor could use the **Display on Map** popup window to limit the map to community colleges. To learn more about Taxonomy, see "Taxonomy" on page 9-200.

Field	Description
	
MinZoomLevel	If you want to set a map zoom level below which map locations will not appear, enter that value. The default value is 4. Possible values are between 1 (most detailed) and 19.
StartZoomLevel	Enter the zoom level at which the map initially appears. See Also: "Determining a Map's Initial Boundaries" on page 9-257
MapStyle	Enter the map's display mode: Road, Satellite or Hybrid. Note: This setting only affects Bing Maps for Enterprise maps.

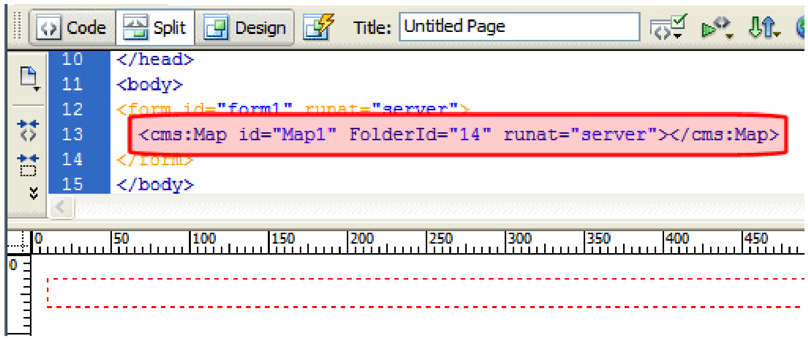
Field	Description
PageSize	Enter the number of locations that can appear on one page of the text box after a search is executed. See Also: "Displaying/Suppressing Map Elements" on page 9-256 If more than this number of locations are available, the site visitor sees **[First] [Previous] [Next] [Last]** at the bottom of the page. He can use the navigation aids to view additional locations. 
MapProvider	Select the service that provides the map, either Google or Bing Maps for Enterprise.
DistanceUnit	Enter the units of distance on the map. Choices are miles and kilometers. The default value is miles.
CustomIcon	Use this field if you want the Category popup box to display an icon to the left of each category, as shown below.  **Prerequisite** To use this value, open the `webroot/images/application/maps/tree` folder. In that folder, create a new folder whose name is the same as the Taxonomy category assigned to the Map server control at the `MapCategory` property. In the sample site, this Taxonomy's name is MapCategory. Then, place the icons in that folder by category title name with a .png extension. Use an underscore (_) to separate taxonomy levels. For example, the image for the category Restaurant > American must be named `Restaurant_American.png`.

Field	Description
DisplayTextResult	If you want the site visitor to see a box of information about each map item to the right of a map, check this box. To suppress the text box, uncheck this box. See Also: "Displaying/Suppressing Map Elements" on page 9-256 **Checked** = display text results about each map item **Unchecked** = suppress text box
TypeControl	If this map uses Bing Maps for Enterprise maps, this property enables or disables the zoom/direction/type control (highlighted below). It lets a site visitor zoom the map in and out, move the center in any direction, and change the display style (Road or Aerial).  If this map uses Google Earth maps, this property enables or disables the type control (highlighted below). It lets the site visitor change the display style (Map, Satellite, or Hybrid). Use the `ZoomControl` property to display or suppress Google Earth's zoom and direction controls.  **Checked** = display zoom/direction/type controls **Unchecked** = suppress zoom/direction/type controls

Field	Description
ZoomControl	Use this property to display or suppress the Google map zoom control (highlighted below).  For Bing Maps for Enterprise maps, the display of the zoom control is determined by the `TypeControl` property. **Checked** = display Google map zoom control **Unchecked** = suppress Google map zoom control
Hide	Used to hide a Login button at run time. **Checked** = Hide Login button **Unchecked** = Show Login button **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   A Map Control icon indicates where the Map Control appears on the template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Map id="Map1" FolderId="14" runat="server"></cms:Map>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Membership Control

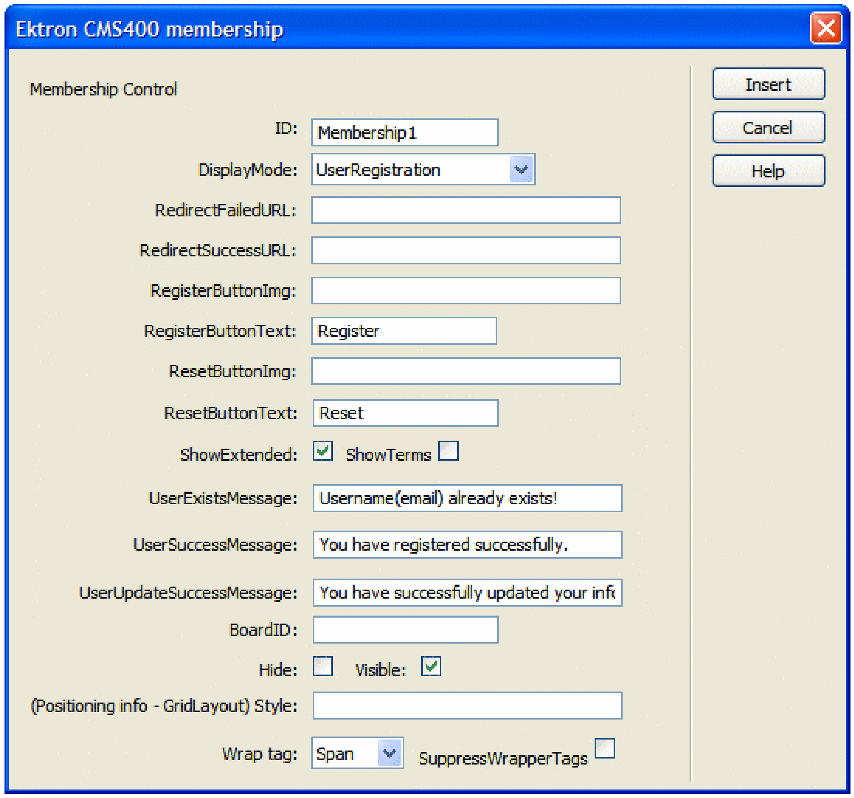
For a description of the Membership function, see "Membership Server Control" on page 16-24.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls...**

To insert a Membership Control:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Membership**.
3. The Membership dialog box appears.



4. Use the following table to assist you with inserting a Membership Control.

Field	Description
ID	A unique name for the function you are inserting.
DisplayMode	The type of membership form displayed. Choose from the following: ■ **UserRegistration** - Lets a site visitor to register as a membership user. ■ **ResetPassword** - Lets a membership user to reset his password. ■ **UnsubscribeSecured** - Lets a membership user unsubscribe. The membership user needs to enter his username and password to unsubscribe. ■ **UnsubscribeUnsecured** - Lets a membership user unsubscribe by entering his membership username only. ■ **AccountActivate** - Let a site visitor activate his membership account by entering the ID number sent him in the account verification email. For more information on the `DisplayMode` property, see "DisplayMode" on page 16-35.

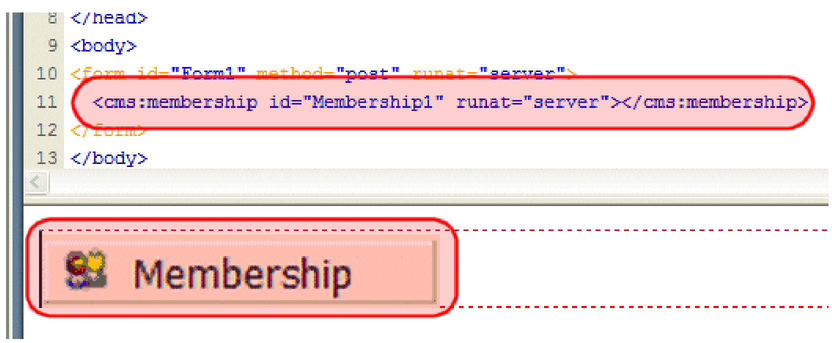
Field	Description
RedirectedFailedURL	The URL where a membership user is sent if the registration fails. If the page resides in the same folder as the registration page, you only need to enter the name of the page. For example, RegFailed.aspx. If the redirect page is located in a subfolder, you need to add the folder path. For example, members\RegFailed.aspx.
RedirectedSuccessURL	The URL where a membership user is sent if the registration is successful. If the page resides in the same folder as the registration page, you only need to enter the name of the page. For example, RegSuccess.aspx. If the redirect page is located in a subfolder, you need to add the folder path. For example, members\RegSuccess.aspx.
RegisterButtonImg	Lets you add an image in place of the text on the register button.
RegisterButtonText	Text that appears on the Register button. The default is Register. If you use a register button image, you do not see this text.
ResetButtonImg	Lets you add an image in place of the text on the reset button.
ResetButtonText	Text that appears on the reset button. The default is Reset. If you use a reset button image, you do not see this text.

Field	Description
ShowExtended	Decide if the Custom User Properties are available when using this control. The default setting is checked. **Checked** = show Custom User Properties **Unchecked** = hide Custom User Properties **Note:** For more information , see See "Custom User Properties" on page 15-12.
ShowTerms	When set to True this property shows the Terms and Conditions as defined in the Workarea. In addition, users are asked to check a box stating they have read and agree to abide by the terms and conditions of the forum. Default is **False**. See Also: "ShowTerms" on page 16-36 and "Terms & Conditions" on page 7-608
UserExistsMessage	The message that appears when a membership user already exists. The default message is: Username(email) already exists!
UserSuccessMessage	The message that appears when a membership user successfully registers. The default message is: You have registered successfully.
UserUpdateSuccessMessage	The message that appears when a membership user successfully updates their information. The default message is: You have successfully updated your information.
Hide	Used to hide a Membership in design time and run time. **Checked** = Hide Membership **Unchecked** = Show Membership **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

   A graphic defines where the Membership Control appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:membership id="Membership1" runat="server"></cms:membership>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Metadata for ASP.NET Pages

For a description of the Metadata function, see "MetaData Server Control" on page 7-171.

This tag appears on the following menu(s):

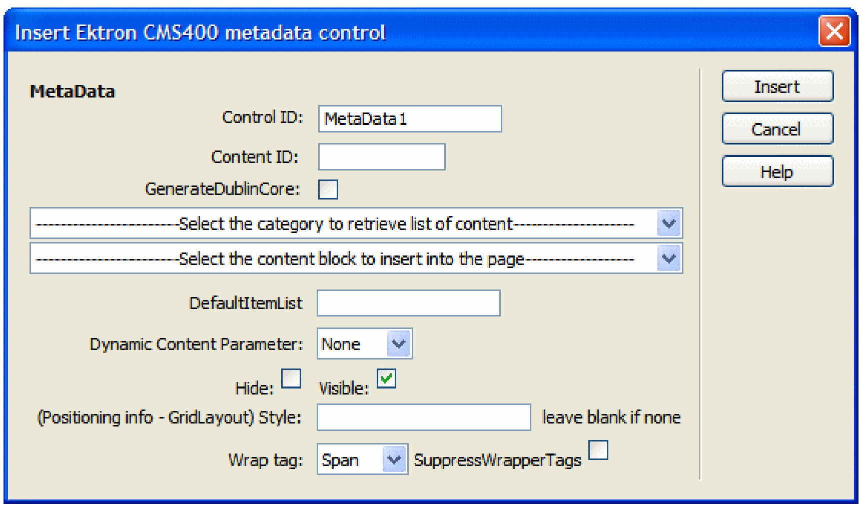
- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a metadata function:

1. Move the blinking cursor to the area that you want to place it.

Note: The Ektron CMS400.NET Metadata function should be inserted within the <head> tags of your template to work properly.

2. From the list of Ektron CMS400.NET Functions, click on **Metadata**.
3. The Insert Ektron Metadata box is displayed.



4. Use the following table to assist you with inserting metadata.

Field	Description
Control ID	A unique name for the function you are inserting.
Content ID	Enter a valid content ID in the Content ID textbox. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content Block drop down boxes.
GenerateDublinCore	When enabled, this property automatically creates seven of the Simple Dublin Core metadata fields from standard CMS400.NET system properties. The default is Unchecked. **Checked** = Generate Simple Dublin Core metadata fields **Unchecked** = Do not generate Simple Dublin Core metadata fields The seven fields and how they are associated with the CMS400.NET properties is explained in "Simple Dublin Core Metadata" on page 7-154

Field	Description
Select Category	The drop-down list contains a list of content folders. If you insert the content ID, you do not need to select a category.
Select Content Block	The drop-down box is populated with a list of all the content block titles within that folder. When a title is selected, the content ID textbox is filled with that content block's id number. If you insert the content ID, you do not need to select a content block.
DefaultItemList	A comma delimited list of content block IDs to get metadata from. DefaultContentID must be set to 0 (zero) so you can add IDs to the list. For example: **[2,4,46]**
Dynamic Content Parameter	Gets or sets the QueryString parameter to read a content ID dynamically.
Hide	Used to hide a Membership in design time and run time. **Checked** = Hide Membership **Unchecked** = Show Membership **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.
6. The following line appears in the <body> of the HTML code.

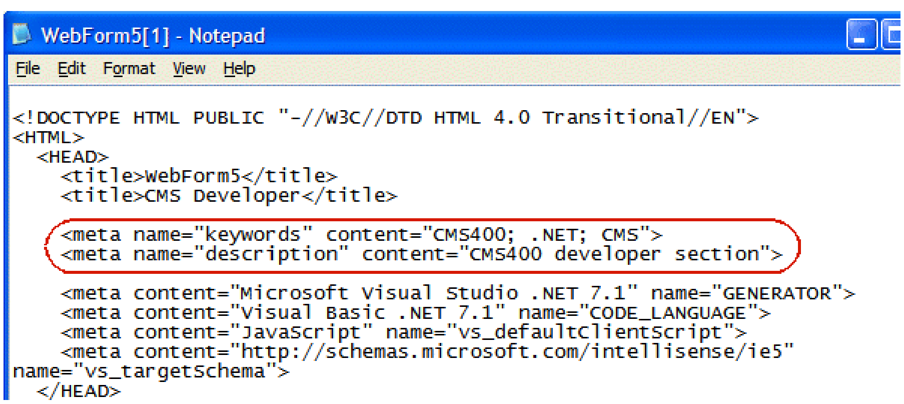
```
        <cms:MetaData id="MetaData2" runat="server" 
DefaultContentID="12"></cms:MetaData>
```

7. Move that line from the <body> tag into the <head> tag.

```
<HEAD>
    <title>WebForm5</title>
    <cms:MetaData id="Metadata2" runat="server" DefaultContentID="12"></cms:MetaData>
    <meta name="GENERATOR" content="Microsoft Visual Studio .NET 7.1">
    <meta name="CODE_LANGUAGE" content="Visual Basic .NET 7.1">
    <meta name="vs_defaultClientScript" content="JavaScript">
    <meta name="vs_targetSchema" content="http://schemas.microsoft.com/intellisense/i
</HEAD>
<body>
    <form id="Form1" method="post" runat="server">
    </form>
</body>
```

8. Save the Web form.
9. Open the Web page in the browser.
10. Right click on the Web page and click **View Source**. Look in the head tag. The meta tags from the content block are added to the page.

The metadata information added is shown below.



WebForm5[1] - Notepad

File Edit Format View Help

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML>
  <HEAD>
    <title>WebForm5</title>
    <title>CMS Developer</title>

    <meta name="keywords" content="CMS400; .NET; CMS">
    <meta name="description" content="CMS400 developer section">

    <meta content="Microsoft Visual Studio .NET 7.1" name="GENERATOR">
    <meta content="Visual Basic .NET 7.1" name="CODE_LANGUAGE">
    <meta content="JavaScript" name="vs_defaultClientScript">
    <meta content="http://schemas.microsoft.com/intellisense/ie5"
name="vs_targetSchema">
  </HEAD>
```

Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:MetaData id="MetaData2" runat="server" DefaultContentID="12"></cms:MetaData>`
ASP, ColdFusion, JSP or PHP	See "Metadata Function for ASP, CF, JSP or PHP Pages" on page 21-190

Metadata Function for ASP, CF, JSP or PHP Pages

For a description of the Metadata function, see "MetaData Server Control" on page 7-171.

This tag appears on the following menu(s):

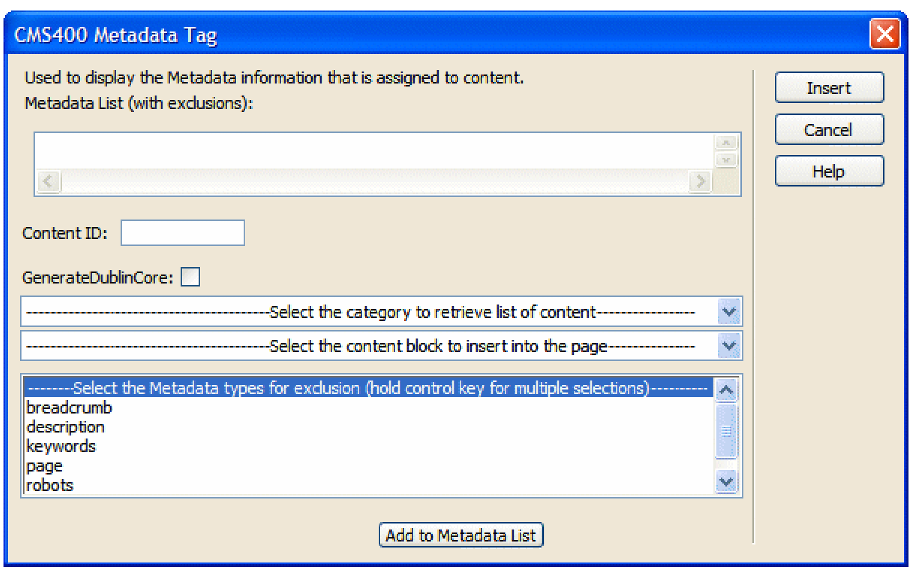
- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

To insert a metadata function:

1. Move the blinking cursor to the area that you want to place it.

Note: The Ektron CMS400.NET Metadata function should be inserted within the <head> tags of your template to work properly.

2. From the list of Ektron CMS400.NET Functions, click on **Metadata**.
3. The Insert Ektron Metadata box is displayed.



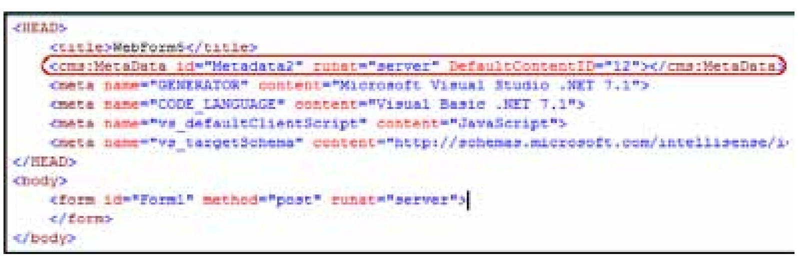
4. Use the following table to assist you with inserting metadata.

Field	Description
Metadata List	When you select a content ID and click the Add to Metadata List button, The content ID is added to this text box. This allows you to create a list of content blocks for which the metadata of each content block is added to the page.
Content ID	Enter a valid content ID in the Content ID textbox. If you do not know the Content ID, you can navigate to it using the Select Category and Select Content Block drop down boxes.
GenerateDublinCore	When enabled, this property automatically creates seven of the Simple Dublin Core metadata fields from standard CMS400.NET system properties. The default is Unchecked. **Checked =** Generate Simple Dublin Core metadata fields **Unchecked** = Do not generate Simple Dublin Core metadata fields The seven fields and how they are associated with the CMS400.NET properties is explained in "Simple Dublin Core Metadata" on page 7-154
Select Category	The drop-down list contains a list of content folders. If you insert the content ID, you do not need to select a category.
Select Content Block	The drop-down box is populated with a list of all the content block titles within that folder. When a title is selected, the content ID textbox is filled with that content block's id number. If you insert the content ID, you do not need to select a content block.
Metadata types for exclusion	Select the metadata types that you do not want added to the metadata function you are inserting. Hold the control key down for multiple selections.

5. When completed, click **insert**.
6. The following line appears in the <body> of the HTML code.

```
        <cms:MetaData id="MetaData2" runat="server"
DefaultContentID="12"></cms:MetaData>
```

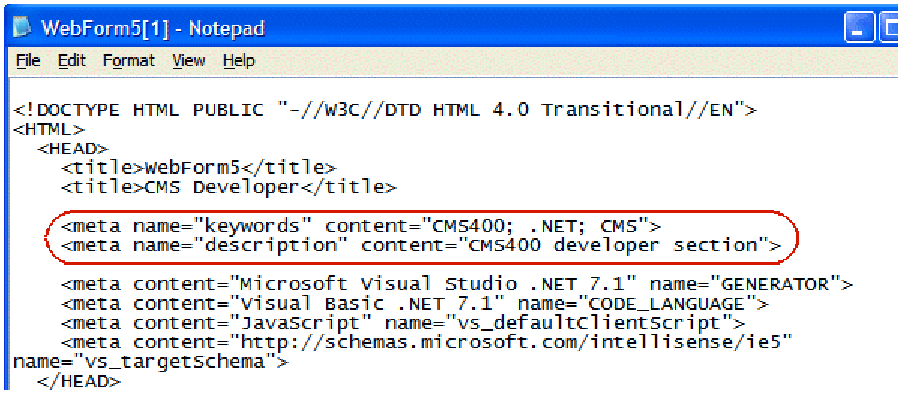
7. Move that line from the <body> tag into the <head> tag.



8. Save the Web form.
9. Open the Web page in the browser.

10. Right click on the Web page and click **View Source**. Look in the head tag. The meta tags from the content block are added to the page.

The metadata information added is shown below.



```
WebForm5[1] - Notepad
File  Edit  Format  View  Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML>
  <HEAD>
    <title>WebForm5</title>
    <title>CMS Developer</title>

    <meta name="keywords" content="CMS400; .NET; CMS">
    <meta name="description" content="CMS400 developer section">

    <meta content="Microsoft Visual Studio .NET 7.1" name="GENERATOR">
    <meta content="Visual Basic .NET 7.1" name="CODE_LANGUAGE">
    <meta content="JavaScript" name="vs_defaultClientScript">
    <meta content="http://schemas.microsoft.com/intellisense/ie5"
name="vs_targetSchema">
  </HEAD>
```

Shown below is an example of the code that is inserted:

Platform	Code View
.NET	For ASP.NET pages, see "Metadata for ASP.NET Pages" on page 21-186
ASP	<% ecmMetadata "[1;Title][9][3;Keywords,Title]","" %>
ColdFusion	<cfmodule template="#request.ecm.AppPath#ecmMetadata.cfm" ItemList="[1;Title][9][3;Keywords,Title]">
JSP	<%= ecmMetadata("[12;keywords,Title]","") %>
PHP	<?php ecmMetadata("[1;Title][9][3;Keywords,Title]",""); ?>

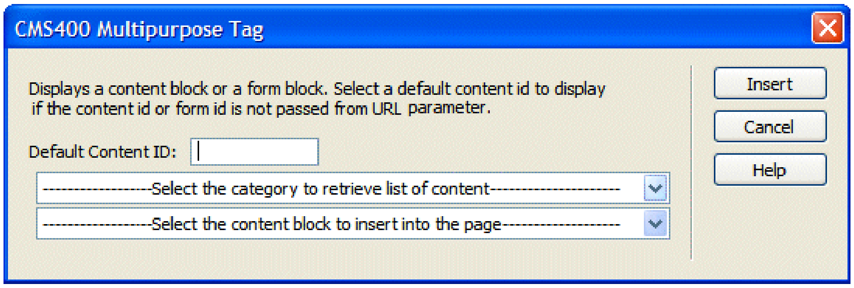
Multipurpose Content Block

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

To insert a Multipurpose content block function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click on **Multipurpose Tag...**
3. The Insert Ektron CMS400.NET Multipurpose Tag box is displayed.

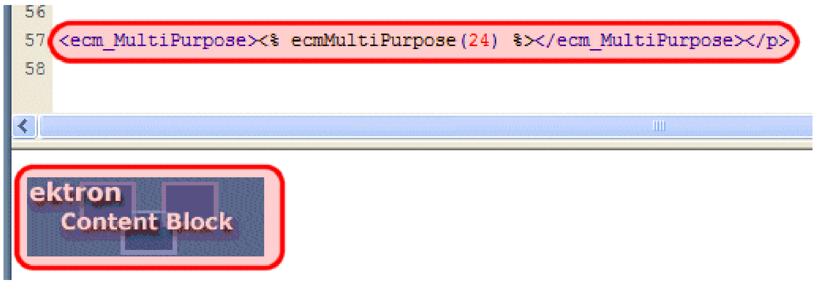


4. Use the following table to assist you with inserting a Multipurpose tag.

Field	Description
Default Content ID	Type in the default content ID, or select a category from the drop down list, then select a content block from the second dropdown list.

5. When completed, click **insert**.

   A graphic to define where the Multipurpose tag will appear on your template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View
.NET	In ASP.NET, the Content Block Tag functions as a Multipurpose Content block.
ASP	`<% ecmMultiPurpose(24) %>`
ColdFusion	`<cfmodule DefaultID="24" template="#request.ecm.AppPath#ecmMultipurpose.cfm">`
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	`<?php ecmMultiPurpose(12); ?>`

Poll

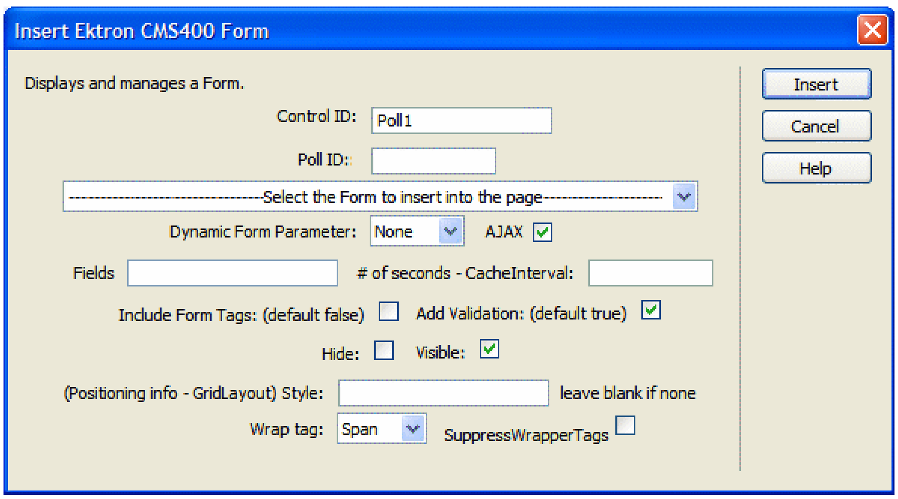
For a description of the Poll function, see "Poll Server Control" on page 7-284.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a Poll:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click **Poll**.
3. The Insert Poll box is displayed.



4. Use the following table to assist you with inserting a poll.

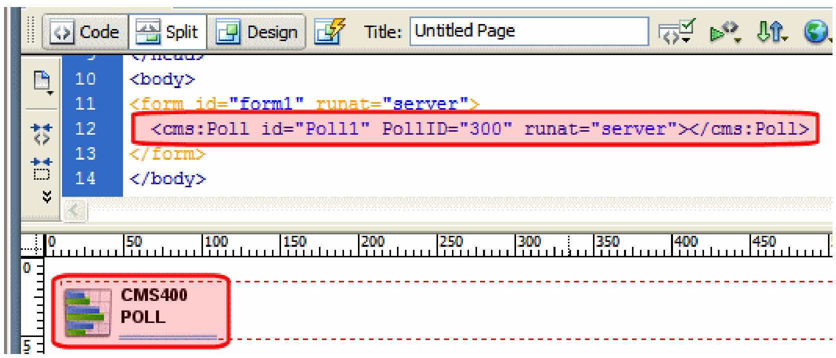
Field	Description
Control ID	A unique name for the function you are inserting.
Poll ID	Type in the Poll ID that you want to insert. If you do not know the Poll ID, you can navigate to it using the Select Poll drop down box.
Select Poll	The drop-down box is populated with a list of all the form titles. When a title is selected, the Poll ID textbox is filled with that form's id number. If you insert the Poll ID, you do not need to select a form.
Dynamic Form Parameter	To make this form block dynamic, select **ekfrm**. When you do, this control uses the form block passed as a URL parameter.

Field	Description
Ajax	Displays the poll or results, using an iFrame, in the area of the page that contains the poll without disturbing its surrounding contents. The default is checked. **Checked** = Polls and results are shown in an iFrame without any modification or refresh of the surrounding contents. **Unchecked** = The poll and the results replace the Web page's content.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Include Form Tags	Determines if tags are generated automatically or manually. See Also: "Automatic versus Manual Generation of Form Tags" on page 7-284
Add Validation	When **checked**, adds Validation to your main runat=server form. **Checked** = add validation **Unchecked** = do not add validation
Hide	Used to hide a poll in design time and run time. **Checked** = Hide poll **Unchecked** = Show poll **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.

Field	Description
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags

5. When completed, click **Insert**.

   A graphic defines where the form appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	`<cms:Poll id="Poll1" PollID="300" runat="server"></cms:Poll>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

PostHistory

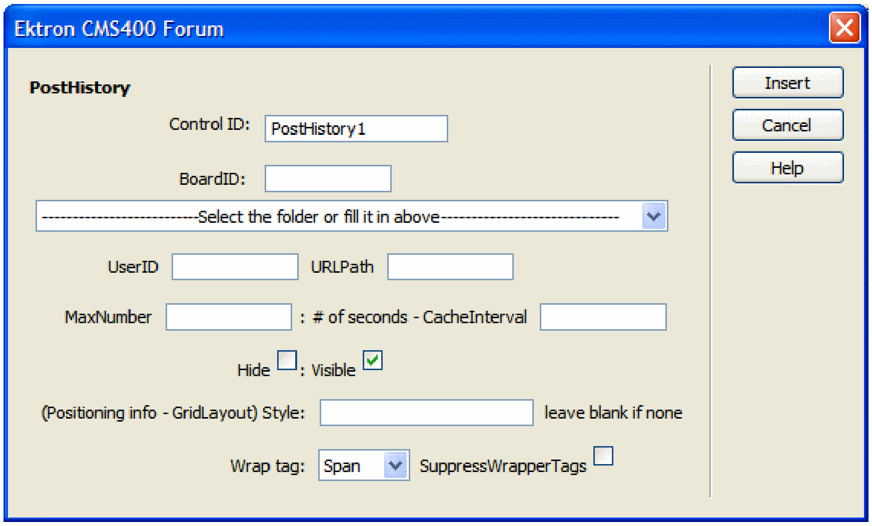
For a description of the PostHistory function, see "PostHistory Server Control" on page 7-679.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Community Controls... > Forums**

To insert the PostHistory function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **PostHistory**.
3. The Insert Ektron CMS400.NET PostHistory box appears.



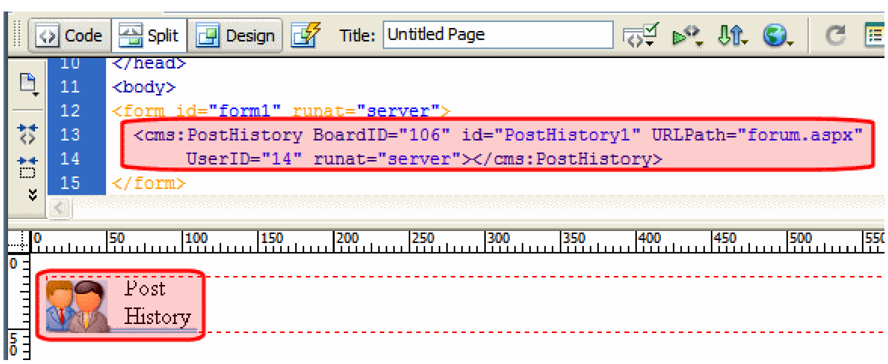
4. Use the following table to assist you with inserting the ActiveTopics function.

Field	Description
Control ID	A unique name for the function you are inserting.
BoardID	The ID of the Discussion Board. If you do not know the board ID, you can navigate to it using the Select folder drop down box.
UserID	The ID of the user for whom to get the post history.
URLPath	The URL path to the page the where the Forum server control is located.
MaxNumber	The maximum number of topics listed.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide the function at run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.

Field	Description
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. Click **insert**.

   An PostHistory icon appears to indicate the location of the post history list.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:PostHistory BoardID="106" id="PostHistory1" URLPath="forum.aspx" UserID="14" runat="server"></cms:PostHistory>`

Platform	Code View
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Random Content

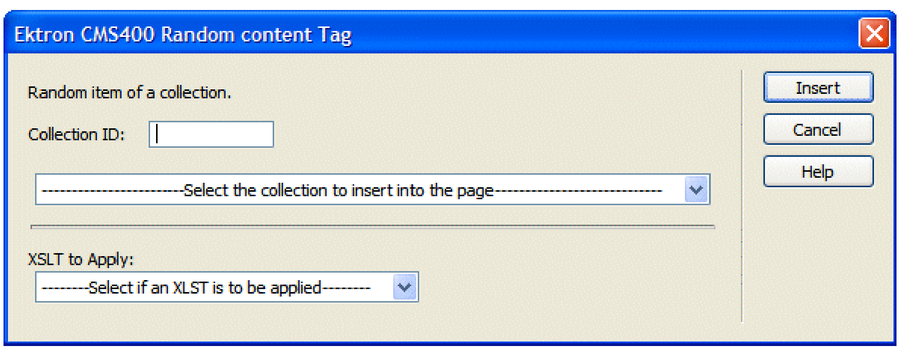
For a description of the Random Content function, see "Random Content" on page 21-304

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

To insert a Random Content function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click on **Insert Random Content Tag...**
3. The Insert Random Content Tag box is displayed.



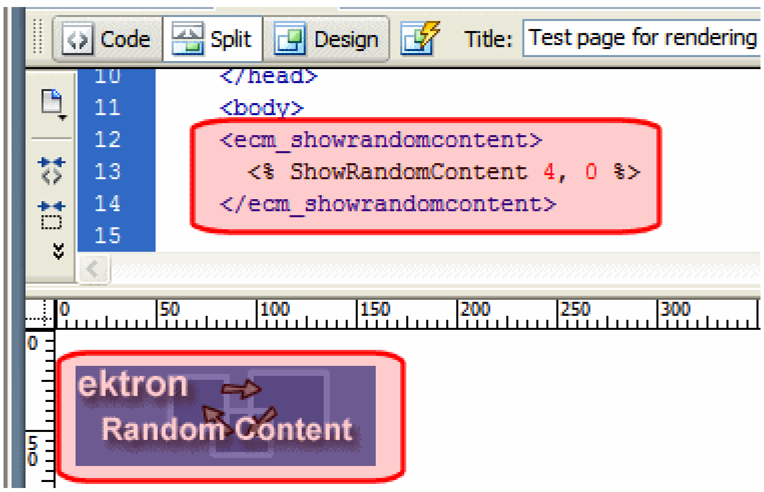
4. Use the following table to assist you with inserting a Random Content tag.

Field	Description
Collection ID	Type in the collection ID, or select it from the drop down list, of the collection where the random content function will retrieve content from.

Field	Description
XSLT to apply *XML Content only*	If desired, you may specify an XSLT to apply to the content that gets displayed.

5. When completed, click **Insert**.

   A graphic to define where the Random Content tag will appear on your template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View
.NET	This function is not available as an Ektron Dreamweaver Extension for .NET
ASP	`<% ShowRandomContent 3, 0 %>`
ColdFusion	`<cfmodule id="3" displayFunction="0" template="#request.ecm.AppPath#ecmShowRandomContent.cfm">`
JSP	`<%= ShowRandomContent(3, 0) %>`
PHP	`<?php ShowRandomContent(3, 0); ?>`

Random Summary

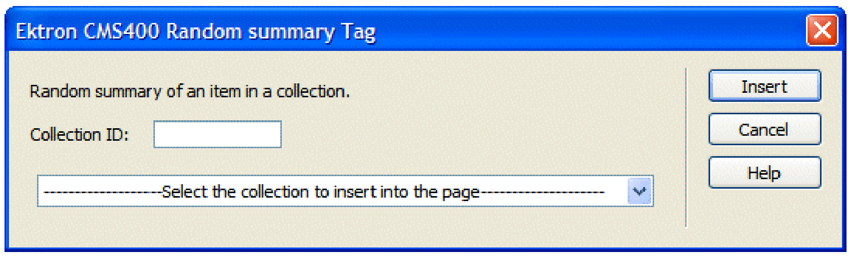
For a description of the Random Summary function, see "Random Summary" on page 21-305

This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

To insert a Random Summary function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click on **Random Summary Tag...**
3. The Insert Ektron CMS400.NET Random Summary Tag box is displayed.

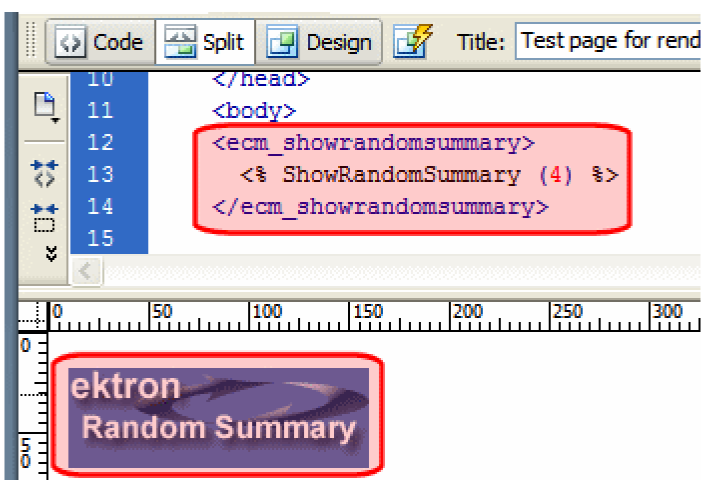


4. Use the following table to assist you with inserting a Random Summary tag.

Field	Description
Collection ID	Type in the collection ID, or select it from the drop down list, of the collection where the random summary function will retrieve summaries from.

5. When completed, click **Insert**.

   A graphic to define where the Random Summary tag will appear on your template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View
.NET	This function is not available as an Ektron Dreamweaver Extension for .NET
ASP	<% ShowRandomSummary (2) %>
ColdFusion	<cfmodule id="2" template="#request.ecm.AppPath#ecmShowRandomSummary.cfm">
JSP	<%= ShowRandomSummary(2) %>
PHP	<?php ShowRandomSummary (2); ?>

RSS Aggregator

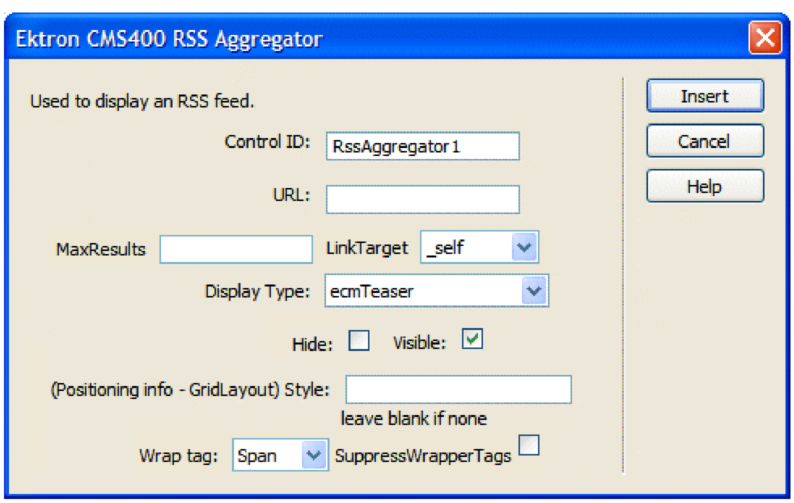
For a description of the RSS Aggregator function, see "RssAggregator Server Control" on page 19-17.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Module Control...**

To insert an RSS Aggregator:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **RSS Aggregator**.
3. The RSS Aggregator dialog box appears.



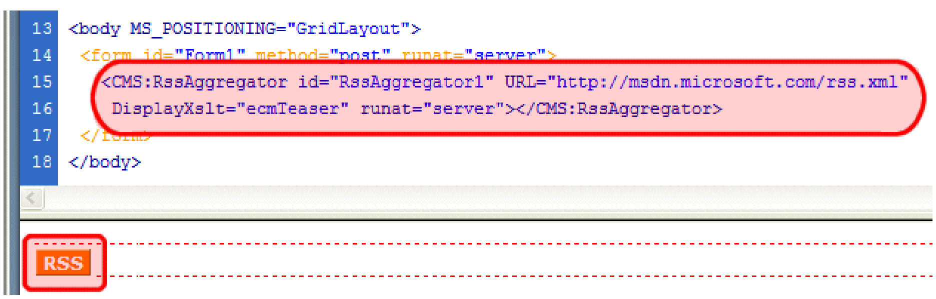
4. Use the following table to assist you with inserting an RSS Aggregator.

Field	Description
Control ID	A unique name for the function you are inserting.
URL	The RSS feed path for the server control. For example: `http://example.com/rss.xml`
MaxResults	The Maximum number of items from an RSS feed that are returned (0=unlimited).
LinkTarget	Defines the way a link acts when a link is clicked. The choices are: **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.
Display Type	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every RSS feed item See Also: . "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists a title and a description of every RSS feed item See Also: "Example of ecmTeaser Display" on page 9-124 **Path to Custom Xslt** - Enter the path to an Xslt that determines the display of the page **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.
Hide	Used to hide an RssAggregator in design time and run time. **Checked** = Hide RssAggregator **Unchecked** = Show RssAggregator **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.

Field	Description
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

   A graphic defines where the RSS Aggregator appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<CMS:RssAggregator id="RssAggregator1" URL="http://example.com/rss.xml" DisplayXslt="ecmTeaser" runat="server"></CMS:RssAggregator>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Old Search

This tag appears on the following menu(s):

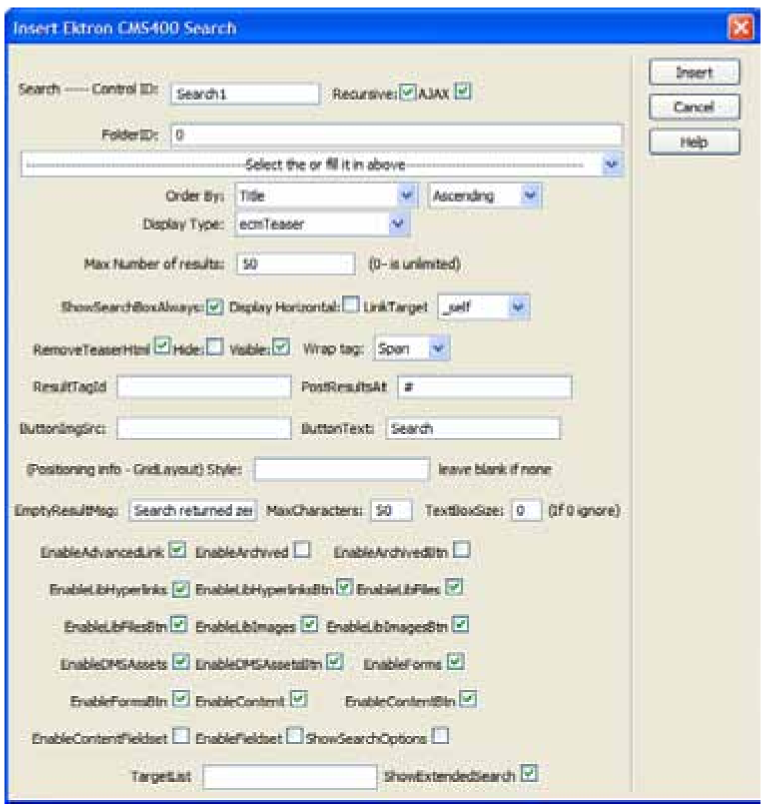
- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

or

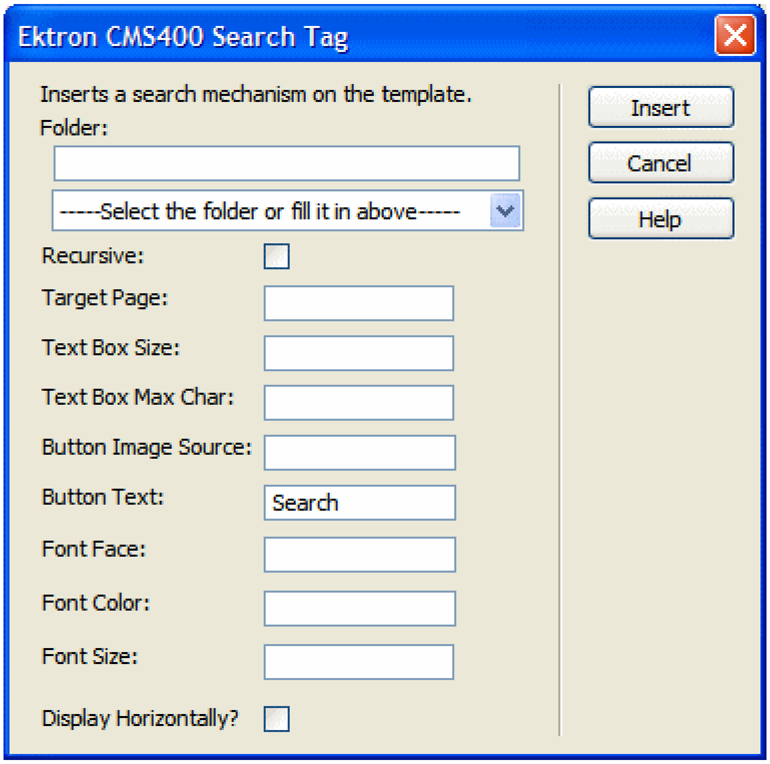
- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert a Old Search function:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Content functions, click on **Old Search**
3. The Insert Ektron Search box is displayed.



Warning! When inserting a list summary using ASP, CF, JSP or PHP, a slightly different dialog box appears.



4. Use the following table to assist you with inserting a search.

Field	Description
Ajax	Check this box to enable Ajax searches. When enabled, the `MaxResults` property determines the maximum number of results per page, and the `ResultTagId` property becomes active. **Checked** = Enable Ajax Search **Unchecked** = Original HTML Search
ButtonImgSrc (ASP.NET) Button Image Source (ASP, CF, JSP or PHP)	If you wish to use an image for the search button, insert the location of the image in this field. If no image is specified, a standard submit button is used.
ButtonText	The button text is the text that is displayed on the standard submit button, or the alt text of a search button image.
Control ID **Warning!** Used in ASP.NET only.	A unique name for the function you are inserting.
Display Horizontally	The search can be displayed either vertically or horizontally on your Web page. Check off this box if you want it to appear horizontally.

Field	Description
Display Type **Warning!** Used in ASP.NET only.	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every content block in the folder **ecmTeaser** - lists the title of every content block in the folder plus the content summary See Also: "Example of ecmNavigation Display" on page 9-124 "Example of ecmTeaser Display" on page 9-124
EmptyResultMsg **Warning!** Used in ASP.NET only.	The return message displayed, if the search returns no hits. The default is: Search returned zero results
EnableAdvancedLink **Warning!** Used in ASP.NET only.	Check this box to display the link that makes the advanced properties available. **Checked** = Display Advanced link **Unchecked** = Hide Advanced link
EnableArchived **Warning!** Used in ASP.NET only.	Enables users to search archived content. The archived content must be archived as Archived Remain On Site.The default is Unchecked. **Checked** = Searching archived content is enabled. **Unchecked** = Searching archived content is disabled, unless Include Archived is checked in the Advanced search.
EnableArchivedBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform an archive search. The default is Unchecked. **Checked** = The Include Archive check box is enabled in the advanced search properties. If used with `EnableArchived`, the check box is checked by default. **Unchecked** = The Include Archive check box is disabled in the advanced search properties.
EnableContent **Warning!** Used in ASP.NET only.	Enables users to search content. The default is Unchecked. **Checked** = Searching content is enabled. **Unchecked** = Searching content is disabled, unless Content is checked in the Advanced search.

Field	Description
EnableContentBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform a content search. The default is Unchecked. **Checked** = The Content check box is enabled in the advanced search properties. If used with `EnableContent`, the check box is checked by default. **Unchecked** =The Content check box is disabled in the advanced search properties.
EnableContentFieldset **Warning!** Used in ASP.NET only.	Creates a border around the group of content items in an advanced search. These content items include Content, Forms and DMS Assets. The default is Unchecked. **Checked** = Show border around content items. **Unchecked** = No border around content items.
EnableDMSAssets **Warning!** Used in ASP.NET only.	Enables users to search DMS Assets. The default is Unchecked. **Checked** = Searching DMS Assets is enabled. **Unchecked** = Searching DMS Assets is disabled, unless DMS Assets is checked in the Advanced search.
EnableDMSAssetsBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform a DMS Asset search. The default is Unchecked. **Checked** = The DMS Asset check box is enabled in the advanced search properties. If used with `EnableContent`, the check box is checked by default. **Unchecked** = The DMS Asset check box is disabled in the advanced search properties.
EnableForms **Warning!** Used in ASP.NET only.	Enables users to search Forms. The default is Unchecked. **Checked** = Searching Forms is enabled. **Unchecked** = Searching Forms is disabled, unless Forms is checked in the Advanced search.
EnableFormsBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform a Forms search. The default is Unchecked. **Checked** = The Forms check box is enabled in the advanced search properties. If used with `EnableContent`, the check box is checked by default. **Unchecked** = The Forms check box is disabled in the advanced search properties.
EnableLibFiles **Warning!** Used in ASP.NET only.	Enables users to search Library Files. The default is Unchecked. **Checked** = Searching Library Files is enabled. **Unchecked** = Searching Library Files is disabled, unless Files is checked in the Advanced search.

Field	Description
EnableLibFilesBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform a Library Files search. The default is Unchecked. **Checked** = The Files check box is enabled in the advanced search properties. If used with `EnableLibFiles`, the check box is checked by default. **Unchecked** = The Files check box is disabled in the advanced search properties.
EnableLibHyperlinks **Warning!** Used in ASP.NET only.	Enables users to search Library Hyperlinks. The default is Unchecked. **Checked** = Searching Library Hyperlinks is enabled. **Unchecked** = Searching Library Hyperlinks is disabled, unless Hyperlinks is checked in the Advanced search.
EnableLibHyperlinksBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform a Library Hyperlinks search. The default is Unchecked. **Checked** = The Hyperlinks check box is enabled in the advanced search properties. If used with `EnableLibHyperlinks`, the check box is checked by default. **Unchecked** = The Hyperlinks check box is disabled in the advanced search properties.
EnableLibImages **Warning!** Used in ASP.NET only.	Enables users to search Library Images. The default is Unchecked. **Checked** = Searching Library Images is enabled. **Unchecked** = Searching Library Images is disabled, unless Images is checked in the Advanced search.
EnableLibImageBtn **Warning!** Used in ASP.NET only.	Provides a check box so users can decide if they want to perform a Library Images search. The default is Unchecked. **Checked** = The Images check box is enabled in the advanced search properties. If used with `EnableLibImages`, the check box is checked by default. **Unchecked** = The Images check box is disabled in the advanced search properties.
Folder	Type in the folder path to be searched. If you do not know the folder path, you can navigate to it using the Select folder drop down box.
Font Color **Warning!** Used in ASP, CF, JSP and PHP only.	The color of the font used in the search function.
Font Face	The type of font to use for search function.

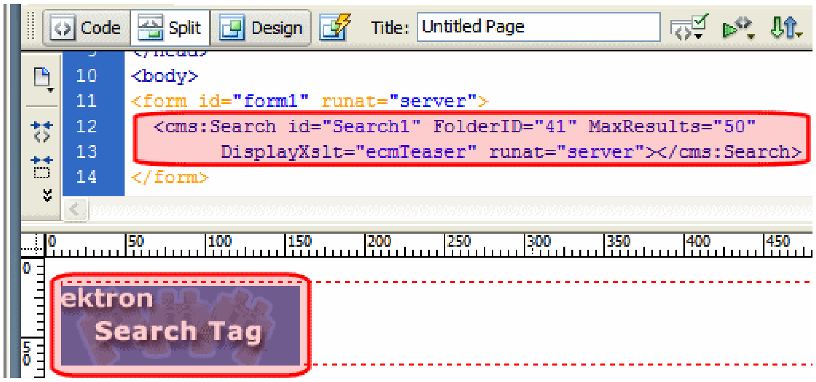
Field	Description
Warning! Used in ASP, CF, JSP and PHP only.	
Font Size **Warning!** Used in ASP, CF, JSP and PHP only.	The size of the font used in the search function.
Hide **Warning!** Used in ASP.NET only.	Used to hide a search in design time and run time. **Checked** = Hide search **Unchecked** = Show search **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
LinkTarget **Warning!** Used in ASP.NET only.	Defines the way a link acts when a link is clicked. The choices are: **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.
MaxCharacters (ASP.NET) Text Box Max Char (ASP, CF, JSP or PHP)	Specify the maximum amount of characters that is accepted in the text box.
Max Number of results **Warning!** Used in ASP.NET only.	Enter a number to specify how many results are displayed on the page (0=unlimited). When the `Ajax` property is checked, this property changes from the maximum amount of results to the maximum results per page. This takes advantage of Ajax's ability to have paging in the searches. If zero is entered, all results appear on the same page.

Field	Description
Order By **Warning!** Used in ASP.NET only.	Specify how you want to order the search results that are generated when a search is performed on you Web site. Also specify if you want the results in ascending or descending order. - **Title - The title of the content block** - **Date Created** - The date the content block was created - **Date Modified** - The date the content block was last modified - **Last Author Last Name** - The last author's last name - **Last Author First Name** - The last author's first name - **Ascending** - Alphabetic or numerical order - **Descending** - Reverse alphabetic or numerical order
PostResultsAt (ASP.NET) Target Page (ASP, CF, JSP or PHP)	The path of the Web page where the search results will be posted. The # symbol appears in the text box by default. The # symbol tells the control to post back to the Web page that created the search. **Warning! Important:** A search control must exist on the posting page.
Recursive	If checked, search information is gathered from the folder selected and all of its child folders.
RemoveTeaserHtml **Warning!** Used in ASP.NET only.	An optional search result formatting parameter that removes all the HTML from each content item's teaser/summary before sending it to the browser. **Checked** = Remove HTML **Unchecked** = Do not remove HTML
ResultTagId **Warning!** Used in ASP.NET only.	Specify the div tag control ID to display the search results. This property is only active when the `EnableAjax` property is checked.
Select Folder	Select a folder path to be searched. If you insert the folder path, you do not need to select a folder.
ShowExtendedSearch	Allows a user to search via the metadata type: Searchable Property. **Checked** = Show extended search. **Unchecked** = Hide extended search. For more information on Metadata and Searchable Property, see "Working with Metadata" on page 7-146.
ShowSearchBoxAlways **Warning!** Used in ASP.NET only.	If **unchecked**, the search box does not appear on PostBack.

Field	Description
ShowSearchOptions **Warning!** Used in ASP.NET only.	If this box is checked, the following choices appear along with the search box. This type of search is also known as a Standard search. The default setting is Checked. - All the words - Any of the words - Exact phrase - Match Partial words **Checked** = Show search options **Unchecked** = Hide search options
Style (Positioning Info - GridLayout) **Warning!** Used in ASP.NET only.	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
TextBoxSize	Specify the size of the text box that is displayed on the Web page for users to enter the search keywords. The width is based on the number of characters.
Visible **Warning!** Used in ASP.NET only.	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Wrap Tag **Warning!** Used in ASP.NET only.	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper **Warning!** Used in ASP.NET only.	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

   A graphic defines where the search appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Search id="Search1" FolderID="41" MaxResults="50" DisplayXslt="ecmTeaser" runat="server"></cms:Search>`
ASP	`<% ecmSearch "\Products",1,"SearchDisplay.asp",10,25,"","Search", "Verdana","Blue","2",0,"" %>`
ColdFusion	`<CFMODULE template="#request.ecm.AppPath#ecmSearch.cfm" StartingFolder="\Products" Recursive="1" TargetPage="SearchDisplay.cfm" TextBoxSize="10" MaxCharacters="25" ButtonImageSrc="" ButtonText="Search" FontFace="Verdana" FontColor="Blue" FontSize="2" Horizontal="0">`
JSP	`<%= ecmSearch("\Products",1,"SearchDisplay.jsp",10,25,"","Search", "Verdana","Blue","2",0,"") %>`
PHP	`<?php ecmSearch("\Products",1,"SearchDisplay.php",10,25,"","Search", "Verdana","Blue","",0,""); ?>`

Search Display

The search display custom tag creates the area where search results appear after a search is executed.

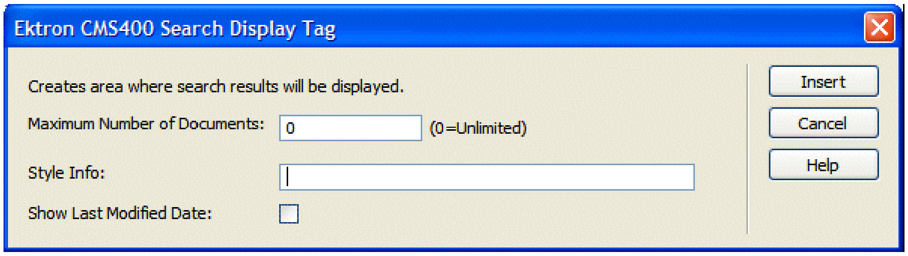
This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

To insert a search display function:

1. Move the blinking cursor to the area that you want to place it.

2. From the list of Ektron CMS400.NET Content functions, click on **Insert Search Display Tag...**
3. The Insert Ektron Search Display Tag box is displayed.

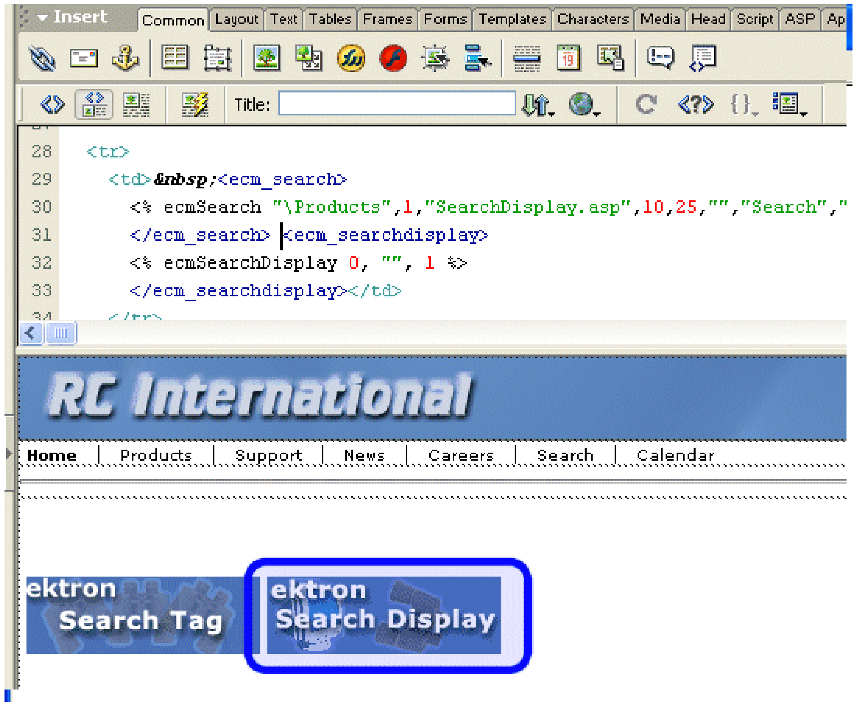


4. Use the following table to assist you with inserting a search display function.

Field	Description
Maximum Number of Documents	Specify the maximum amount of results that will be returned to the user when a search is performed.
Style Info	Insert an inline style sheet that will be used to format all the hyperlinks that are returned.
Show Last Modified Date	Check off this box to show the last modified date with the search result. This allows users to distinguish between updated and old content.

5. When completed, click **insert**.

   A graphic to define where the search display tag has been placed on your template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View (with no default content block set)
.NET	In ASP.NET, you do not need to add a separate search display.
ASP	`<% ecmSearchDisplay 0, "", 1 %>`
ColdFusion	`<cfmodule template="#request.ecm.AppPath#ecmSearchDisplay.cfm" MaxNumber="0" StyleInfo="" ShowDate="1">`
JSP	`<%= ecmSearchDisplay(0, "", 1)%>`
PHP	`<?php ecmSearchDisplay(0, "", 1)?>`

Single Summary

For a description of the Single Summary function, see "Single Summary Function" on page 21-286

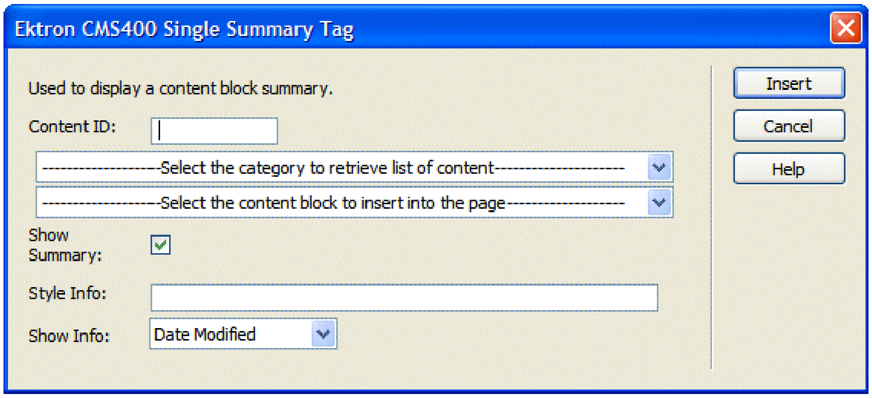
This tag appears on the following menu(s):

- **Commands > Ektron CMS400 - (ASP CF JSP PHP) > CMS Function...**

To insert a Single summary:

1. Move the blinking cursor to the area that you want to place it.

2. From the list of Ektron CMS400.NET Content functions, click on **Single Summary Tag...**
3. The Insert Ektron Single Summary Tag box is displayed.

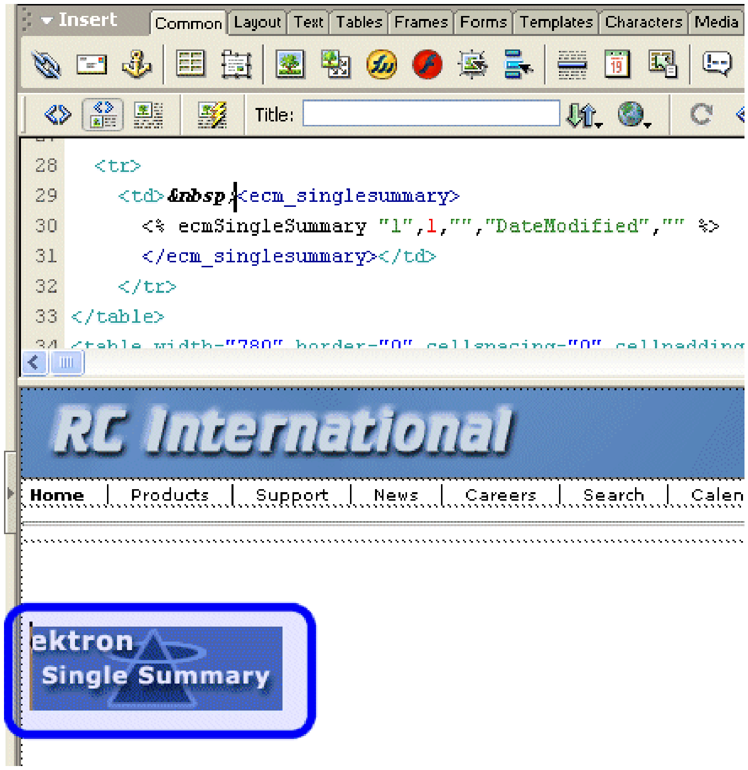


4. Use the following table to assist you with inserting a single summary tag.

Field	Description
Content ID	Working Offline - Enter a valid content ID into the Content ID textbox. Working Online - The top drop-down list will be filled with a list of content folders that you have privileges to. After choosing a content folder, the bottom drop-down box will be filled with a list of all the content block titles within that category. When a title is selected, the content ID textbox will be filled with that content block's id number.
Show Summary	If checked, content summaries will be displayed.
Style Info	Insert any inline style information, which will be applied to the generated text hyperlink, here.
Show Info	Select the type of information that will be displayed next to the generated hyperlinks.

5. When completed, click **insert**.

   A graphic to define where the single summary tag will appear on your template is inserted.



Shown below is the code that will be inserted according to the platform that has been specified in the setup:

Platform	Code View
ASP	<% ecmSingleSummary "1",1,"","DateModified","" %>
ColdFusion	<cfmodule template="#request.ecm.AppPath#ecmSingleSummary.cfm" ContentID="1" ShowSummary="1" StyleInfo="" ShowInfo="DateModified">
JSP	<%= ecmSingleSummary("1",1,"","DateModified","") %>
PHP	<?php ecmSingleSummary("1",1,"","DateModified","") ?>

Site Map

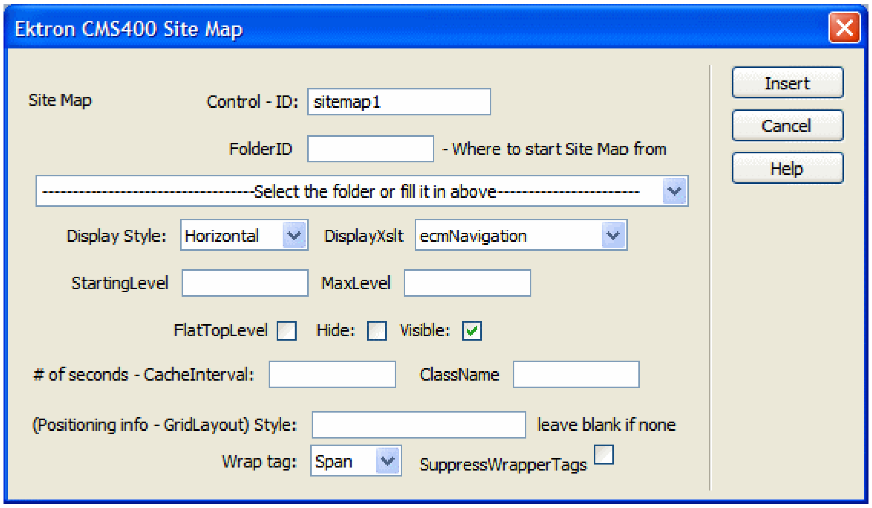
For a description of the Site Map function, see "SiteMap Server Control" on page 9-298.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Menu Controls...**

To insert a Site Map:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Site Map**.
3. The Site Map dialog box appears.



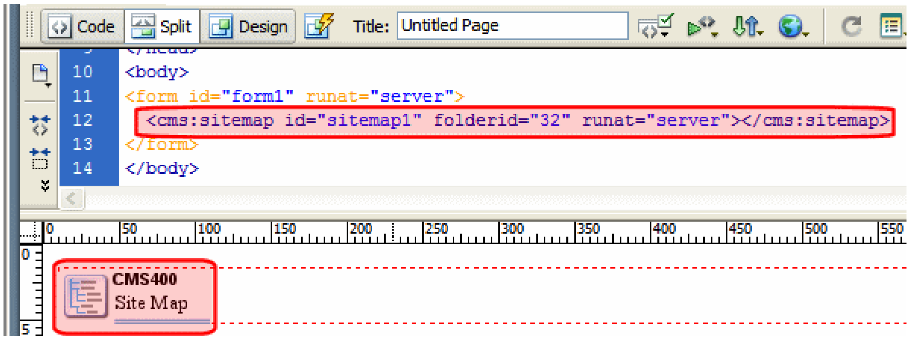
4. Use the following table to assist you with inserting a SiteMap.

Field	Description
Control ID	A unique name for the function you are inserting.
FolderID	The numeric id of the folder that you want to use. If you do not know the folder ID, you can navigate to it using the Select folder drop down box.
DisplayStyle	Indicate how to display the site map: horizontally or vertically. The default is Horizontal.
DisplayXslt	Determines how the information on the page is displayed. **None** - databind only **ecmNavigation** - lists the title of every content block in the collection See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the collection plus the content summary : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. See Also: "Example of ecmTeaser Display" on page 9-124
StartLevel	Set to the starting level of the site map. If set to 0 (zero), starts from the root.
MaxLevel	Set the maximum amount of levels to show. Set it to 0 (zero) for unlimited.

Field	Description
FlatTopLevel	When this box is checked, include site nodes from the parent folder but not their items. Unchecking this box includes all nodes and items. **Checked** = include site nodes from the parent folder but not their items **Unchecked** = includes all nodes and items
Hide	Used to hide a SiteMap in design time and run time. **Checked** = Hide the SiteMap **Unchecked** = Show the SiteMap **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
# of seconds - CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags

5. When completed, click **Insert**.

   A graphic defines where the Site Map appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:sitemap id="sitemap1" folderid="32" runat="server"></cms:sitemap>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Smart Menu

For a description of the Smart Menu function, see "Smart Menu Server Control" on page 9-178.

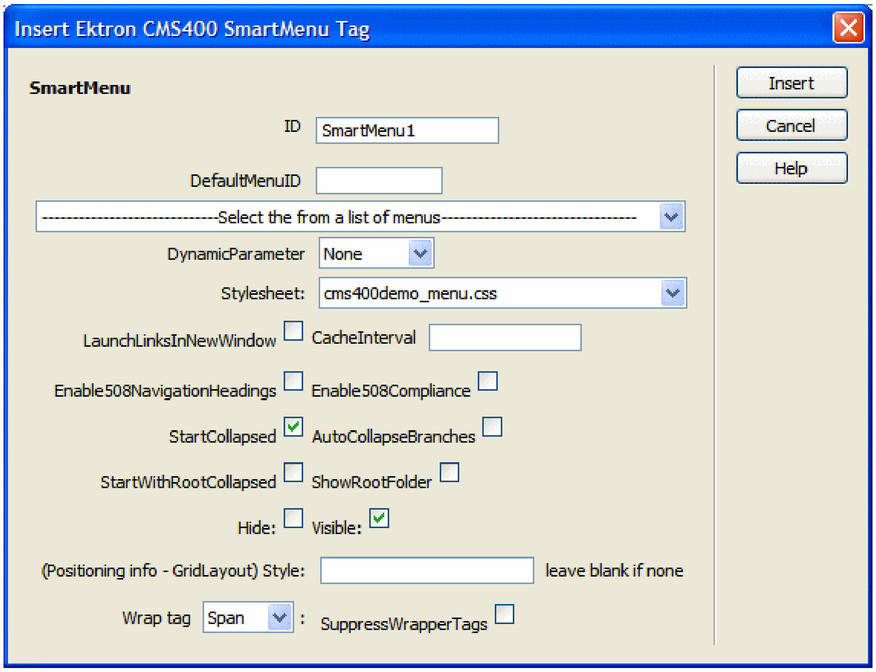
This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Menu Controls...**

To insert a Smart Menu:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Smart Menu**

The Smart Menu Control box appears.



3. Use the following table to assist you with inserting a Smart Menu.

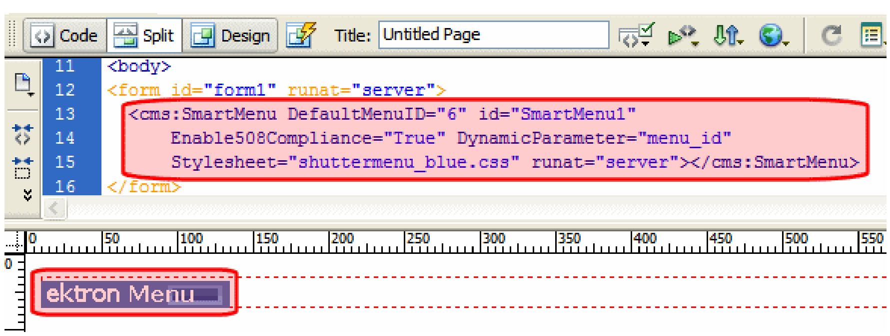
Field	Description
Control ID	A unique name for the function you are inserting.
DefaultMenuID	The numeric id of the menu that you want to insert. If you do not know the DefaultMenuID, you can navigate to it using the Select Menu drop down box.
Select Menu	Select a menu to be used. When a menu is selected, the DefaultMenuID textbox is filled with that menu's id number. If you insert the DefaultMenuID, you do not need to select a menu.
DynamicParameter	Checks the QueryString for the menu value and replaces the menu with content when ID is specified. Leave blank to always display the menu. **None** - Use Default **menu_ID** - The control uses the menu passed as a URL parameter.
Stylesheet	Enter the style sheet that will determine the appearance of the menus. Menu style sheets reside in the `site root/workarea/csslib/smartmenu` folder. You can modify any of the standard style sheets or create your own.

Field	Description
LaunchLinksinNew Window	Check this box and when a site visitor selects a menu option, it appears in a new browser window. If unchecked, the new page replaces the current page in the browser. **Checked** = when a site visitor selects a menu option, it appears in a new browser window **Unchecked** = the new page replaces the current page in the browser
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 (three hundred). See Also: "Caching with Server Controls" on page 21-31
Enable508compliance	If you check this box, the menu will comply with Section 508. See Also: "Section 508 Compliance Features of Smart Menus" on page 9-183 **Checked** = menu will comply with Section 508 **Unchecked** = menu does not comply with Section 508
StartCollapsed	If you check this box, all submenus are closed when the menu initially displays. **Checked** = all submenus are closed when the menu initially displays **Unchecked** = initially display submenus
AutoCollapseBranches	If you check this box, whenever a new submenu opens, all other submenus close. If unchecked, other submenus remain open when a new one opens. **Checked** = whenever a new submenu opens, all other submenus close **Unchecked** = submenus remain open when a new one opens
Start With RootCollapsed	If you check this box, the menu initially displays with its root menu closed. **Note:** This property is ignored if the `ShowRootFolder` property is `unchecked`. **Checked** = the menu initially displays with its root menu closed **Unchecked** = the menu initially displays with its root menu open
ShowRootFolder	If you check this box, a menu option listing the title of the root folder appears. If unchecked, the title of the root folder does not appear. **Checked** = a menu option listing the title of the root folder appears **Unchecked** = the title of the root folder does not appear

Field	Description
Hide	Used to hide a Smart Menu in design time and run time. **Checked** = Hide Smart Menu **Unchecked** = Show Smart Menu **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

4. When completed, click **insert**.

   A graphic defines where the Smart Menu appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	<cms:SmartMenu DefaultMenuID="6" id="SmartMenu1" Enable508Compliance="True" DynamicParameter="menu_id" Stylesheet="shuttermenu_blue.css" runat="server"></cms:SmartMenu>
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Standard Menu

For a description of the Standard Menu function, see See "Menu Server Control" on page 9-184.

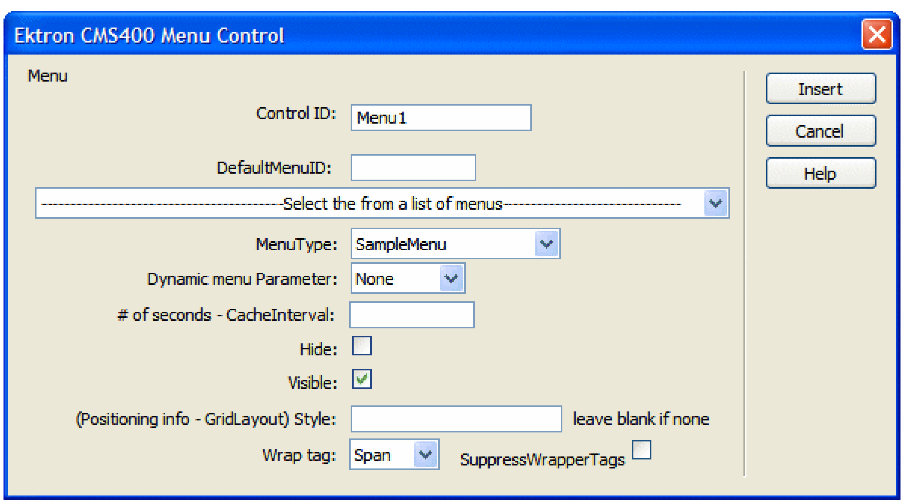
This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > CMS Menu Controls...**

To insert a Standard Menu:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET Functions, click **Standard Menu**

The Standard Menu Control box appears.



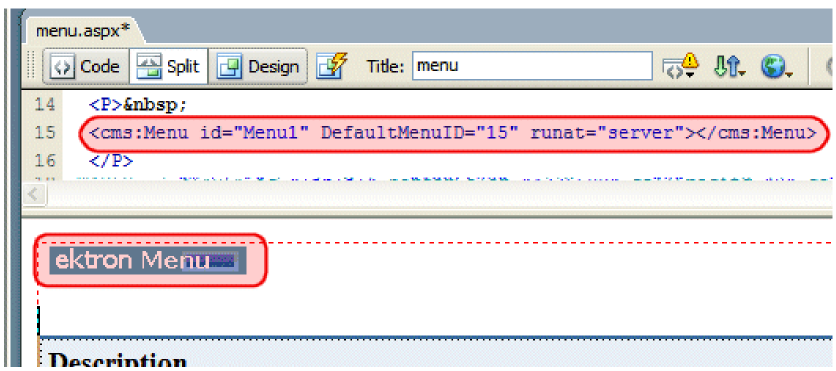
3. Use the following table to assist you with inserting a Standard Menu.

Field	Description
Control ID	A unique name for the function you are inserting.
DefaultMenuID	The numeric id of the menu that you want to insert. If you do not know the DefaultMenuID, you can navigate to it using the Select Menu drop down box.
Select Menu	Select a menu to be used. When a menu is selected, the DefaultMenuID textbox is filled with that menu's id number. If you insert the DefaultMenuID, you do not need to select a menu.
MenuType	The type of menu to render. **None** - databind only **SampleMenu** - A sample display, formatted as a bulleted menu list **TreeMenu** - A sample display, formatted as a folder tree. You can expand the tree by clicking on the folder icon. For more information on using the SampleMenu and TreeMenu Display, see See "Using DisplayXslt Samples" on page 9-187 .
Dynamic Menu Parameter	Checks the QueryString for the menu value and replaces the menu with content when ID is specified. Leave blank to always display the menu. **None** - Use Default **menu_ID** - The control uses the menu passed as a URL parameter.
CacheInterval	Sets the amount of time the server control's data is cached. The default is 0 (zero). This is the amount of time, in seconds, a control's data is cached. For example, if you want to cache the data for five minutes, set this property to 300 0* *(*three hundred). See Also: "Caching with Server Controls" on page 21-31
Hide	Used to hide a menu in design time and run time. **Checked** = Hide function **Unchecked** = Show function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags

4. When completed, click **insert**.

   A graphic defines where the Standard Menu appears on your template.



Shown below is an example of the code that is inserted:

Platform	Code View
.NET	`<cms:Menu id="Menu1" DefaultMenuID="15" runat="server"></cms:Menu>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Web Search

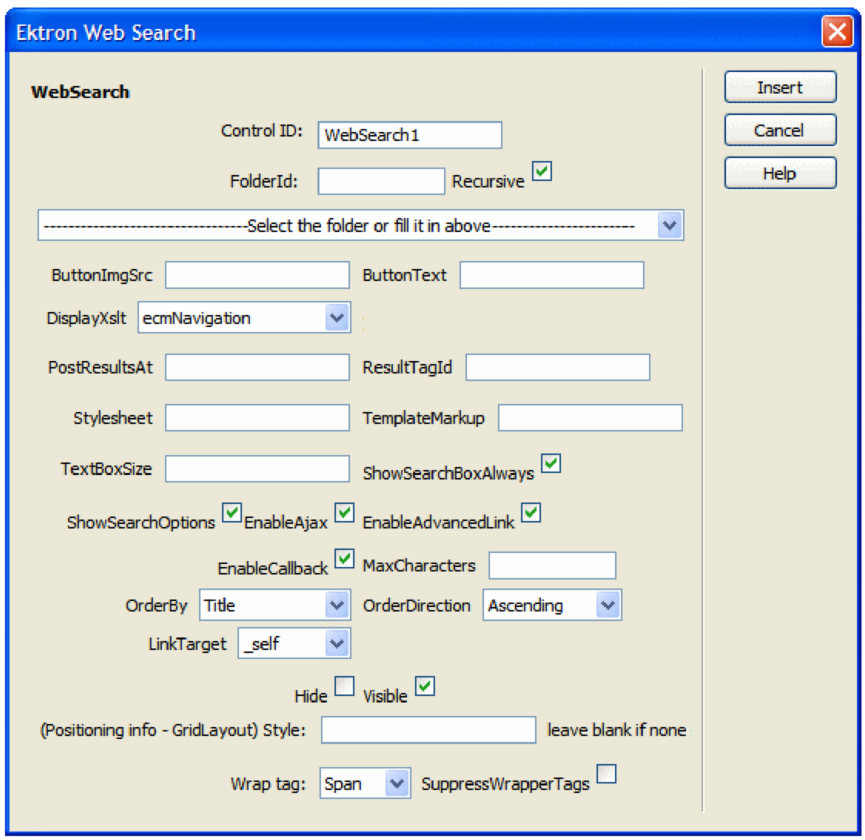
For a description of the Web Search Function, see See "Web Search Server Control" on page 9-68.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert an Web Search:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **Web Search**.
3. The Insert Web Search box is displayed.



4. Use the following table to assist you with inserting an Web Search.

Field	Description
Control ID	A unique name for the function you are inserting.

Field	Description
FolderID	The numeric id of the folder that you want to search. If you do not know the folder path, you can navigate to it using the Select folder drop down box.
Recursive	In the `FolderID` property, you specify a folder whose content is searched on this map. To extend the search to all folders below this folder, check this box.
Select Folder	Select a folder path to be searched. When a folder is selected, the folderID textbox is filled with that folder's id number. If you insert the Folder ID, you do not need to select a folder.
ButtonImgSrc	If you want to display an image on the submit button, enter the server path to it.
ButtonText	The text used for the button if no image source is identified. If an image source is identified, this is alternative text for the button.
DisplayXslt	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every content block in the folder See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary **Warning!** If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade. See Also: "Example of ecmTeaser Display" on page 9-124
PostResultsAt	Enter the Web form on which the search results will post. To display results on the Web page from which the search was initiated, enter a pound sign (#) or leave the field blank. **Warning!** A Web Search server control must exist on the posting page.
ResultTagId	Lets you designate where search results appear. You can place search criteria in one area of a Web form and the results in another. For example, you have the following tag. `<span id=”results”></span>` In this case, enter **results** for the property value.

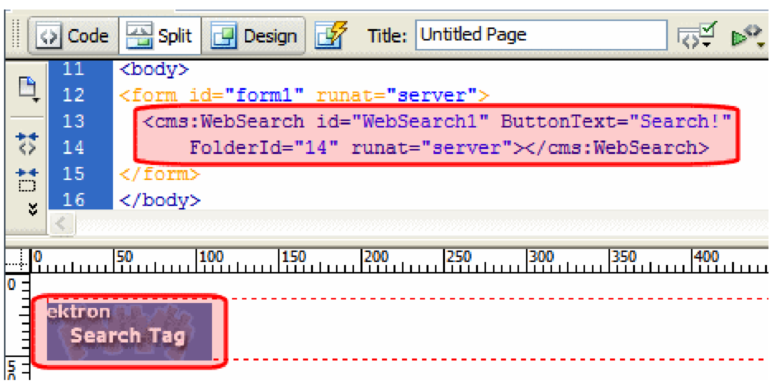
Field	Description
Stylesheet	Specify the location of the style sheet for the search results page. Set the location relative to the site root folder. For example: `csslib\mytest.css`. Leave blank to use the default style sheet, `\`*`webroot`*`\Workarea\csslib\global.css`.
MarkupLanguage	Identify the template markup file that controls the display of the search results. For example, mysearchmarkup.ekml. If the *.ekml file is located in the same folder as the Web form containing the server control, just enter its name. If the file is in another folder, enter the path relative to site root. For example, `\CMS400Developer\workarea\customfiles\markup\mysearchmarkup.ekml`. **Note:** If you enter a valid EkML file, the `Displayxslt` property value is ignored. See Also: "Ektron Markup Language" on page 21-414 and "websearch.ekml" on page 21-474
Text Box Size	The size of the **Search** text box for user input. The width is based on the number of characters.
ShowSearchBoxAlways	If set to **unchecked**, the search box does not appear when the results are posted to the Web page. **Checked** = search box always appears **Unchecked** = the search box does not appear when the results are posted to the Web page
ShowSearchOptions	If this box is checked, the following options appear above the **Search** box. - Site - Html - Documents - Images - Multimedia **Checked** = show search options **Unchecked** = hide search options
EnableAdvancedLink	Set to true to display the link to the Advanced Search page (see image below). 

Field	Description
MaxCharacters	The maximum number of characters the **Search** text box accepts. If you enter a value less than 50, it is a good idea to set the `TextBoxSize` property to the same number.
Order By	Specify how you want to order the search results that are generated when a search is performed on you Web site. - **Title** - The title of the content block - **Date Created** - The date the content block was created - **Date Modified** - The date the content block was last modified - **Last Author Last Name** - The last author's last name - **Last Author First Name** - The last author's first name
OrderDirection	Specify if you want the results in ascending or descending order. - **Ascending** - Alphabetic or numerical order - **Descending** - Reverse alphabetic or numerical order
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.
Hide	Used to hide an Web Search in design time and run time. **Checked** = Hide Web Search **Unchecked** = Show Web Search **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"

Field	Description
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. ☑ **Checked** = Suppress wrapper tags ☐ **Unchecked** = Do not suppress wrapper tags

5. When completed, click **insert**.

   A graphic defines where the Web Search appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	`<cms:WebSearch id="WebSearch1" ButtonText="Search!" FolderId="14" runat="server"></cms:WebSearch>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

XML Index Search

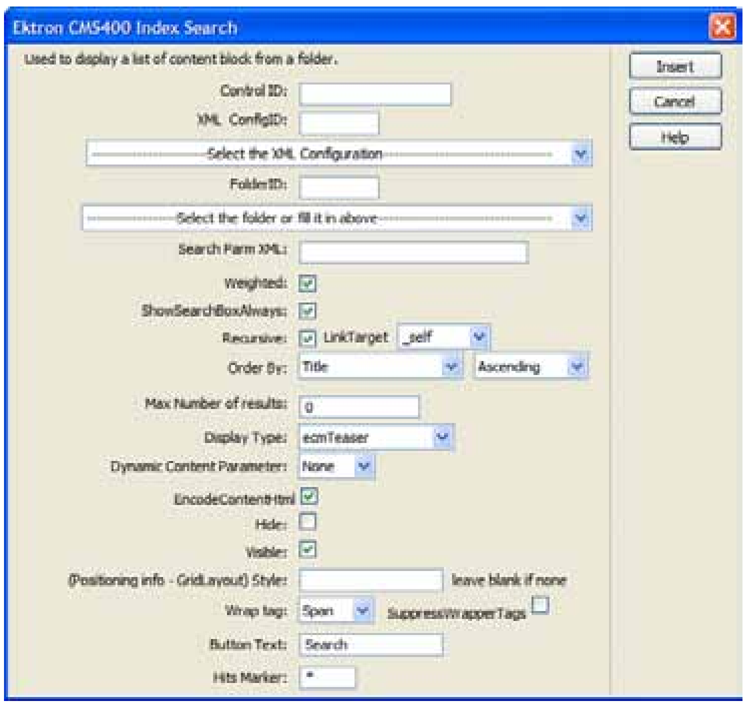
For a description of the XML Index Search Function, see "IndexSearch Server Control" on page 7-394.

This tag appears on the following menu(s):

- **Commands > Ektron CMS400.NET (Server Controls) > Content Controls...**

To insert an XML Index Search:

1. Move the blinking cursor to the area that you want to place it.
2. From the list of Ektron CMS400.NET functions, click **XML Index Search**.
3. The Insert XML Index Search box is displayed.

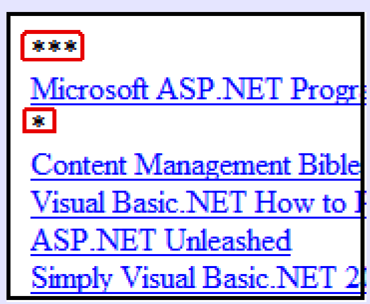


4. Use the following table to assist you with inserting an XML Index Search.

Field	Description
Control ID	A unique name for the function you are inserting.
XML ConfigID	ID of the Smart Form whose indexed fields appear on the search screen. If you do not know the XML ConfigID, you can navigate to it using the Select Smart Form drop down box.

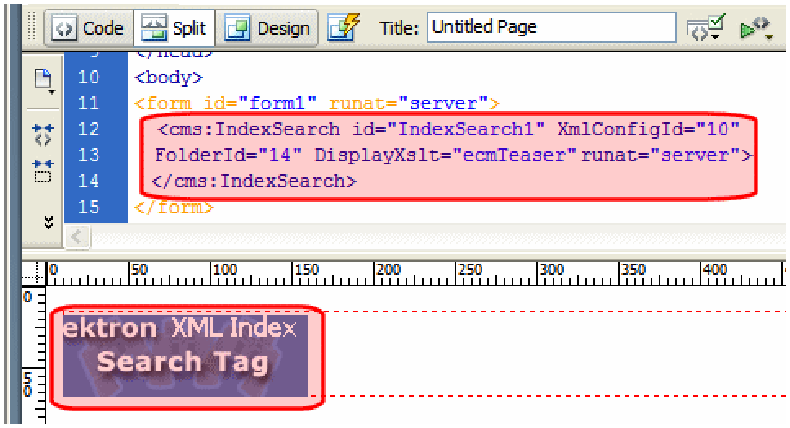
Field	Description
Select XML Configuration	The drop-down box is populated with a list of all the XML Configuration titles. When a title is selected, the XML ConfigID textbox is filled with that XML Configuration's id number. If you insert the XML ConfigID, you do not need to select a XML Configuration.
FolderID	The numeric id of the folder that you want to search. If you do not know the folder path, you can navigate to it using the Select folder drop down box.
Select Folder	Select a folder path to be searched. When a folder is selected, the folderID textbox is filled with that folder's id number. If you insert the Folder ID, you do not need to select a folder.
Search Parm XML	This property preserves settings that a developer would create in Visual Studio.
Weighted	If this value is **checked**, content blocks are ranked by the number of criteria matches. For example, if a content block matches all search criteria, it appears at the top of the results page. A hit marker appears for each match. If a second content block only matches one criterion, it also appears on the results page underneath the first content block. One asterisk appears above the page's title to indicate the single match. **Checked**- display every content block that matches *at least one* search criteria **Unchecked** - show only content blocks that match *all* search criteria
ShowSearchBoxAlways	If set to **unchecked**, the search box does not appear on when the results are posted to the Web page.
Recursive	Determines whether the XML Index Search Control uses this folder's child folders in the search.
LinkTarget	Defines the way a link acts when a link is clicked. **_blank** - This target causes the link to always be loaded in a new blank window. This window is not named. **_self** - This target causes the link to always load in the same window the anchor was clicked in. This is useful for overriding a globally assigned base target. **_parent** - This target makes the link load in the immediate frameset parent of the document. This defaults to acting like "_self" if the document has no parent. **_top** - This target makes the link load in the full body of the window. This defaults to acting like "_self" if the document is already at the top. It is useful for breaking out of an arbitrarily deep frame nesting.

Field	Description
Order By	Specify how you want to order the search results that are generated when a search is performed on you Web site. Also specify if you want the results in ascending or descending order. - **Title - The title of the content block** - **Date Created** - The date the content block was created - **Date Modified** - The date the content block was last modified - **Last Author Last Name** - The last author's last name - **Last Author First Name** - The last author's first name - **Ascending** - Alphabetic or numerical order - **Descending** - Reverse alphabetic or numerical order When you choose weighted search results, Ascending and Descending use how many criteria match your search. For example, if you have weighted results, and you choose Ascending, the results that match the most criteria appear first.
Max Number of results	The Maximum number of content blocks returned (0=unlimited).
Display Type	Determines how the information on the page is displayed **None**-databind only **ecmNavigation** - lists the title of every content block in the folder See Also: "Example of ecmNavigation Display" on page 9-124 **ecmTeaser** - lists the title of every content block in the folder plus the content summary See Also: "Example of ecmTeaser Display" on page 9-124
Dynamic Content Parameter	Checks the QueryString for the content block ID value and replaces the search with content when ID is specified. Leave blank to always display the search. By making content dynamic, when the content displayed on a Web page contains a link to another piece of content, you can display the second piece of content in the same Web page space. **None** - Use Default **ID** - The control uses the content block passed as a URL parameter.
EncodeContentHtml	When checked, Content HTML is encoded when it is returned. **Checked** = Content HTML is encoded **Unchecked** = Content HTML is not encoded
Hide	Used to hide an IndexSearch in design time and run time. **Checked** = Hide IndexSearch **Unchecked** = Show IndexSearch

Field	Description
	Note: If `Hide` and `Visible` are both checked, the property is hidden.
Visible	Used to show or hide the function at run time. **Checked** = Show function **Unchecked** = Hide function **Note:** If `Hide` and `Visible` are both checked, the property is hidden.
Style (Positioning Info - GridLayout)	Set position information of a control as absolute, when using a GridLayout Web page. For example: style="Z-INDEX: 101; LEFT: 328px; POSITION: absolute; TOP: 240px"
Wrap Tag	Allows a developer to specify a server control's tag. The default is **Span**. **Span** - The <span> tag is used to designate an in-line portion of an HTML document as a span element. **Div** - The <div> tag is used when you want to apply attributes to a block of code.
SuppressWrapper	Suppresses the output of the span/div tags around the control. The default is **Unchecked**. **Checked** = Suppress wrapper tags **Unchecked** = Do not suppress wrapper tags
Button Text	The text that appears on the button.
Hits Marker	This symbol shows how many search criteria each hit matched. The following example shows the first hit met three of the criteria. The second group met one criterion. 

5. When completed, click **insert**.

   A graphic defines where the XML Index Search appears on your template.



Shown below is an example of the code that is inserted.

Platform	Code View
.NET	`<cms:IndexSearch id="IndexSearch1" XmlConfigId="10" FolderId="14" DisplayXslt="ecmTeaser" runat="server"></cms:IndexSearch>`
ASP	This function is not available as an Ektron Dreamweaver Extension for ASP.
ColdFusion	This function is not available as an Ektron Dreamweaver Extension for ColdFusion.
JSP	This function is not available as an Ektron Dreamweaver Extension for JSP.
PHP	This function is not available as an Ektron Dreamweaver Extension for PHP.

Other Supported Development Frameworks

Standard ASP.NET Methods

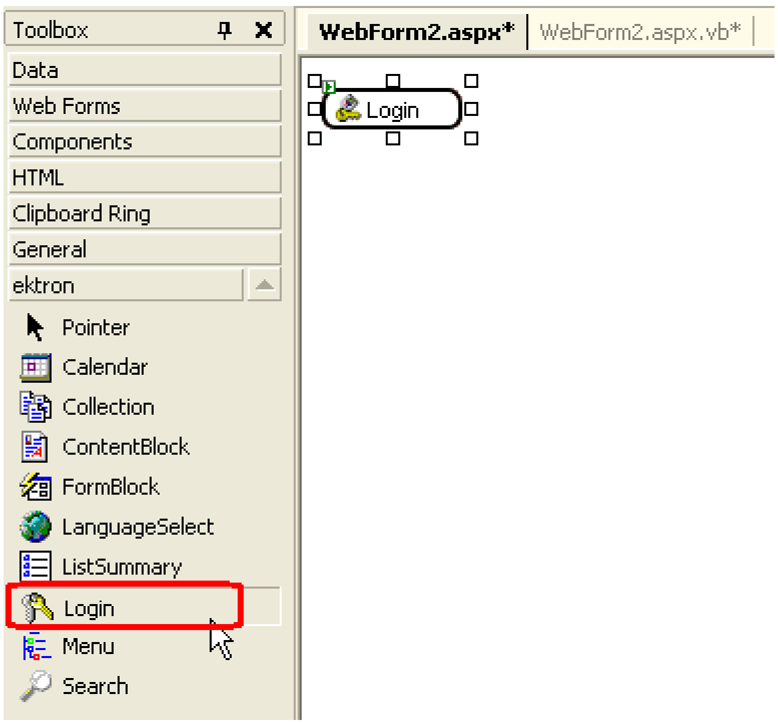
Use these methods to customize Ektron CMS400.NET. To use them, insert them onto your template pages to invoke content blocks, list summaries, and other objects stored in your database. They are the primary building blocks of your Ektron CMS400.NET Content Management System.

Replacement of Standard Methods

Beginning with Release 4.7, Ektron CMS400.NET utilizes ASP.NET server controls, which replace most Standard ASP.NET methods. With Ektron CMS400.NET's new toolbox of pre-built, reusable, data-bindable ASP.NET controls, Ektron empowers developers working in Visual Studio to rapidly integrate Ektron CMS components into their templates and sites. For more Information on Ektron CMS400.NET controls, see "Developer Topics" on page 21-1.

The following examples shows the Login server control added by drag and drop vs. adding a Login method by the ASP.NET method.

Drag and Drop Login server control



Adding a Login function via an ASP.NET method.

```
<tr>
```

```
<td>
<%=AppUI.ecmLogin()%>
</td>
</tr>
```

Best Practice

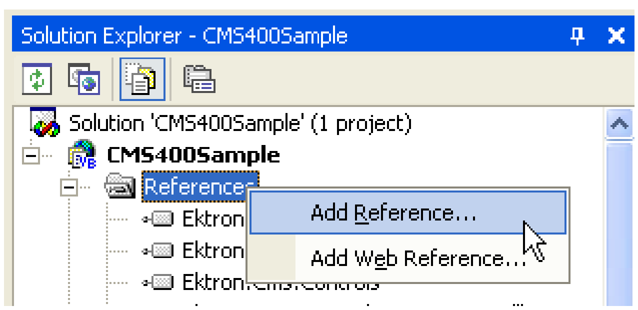
Ektron recommends using CMS400.NET server controls when available over Ektron standard ASP.NET methods. The methods are being replaced by the server controls.

Note: You can still use the standard ASP.NET methods in Ektron CMS400.NET.

Referencing Methods in Visual Basic

Before you can use methods with Visual Basic, you must add a reference to them from Visual Basic. Follow these steps to do so.

1. Open Visual Basic.
2. Choose or add a project.
3. In Solution Explorer, right click **References** and choose **Add Reference**.

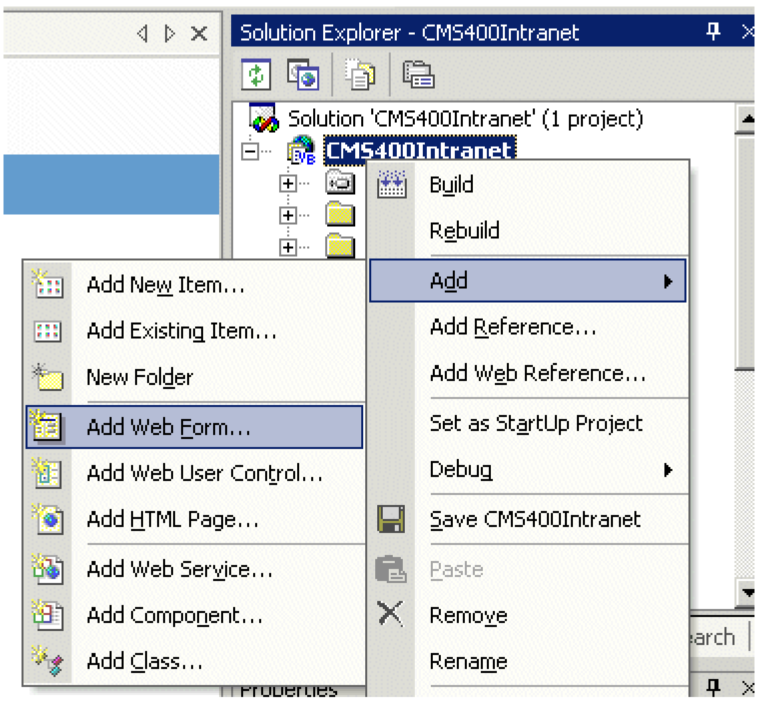


4. In the Add Reference dialog box, click **Browse**.
5. Go to `webroot/siteroot/Bin`.
6. To load the standard methods click `Ektron.Cms.UI.CommonUI.dll`. To load the XML Indexing methods, click `Ektron.Cms.Common.dll`.
7. Click **Open**, then **OK**.

Adding a New Web Form

To add a new Web form, follow these steps.

1. Open your project in Visual Studio.
2. Right click the project.
3. Click **Add > Add Web Form**.



4. Click **Web Form**.
5. In the code behind, add an `Imports Ektron.Cms.UI.CommonUI` statement.

Requirements for Standard Methods

Ektron CMS400.NET maintains and displays content through the use of Ektron ASPX methods and ASP.NET assembly objects. To use the methods, include the following code in your template:

```
<%@ Page Language="vb" AutoEventWireup="false" %>
<%@ Import Namespace="Ektron.Cms.UI.CommonUI" %>
<% Dim AppUI As New ApplicationAPI %>
```

Each line is explained below.

Line	Description
`<%@ Page Language="vb" AutoEventWireup="false" %>`	A generic .net line of code that should always be placed in the template
`<%@ Import Namespace="Ektron.Cms.UI.CommonUI" %>`	An import statement that calls the namespace `Ektron.CMS.UI.CommonUI` to display information from the .net assembly file
`<% Dim AppUI As New ApplicationAPI %>`	Creates an instance of the ApplicationUI class that is used by each method

These lines call the Ektron .net assembly object to allow the page to function properly. They must appear at the top of each template file.

Standard Methods

To customize your Ektron CMS400.NET application, you need to be familiar with these methods.

Method	Description	More Information
Add Content	Programmatically adds a content blocks to Ektron CMS400.NET	"Addcontent" on page 21-242
Collection	Displays links generated by collections.	"Collection Server Control" on page 153
Content Block	Displays and manages a content block.	"ContentBlock Server Control" on page 252
Event Calendar	Displays an event calendar	
Form	Displays a content block that is associated with a form.	"FormBlock Server Control" on page 361
IndexSearch	Displays on a Web page a set of search fields. A site	"IndexSearch

Method	Description	More Information
	visitor uses the page to search for information on your Web site.	Server Control" on page 407
List Summary	Displays a list of content block summaries.	"ListSummary Server Control" on page 346
Login	Displays the login or logout button, which lets the user log in and use Ektron CMS400.NET.	"Login Server Control" on page 8
Metadata	Displays the metadata in the source of the Web page displaying the content.	"MetaData Server Control" on page 212
Menu	Customizes the DHTML menus feature	"DhtmlMenu Server Control" on page 244
Search	Inserts a text box with a search button in the template. When the user completes the search screen, it looks through XHTML content on the Web site.	"Web Search Server Control" on page 85
ShowSiteLanguage	Lets a site visitor select a language in which to view site.	"LanguageSelect Server Control" on page 61

Addcontent

The addcontent method lets you programmatically add a new content block to Ektron CMS400.NET without logging in. This method can be used for several applications, such as

- A Web form allowing you to collect data from users about the content block
- A loop function that moves information from a database to an Ektron CMS400.NET database

Warning! Every string that you pass to the function must be HTML encoded. Here is the VB.Net syntax for encoding a string.

```
myTitle = "John's Book"

myTitle = Server.HtmlEncode(myTitle)
```

Explained in the table below are the attributes for the add content block function.

Attribute	Description
Username	The username of the user to be authenticated for permissions to see whether the user is able to add a content block.
Password	The password for the username being authenticated.
Domain	If using Active Directory, specify the domain needed to authenticate the user.
Content_title	Specify a title for the content block being added.
Content_ comment	Specify a historical comment for the content being added.
ContentHTML	Actual content for the content block.
SummaryHTML	Summary information about the content block.
ContentLanguage	Language of content.
FolderID	ID number of the content folder where the content block will be added to.
GoLive	Date and time the content will go live. Note: Must match date/time format set in the Web.config key ek_ dateFormat.
EndDate	Date and time the content will expire. Note: Must match date/time format set in the Web.config key ek_ dateFormat.
MetaInfo	Specify the information for the metadata which will be used as a reference point for finding other words or information. An example is: `<metadata><meta id="3">Title</meta></metadata>` Where ID is the metadata definition ID whose value is being set. The value is set between the meta tags and the meta tag is repeatable for as many metadata definitions as you want to set for the given content block.
ErrString	If there is a error then errString contains the error, otherwise errString is empty.

Add Content Example

The following is an example of the add content function in a template:.

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs)
Handles Me.Load
 Dim m_apiObj As Ektron.Cms.UI.CommonUI.ApplicationAPI
 Dim newContentId As Integer = 0
 Try
 m_apiObj = New Ektron.Cms.UI.CommonUI.ApplicationAPI
 newContentId = m_apiObj.AddContent( _
 "admin", _
 "admin", _
 "", _
 "Content Title", _
 "Comment - this content added through API!", _
 "This is the <b>body</b> of the content.", _
 "This is the <i>summary</i> for the content.", _
 "1033", _
 "0", _
 "06-27-2006 4:09 PM", _
 "", _
 "<metadata><meta id=""3"">ContentTitle</meta></metadata>", _
 "")
 Literal1.Text = "Content Added, ID = " + newContentId.ToString
 Catch ex As Exception
 Literal1.Text = "Error, AddContent Failed: " + ex.Message
 Finally
 m_apiObj = Nothing
 End Try
End Sub
```

The previous example has the following properties:

- The user “admin” is used to be authenticated.
- The title of the new content block is “Content Title”.
- The comment for the content is “Comment”.
- The body of the content is “This is the **body** of the content”.
- The summary of the content block is “This is the *summary* for the content.
- The language ID = 1033, or English.
- The folder ID = 0 is where the content is added.
- The start date is 06-27-2006.
- No end date is specified.
- The metadata definition ID being set is “3” and the value is ContentTitle.

When this function is executed, the content is added to Ektron CMS400.NET. Displayed here is the record of the content in the workarea.

Custom ASP Functions

Ektron CMS400.NET displays content on your Web site through the use of custom Ektron ASP functions and ComObjects. Your template you must include the following file to be able to use the custom functions:

```
<!-- #include file="applicationAPI.asp" -->
```

This file (**`application.asp)`** calls the file with the custom Ektron functions to allow the page to function properly. The `include` statement must appear at the top of every template file that uses an Ektron CMS400.NET custom ASP function.

Warning! `ContentWS.asmx` is the web services (WSDL) file that the custom ASP functions use to talk to Ektron CMS400.NET. The WSDLpath located in the `applicationAPI.asp` file must be set to location of the WSDL file. The default WSDLpath is `http://localhost/cms400Developer/WorkArea/WebServices/ContentWS.asmx`. If you have changed the location of `ContentWS.asmx` you need to update the WSDLpath. For example, if your site is `www.example.com`, the WSDLpath would be `http://www.example.com/WorkArea/WebServices/ContentWS.asmx`.

To customize Ektron CMS400.NET, you need to be familiar with these tags.

Function	Description	More Information
Calendar Functions		
Calendar	Displays a calendar with different display types. For example, a daily view calendar.	Calendar Function
Event Calendar	Displays a month view event calendar	"Event Calendar Function" on page 21-305
Collection Functions		
Collection	Displays links generated by collections	"Collection Function" on page 21-293
CollectionXML	Creates XML for a collection by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML Collection Function" on page 21-300
Random Content	Randomly displays the content of a collection item	"Random Content" on page 21-304

Function	Description	More Information
Random Summary	Randomly displays the summary of a collection item	"Random Summary" on page 21-305
RSS Collection	Creates an RSS feed out of the items in a collection.	"RSS Collection Function" on page 21-298
Content Functions		
Add Content	Allows a user to add content to Ektron CMS400.NET programmatically.	"Add Content" on page 21-257
Content Block	Displays and manages a content block	"Content Block Function" on page 21-251
Form	Displays a content block associated with a form	"Form Function" on page 21-307
Multipurpose	Displays either a content block or a form	"MultiPurpose Function" on page 21-310
List Summary Functions		
Archive ListSummary	Displays summaries of archived content blocks	"Archive List Summary Function" on page 21-285
List Summary	Displays a list of content block summaries	"List Summary Function" on page 21-274
List Summary XML	Creates XML for a list summary by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML List Summary Function" on page 21-280

Function	Description	More Information
RSS List Summary	Creates an RSS feed out of the items in a list summary.	"RSS Summary Function" on page 21-289
Single Summary	Displays the summary for a content block	"Single Summary Function" on page 21-286
Login Functions		
Login	Adds the login or logout button	"Login Function" on page 21-249
Menu Functions		
DropHTMLMenu	Used to display a DHTML menu	"DHTML Menus" on page 21-317
GenerateMenu	Works with DropHTML menu to display DHTML menus	"DHTML Menus" on page 21-317
XML Menu	Creates XML for a menu by wrapping tags around all of the menu items properties.	"XML Menu" on page 21-321
Metadata Functions		
Metadata	Displays the metadata for the current Web page	"Metadata Function" on page 21-311
Search Functions		
Search	Inserts a text box with a search button	"Search Functions (ASP)" on page 21-261
Search Display	Creates an area to display search results	"Search Display Function" on page 21-270

Function	Description	More Information
Site Language Functions		
ShowSiteLanguage	Lets a site visitor select a language in which to view site.	"Show Site Language Function" on page 21-316

Login Function

The login function adds a login button on the template when displayed in a browser. Here it the format of the login function.

```
<% ecmLogin %>
```

This tag is responsible for displaying the following buttons on the Web page.

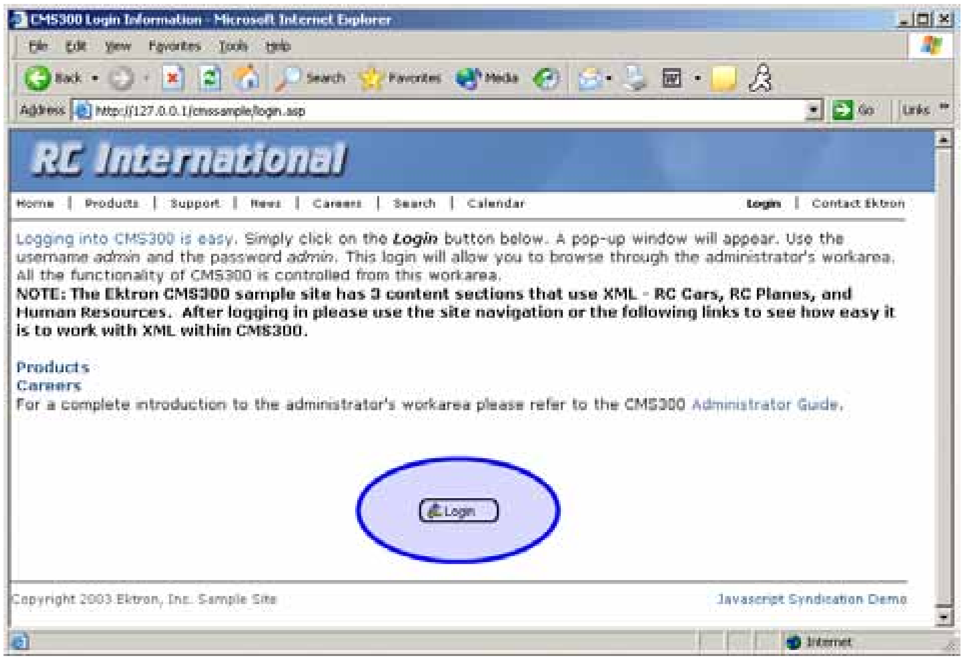
Button	Name	Description
	Login	When user is not logged into Ektron CMS400.NET, this button appears. Click this button to let the user log in to the application.
	Logout	Once logged in, this button replaces the login button to allow the user to log out from the Ektron CMS400.NET Web site.
	Workarea	When logged in, this button appears under the logout button allowing the user to access their workarea.
	Preview On	Lets the user to preview the entire Web site as if all checked-in content was published.
	Preview Off	Turns off preview mode.

Login Tag Example

The following example places a login button in a table cell inside an asp template.

```
<tr>

<td>

<% ecmLogin %>

</td>

</tr>
```

When inserted properly, a login button appears on the Web page.



Clicking the login button opens a login window in which a user enters the username and password. Upon successful completion, the user is logged in to the Ektron CMS400.NET Web site.

Placing Your Login Button

You can add as many login buttons to a template as you like. You might want to include a login button on each template, or have a special Web page called login.asp, from which users can log in without the public being able to access the login page.

Content Block Function

The content block tag displays a content block on an Ektron CMS400.NET Web page. There are two functions to choose from:

- ecmContentBlock
- ecmContentBlockEX

ecmContentBlock allows you display a content block without having to define an XSLT.

With ecmContentBlockEX, you can display XML content by defining an XSLT or applying one of the predefined XSLTs located in Ektron CMS400.NET. For more information on predefined XSLTs, "Adding a Smart Form Using External XML Files" on page 621.

Here is the format for the ecmContentBlock function.

<%ecmContentBlockEX	**ID**	**%>**

Here is the format for the ecmContentBlockEX function.

<%ecmContentBlockEX	**ID,** **"XSLT",** **Override**	**%>**

Note: As an alternative, you can use the multipurpose function, which can display either a content block or a content block associated with a form. For more information, see "MultiPurpose Function" on page 21-310.

The table below explains the attributes of the ecmContentBlock function.

Attribute	Description	Required
ID	ID number assigned of the content block that will appear	Yes

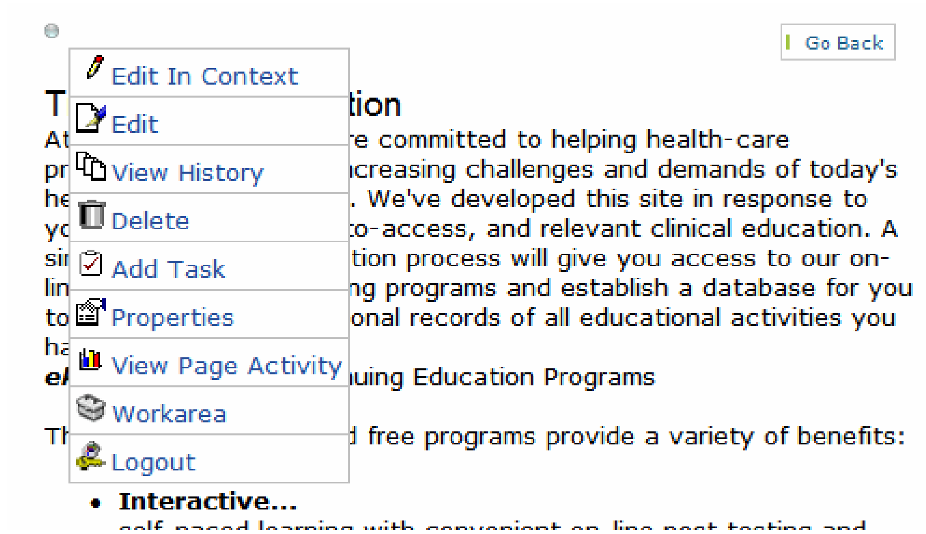
The table below explains the attributes of the ecmContentBlockEX function.

Attribute	Description	Required
ID	ID number assigned of the content block that will appear	Yes

Attribute	Description	Required
XSLT	File name and path to a valid XSLT to transform the XML content. See Also: "The Function's Arguments" on page 21-256 **Warning!** : If you specify an external file, it is strongly recommended that you do not store this file in your site's Workarea folder. If you store this file in the Workarea folder, the file will be lost when you upgrade.	No
Override	If no XSLT is specified, then enter 1 to use XSLT1, 2 for XSLT2, or 3 for XSLT3. See Also: "The Function's Arguments" on page 21-256	No

In normal view, these tags retrieve the content block from the database and displays it in the template.

If a user is logged into Ektron CMS400.NET, the content block tag displays a silver access point in the upper left of the block to show the edit options when hovering over it. .



Content Block Examples

Ektron CMS400.NET has two types of content blocks.

Type	Displays	More information
Static	One content block on the Web page	"Static Content Block" on page 21-253
Dynamic	A content block whose ID is passed through the URL	"Dynamic Content Block" on page 21-254

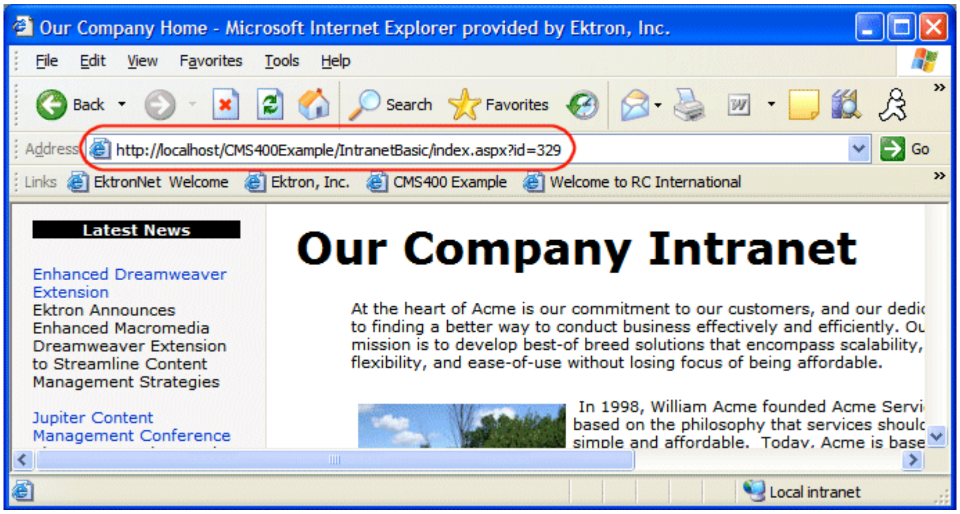
In addition, a content block can contain XHTML or XML content. For more information, see "XML Content Block" on page 21-255.

Static Content Block

The following illustrates how to insert a static content block on a template.

```
<tr>

<td>

<% ecmContentBlock(329) %>

</td>

</tr>
```

In the example above, the function retrieves the content block with an id of 329 from the database to the browser.

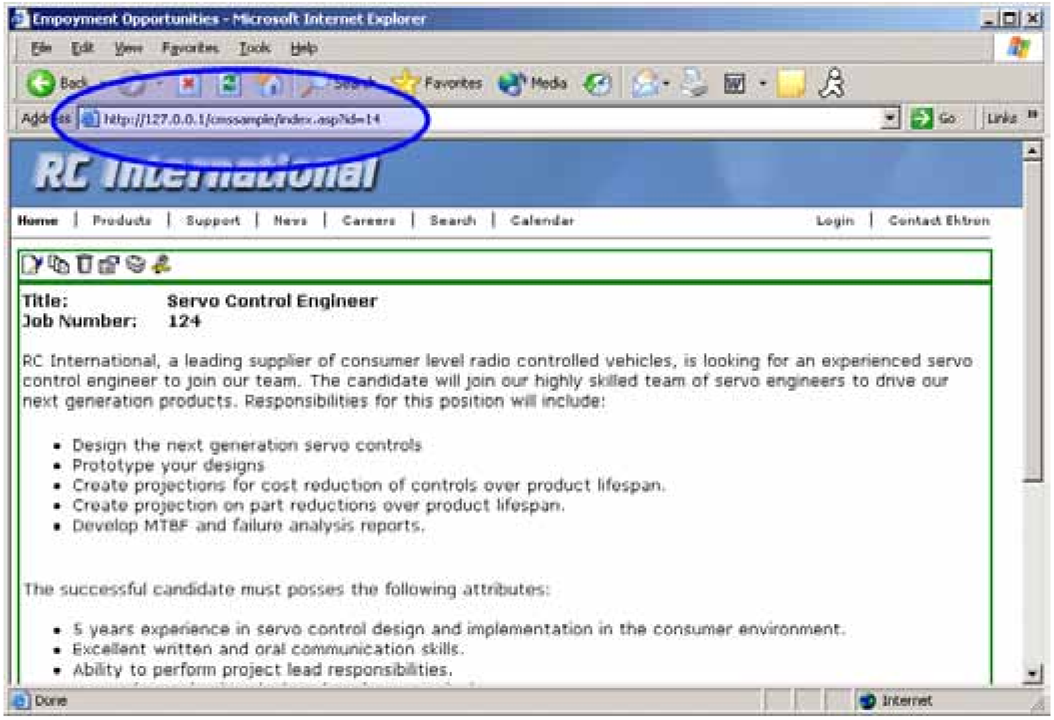


Dynamic Content Block

The following example shows the content block tag where the id is being passed as a URL parameter. Use this format with dynamic template.

```
<tr>

<td>

<% ecmContentBlock(request.QueryString("id")) %>

</td>

</tr>
```

When a user accesses this page, it adds the content block ID number to the tag's template, and the content block with the corresponding ID appears on the Web page in the specified template.



The `id=` convention is used by Ektron CMS400.NET to generate quicklinks when content blocks are created.

The dynamic `ecmContentBlock` function is almost the same as the static one (see "Static Content Block" on page 21-253). The only difference is the parameter, which makes the function dynamic. The parameter uses a query string call (`Request.QueryString`) to read the URL from the browser's address bar. It treats everything after the question mark as a list of key/value pairs separated by ampersands. So, `Request.QueryString` passes the key as a parameter and returns its associated value. For example, in URL `<http://localhost/CMS400Developer/index.asp?id=1&LangType=1036>`, the following QueryString calls return these values.

QueryString Call	Return value
Request.QueryString("id")	1
Request.QueryString("LangType")	1036

XML Content Block

Here is an example of displaying an XML content block. Note that you specify a content block and an XSLT, which determines how the content block is displayed.

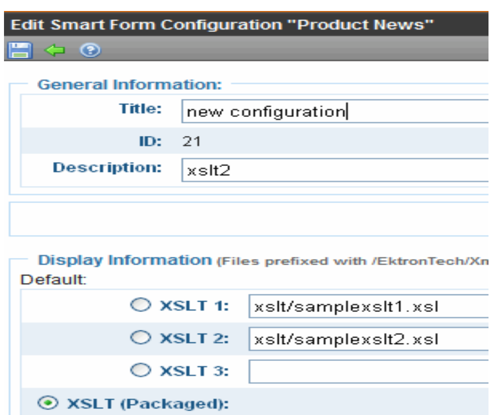
```
<tr>

<td>

<% ecmContentBlockEx 13, "", 1 %>

</td>

</tr>
```

This example displays the content block ID=13, using XSLT1 as the display XSLT.

The Function's Arguments

The ecmContentBlockEx takes three arguments. The first argument identifies the content block to display. The second one is optional and, if used, specifies an external XSLT file.

If the second argument does not exist, the third argument specifies an XSLT identified in the Edit Smart Form screen. The following table provides additional detail about the second and third arguments.

<table>
<tr><th>To use this display XSLT</th><th>Enter this for argument 2</th><th>Enter this for argument 3</th></tr>
<tr><td>The default XSLT specified in the Edit Smart Form screen (illustrated below). Note that, in this example, the XSLT Packaged option is the default XSLT since it is selected.

</td><td>""</td><td>none</td></tr>
<tr><td>XSLT Packaged: from the Edit Smart Form screen (that is, the XSLT created in the Data Designer)
Note: If an XSLT package has not been created, and</td><td>""</td><td>0</td></tr>
</table>

To use this display XSLT	Enter this for argument 2	Enter this for argument 3
zero (0) is the third argument, the default XSLT specified in the Edit Smart Form screen is used.		
	""	1
XSLT 2 from the Edit Smart Form screen	""	2
XSLT 3 from the Edit Smart Form screen	""	3
An absolute or relative path to an XSLT	An external XSLT file not specified in the Edit Smart Form screen. For example `<% ecmContentBlockEx 13, "samplexslt.xsl"%>`	does not matter - if a value exists in argument 2, argument 3 is ignored

Dynamic and Static Combination

Here is an example of how you can use the two different content tags in the same table cell by using an IF statement

```
<tr>
<td>
<% if request.QueryString("id")<> "" then
ecmContentBlock(request.QueryString("id"))else
ecmContentBlock(14) end if %>
</td>

<tr>
```

In this sample code, when a person accesses this page without passing through the content's ID number, the content with an ID=14 will be displayed. If you pass a content id through the URL like **index.asp?id=4,** the content block ID=4 will be displayed.

Add Content

The add content function allows you to programmatically add a new content block to Ektron CMS400.NET without the need of logging in.

This function can be for several applications including, but not limited to:

- Applied to a Web form, allowing you to collect data from users about the content block
- Creating a loop function that moves information from a database to an Ektron CMS400.NET database

Here is the format for the add content function:

<% AddContent	**Username,Password,Domain,content_ title,content_ comment, ContentHtml, SummaryHTML, ContentLanguage, FolderID,GoLive,EndDate,MetaInfo**	%>

Warning! Every string that you pass to the function must be HTML encoded. Here is the VB.Net syntax for encoding a string.

Warning! `myTitle = "John's Book"`

Warning! `myTitle = Server.HtmlEncode(myTitle)`

Explained in the table below are the attributes for the add content block function.

Attribute	Description
Username	The username of the user to be authenticated for permissions to see whether the user is able to add a content block.
Password	The password for the username being authenticated.
Domain	If using Active Directory, specify the domain needed to authenticate the user.
Content_title	Specify a title for the content block being added.
Content_comment	Specify a historical comment for the content being added.

Attribute	Description
ContentHTML	Actual content for the content block.
SummaryHTML	Summary information about the content block.
ContentLanguage	Language of content.
FolderID	ID number of the content folder where the content block will be added to.
GoLive	Date and time the content will go live. Note: Must match date/time format set in the Web.config key ek_ dateFormat.
EndDate	Date and time the content will expire. Note: Must match date/time format set in the Web.config key ek_ dateFormat.
MetaInfo	Specify the information for the metadata which will be used as a reference point for finding other words or information. An example is: `<metadata><meta id="3">Title</meta></metadata>` Where ID is the metadata definition ID whose value is being set. The value is set between the meta tags and the meta tag is repeatable for as many metadata definitions as you want to set for the given content block.

Add Content Example

The following is an example of the add content function in a template:.

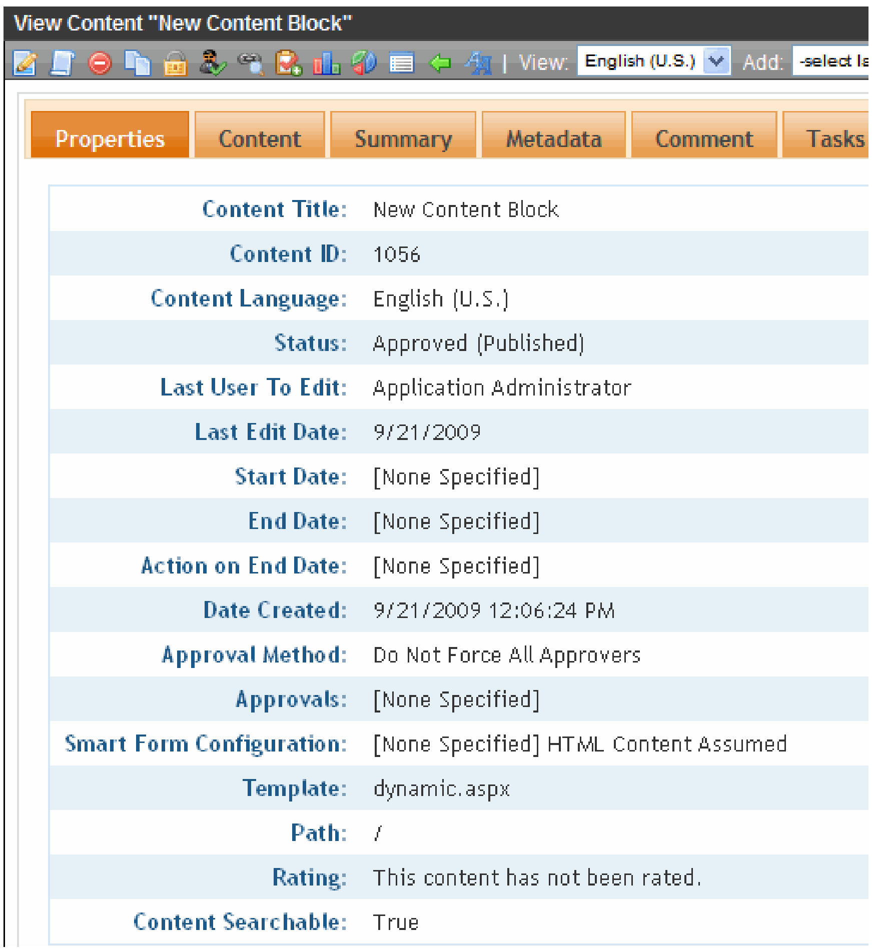
```
<tr>
  <td>
    <% AddContent "admin", "admin", "", "Content Title", "Comment",
 "This is the <b>body</b> of the content.", "This is the <i>summary</i>
for the content.", 1033, 31, "06-14-2004 11:55 AM",     "",
"<metadata><meta id=""3"">ContentTitle</meta></metadata>","" %>
  </td>

</tr>
```

The previous example has the following properties:

- The user “admin” is used to be authenticated.
- The title of the new content block is “Content Title”.
- The comment for the content is “Comment”.
- The body of the content is “This is the **body** of the content”.

- The summary of the content block is “This is the *summary* for the content.
- The language ID = 1033, or English.
- The folder ID = 31 is where the content is added.
- The start date is 06-14-2004”.
- No end date is specified.
- The metadata definition ID being set is “3” and the value is ContentTitle.

When this function is executed, the content is added to Ektron CMS400.NET. Displayed here is the record of the content in the workarea.



Search Functions (ASP)

The search tag is used to display a text box, with a search button on the template. When seen on the template of a Web page, users can enter text and click on the search button to search through all the HTML content on the Web site. To create a search, Ektron has created two search functions:

- ecmSearch
- ecmSearchNoFormTag

Both functions have the same parameters and perform the same search. The only difference is ecmSearch automatically inserts form tags, ecmSearchNoFormTag does not.

The following is an example of form tags.

```
<form name="ecmsearch" method="post" action='search-display.asp'>
</form>
```

When using ecmSearch, form tags are added automatically. When using ecmSearchNoFormTag you need to add the tags manually

When using the search function, ecmSearch and ecmSearchNoFormTag can be interchanged. Shown here is the format for the ecmSearch and ecmSearchNoFormTag:

<% ecmSearch or ecmSearchNoFormTag	**"Starting Folder", Recursive, "Target Page", Text Box Size, Maximum Characters, "Button Image Source", "Button Text", 'Font Face', "Font Color", "Font Size", Horizontal, 'Spare"**	%>

The following table provides information about all the attributes for the search tags.

Attribute	Description	Required?	For more information, see
Starting Folder	The folder you wish to search.	Yes	"Starting Folder" on page 21-264
Recursive	Whether to search subfolders. 0=No, 1 = Yes	Yes	"Recursive" on page 21-264
Target Page	The Web page to output the search results.	Yes	"Target Page" on page 21-265
Text Box	The size of the text box for user input.	Yes	"Text Box" on page 21-265
Maximum Characters	The maximum number of characters that the input text box can accept.	No	"Maximum Characters" on page 21-266
Button Image Source	The image location for the search button. Blank (“”) = standard submit button.	No	"Button Image Source" on page 21-266
Button Text	The text used for the button if the standard submit button is chosen, or alternative text for the button if an image is chosen.	No	"Button Text" on page 21-267
Font Face	The font of the search tag text.	No	"Font Face" on page 21-267
Font Color	The font color of the search tag text. Blank (“”) = Black.	No	
Font Size	The font size of the search tag text.	No	"Font Size" on page 21-268
Horizontal	Determines if the search options are in a row or a column. 1 = horizontal, 0 = vertical	Yes	"Horizontal" on page 21-269
Spare1	Currently not used.	Must be “”	"Spare 1" on page 21-270

Search Tag Example

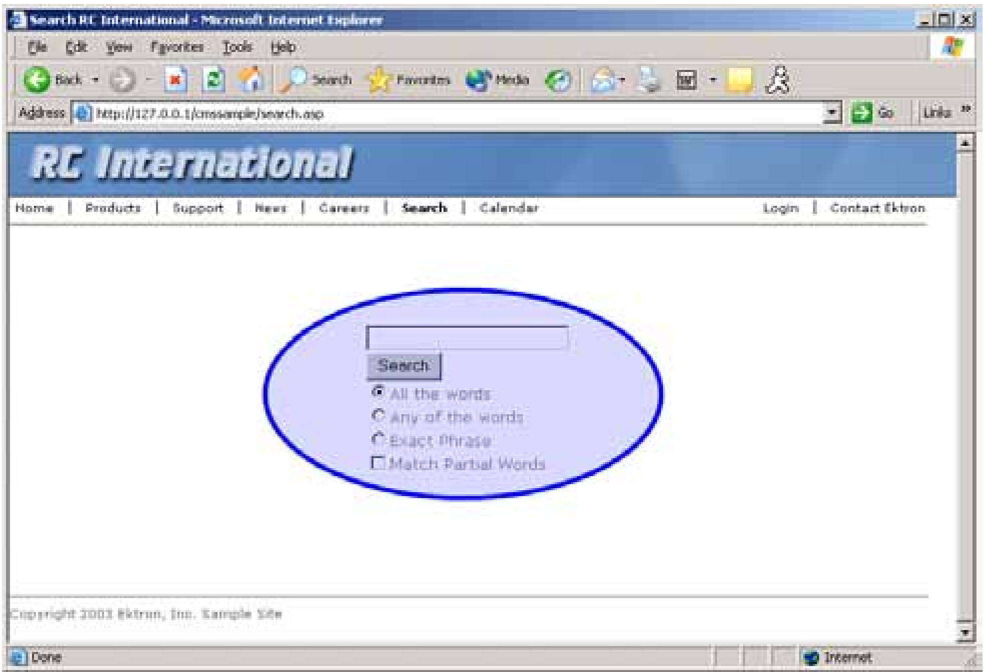
The following example places a text field and a search button in a table cell inside an ASP template.

```
<tr>
<td>
<% ecmSearch "\",1,"search-
display.asp",25,200,"","Search","Verdana",
"#808080","2",0,"" %>
</td>

</tr>
```

The previous example has the following properties:

- Searches the root folder, in this case the `\content` folder.
- Search is recursive.
- The target page is “search-display.asp”.
- The size of the text box is 25.
- The search text box allows up to 200 characters.
- No image is used for a button. Instead, a standard submit button is used.
- The text on the submit button is “Search”.
- The search options appear in Verdana with a color of #808080 and a size of 2pt.
- The search options are arranged vertically.

When added to a template, and visited, the search tag will appear similar to the following:



Search Tag Attributes

The search tag's attributes are described below.

Starting Folder

In this attribute, specify the content folder where the search begins. There are two options for this attribute.

Value	Search begins in
"\"	
"\folder path"	specified folder

Recursive

When you setup the search to be recursive, you are allowing the search to search all the sub-folders associated with the starting folder you had specified. You have two options for this attribute:

Value	Search begins in
1	Recursive search (will search sub-folders of the starting folder).
0	Non-Recursive search (will only search starting folder).

Target Page

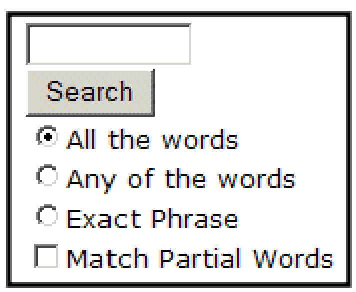
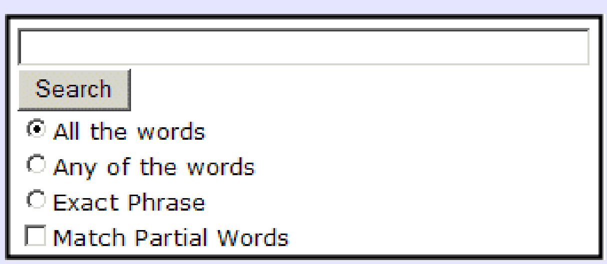
The page that displays the search results. You may enter any form of a URL for this page.

Note: The target page *must* include the searchdisplay function to display search results.

To use the same page, enter a pound sign (#) into the field.

Text Box

This attribute sets the size of the search text box. It can be any number, depending on the size of the search text box that you want.

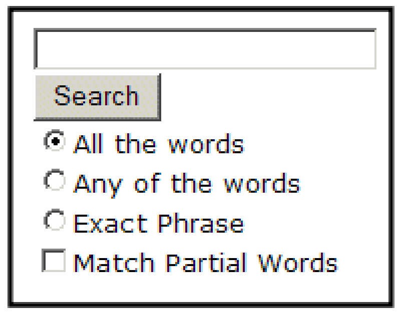
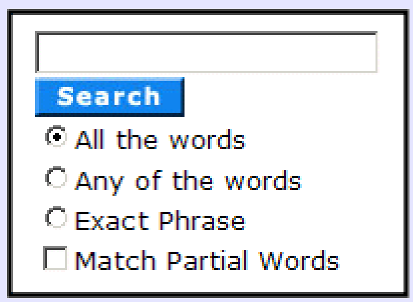
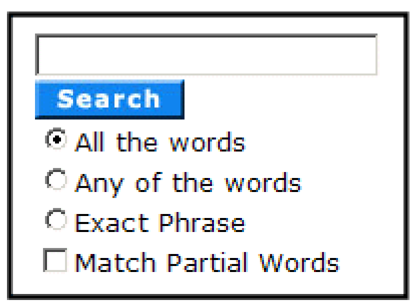
Text Box Size	Web Page View
10	
50	

Maximum Characters

This attribute determines the maximum number of characters that a user can enter for search text.

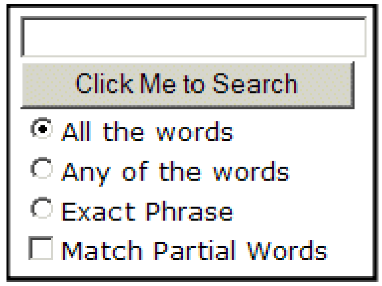
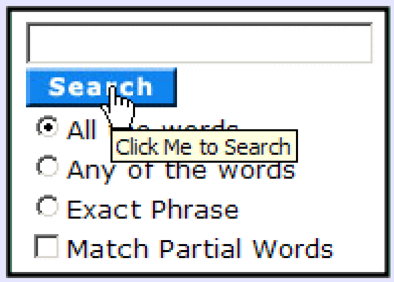
Button Image Source

To use an image for the search button, enter the image’s filename and path.

Button Image Source	Web Page View
““	
“search.jpg”	
“http://www.example.com/images/search.jpg”	

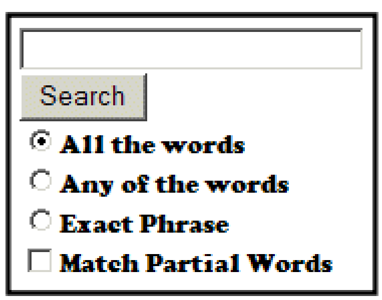
Button Text

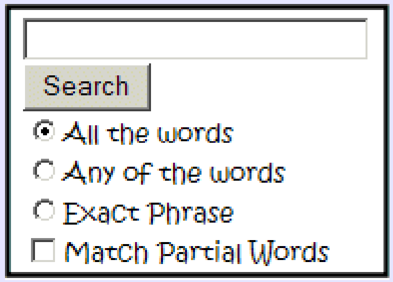
If no search button image is specified, the text in this field appears on the button. If an image is being used for the search button, this text is the image's alt text.

Button Text	Web Page View
"Click Me to Search"	
"Click Me to Search"	

Font Face

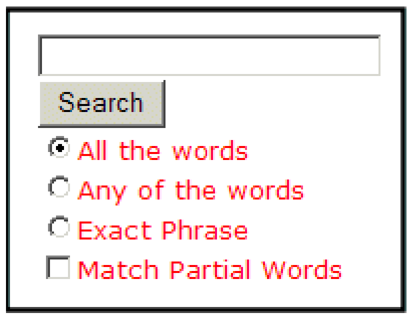
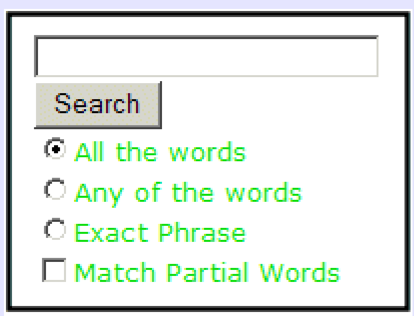
This font is used for the search options displayed on the Web page.

Font Face	Web Page View
Cooper Black	

Font Face	Web Page View
Kristen ITC	

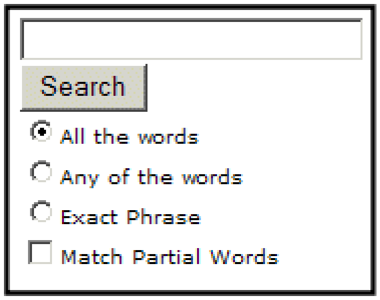
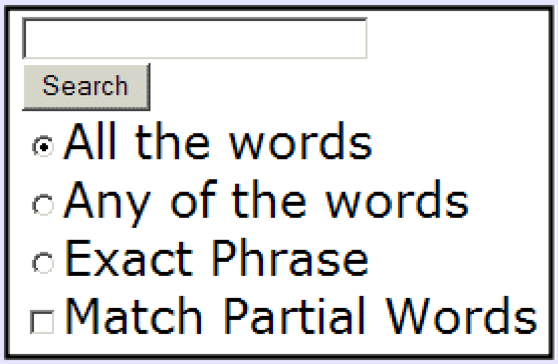
Font Color

The color of the text in the search tag. You may enter the color name or a hex i decimal value of the color.

Font Color	Web Page View
Red	
#14DA14	

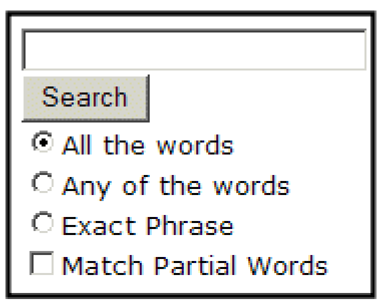
Font Size

This is the size of the text on the search tag.

Font Size	Web Page View
1	
5	

Horizontal

This attribute determines whether the search options are displayed vertically or horizontally.

Attribute	Web Page View
0 (vertical)	
1 (horizontal)	

Spare 1

At the end of the Search tag is a attribute called Spare 1. This attribute has not yet been assigned an function. As of now, when you enter a search tag, you must pass this attribute ““.

Search Display Function

The search display custom tag creates the area where search results appear after a search is executed.

Here is the format of the ecmSearchDisplay tag.

<% ecmSearchDisplay	**“MaxNumberReturn”, “StyleInfo”, ShowDate**	**%>**

Below is a description of the tag’s attributes.

Attribute	Description	Required	For more information, see
Max Number of content blocks Returned	Maximum number of content blocks returned. (0=Unlimited)	Yes	"Max Number of Content Blocks Returned" on page 21-271
Style Info	An HTML style string used within the HTML “hyperlink” generated by the search output. Can control font, color, size, etc.	No	"Style Info" on page 21-272
ShowDate	Displays the last modified date of the content block. 0=No 1=Yes	No	"Show Date" on page 21-273

Search Display Example

Insert the following on the page that displays search results. You may place it on the same page as the search tag or a separate page.

```
<tr>
<td>
```

```
<% ecmSearchDisplay 0,"","1" %>
</td>

</tr>
```

This search display example has the following properties:

- Returns unlimited results when the search is performed.
- Contains no style information.
- Shows the last modified date of the content.

Search Display with Default Content

You can also set up the search display tag to display a default content block if a search is not performed. Then, if a search is performed, the results replace the content block. The sample code below does that:

```
<tr>
<% if (Request.Form("ecmsearchtype") <> "") then %>
<td>
<% ecmSearchDisplay 0,"" %>
</td>
<% else %>
<td>
<% ecmContentBlock(1) %>
</td>
<% end if %>

</tr>
```

Search Display Attributes

Listed below are the attributes for the SearchDisplay tag.

Max Number of Content Blocks Returned

This attribute determines the number of search results displayed on a page. You may enter any integer. To display unlimited results, enter 0 (zero).

Max Returns	Web Page View
0	**Search Results** RC Sportster RC Redstar RC Lilly RC Cheetah Products Page RC International Ships RC Sportster RC International Hosts RC Conference RC International Announces the RC Cheetah
3	**Search Results** RC Sportster RC Redstar RC Lilly

Style Info

An HTML style string used within the HTML “hyperlink” generated by the search output. Can control font, color, size, etc.

Style Info	Web Page View
““	**Search Results** RC Sportster RC Redstar RC Lilly RC Cheetah Products Page RC International Ships RC Sportster RC International Hosts RC Conference RC International Announces the RC Cheetah

Style Info	Web Page View
"font-family:arial; font-weight:bold; background-color:#cccccc; border:solid blue 1pt; margin:2px; width:50%;"	**Search Results** RC Sportster RC Redstar RC Lilly RC Cheetah Products Page RC International Ships RC Sportster RC International Hosts RC Conference RC International Announces the RC Cheetah

Show Date

This attribute determines if the content block's last modified date appears next to the title. This is useful when determining which content block is the most recent. You have two choices.

Attribute	Web Page View
0	**Search Results** RC Sportster RC Redstar RC Lilly RC Cheetah Products Page RC International Ships RC Sportster RC International Hosts RC Conference RC International Announces the RC Cheetah
1	**Search Results** RC Sportster *(8/27/2002 7:52:40 PM)* RC Redstar *(8/27/2002 7:52:01 PM)* RC Lilly *(8/27/2002 7:51:26 PM)* RC Cheetah *(8/27/2002 7:50:53 PM)* Products Page *(8/27/2002 7:50:09 PM)* RC International Ships RC Sportster *(8/27/2002 2:46:12 PM)* RC International Hosts RC Conference *(8/27/2002 2:44:44 PM)* RC International Announces the RC Cheetah *(8/27/2002 2:43:01 PM)*

List Summary Function

The list summary function is used to display the list of content summaries on a Web page.

Shown here is the format of the list summary function:

<% ecmListSummary	**"Folder", Recursive, ShowSummary, "StyleInfo", "OrderBy, Asc/Desc", "ShowInfo", MaxNumber, "ObjType", "OptionList"**	**%>**

A list and description of the attributes are shown in this table:

Attribute	Description	Options
Folder	This is the folder the summary information will come from.	Any folder
Recursive	Allow the tag to get summary info from the child folders.	0 = Not Recursive 1 = Recursive
ShowSummary	Do you want the content summary to be displayed?	0 = No 1 = Yes
StyleInfo	Inline style information for the generated text hyperlink.	Any string
OrderBy, ASC/DESC	Order the hyperlinks by:	"Title" "DateModified" "DateCreated" "Startdate" "AuthorFname" "AuthorLname"
	Order the hyperlinks in ascending or descending order.	"Title,asc"

Attribute	Description	Options
	"Title,desc"	
ShowInfo	Information that will appear to the right of the hyperlink.	"DateModified" "DateCreated" "AuthorFname" "AuthorLname"
MaxNumber	Maximum number of summaries returned.	0 = Unlimited
ObjType	Determines whether the list summary is for the folder or a single piece of content. For example: If the `Folder` property = **\books** and **"Folder"** is chosen as the `ObjType`, the list summary for the folder with books appears. If the `folder` property = **1** and you choose **"Content"** as the `ObjType`, a single summary for content with an ID = 1 appears. See Also: "Single Summary Function" on page 21-286 The default ObjType is **"Folder"** when left blank.	"" "Folder" "Content"
OptionList	Not yet implemented	MUST BE ""

List Summary Example

Shown below is an example of the ListSummary function in an ASP Web page.

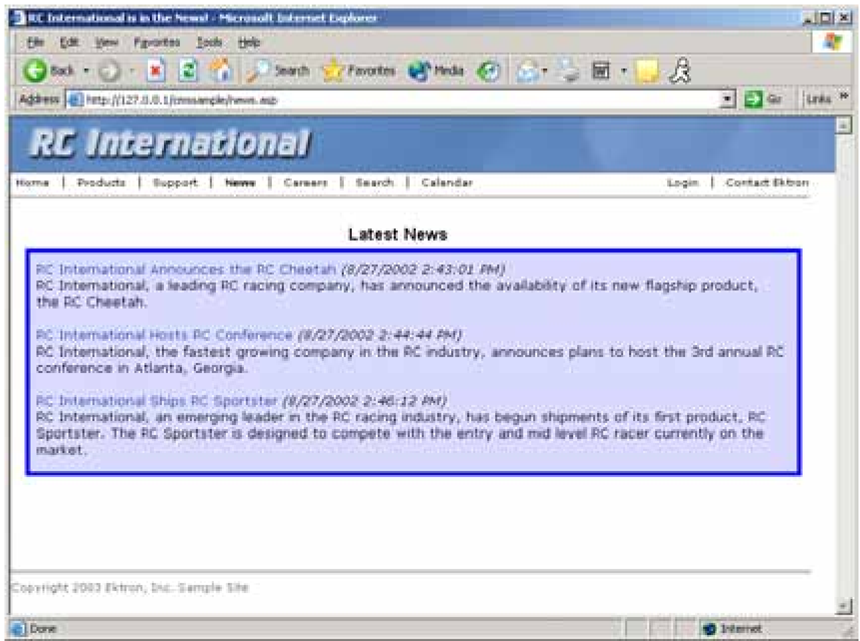
```
<TR>
<TD>
<% ecmListSummary "\Marketing\News",0,1,"",
"Title,asc","DateModified",0,"","" %>
</TD>
</TR>
```

The previous example has the following properties:

- Displays summaries from the \Marketing\News folder.
- Not recursive.
- The summaries will be shown.
- No style was applied to the hyperlinks.
- The results will be displayed in ascending order by title.

- The date modified of each content block will be displayed.
- Unlimited results will be shown.

Here is how the summaries will appear on the web page.



List Summary Attributes

Listed below are all the different attributes and descriptions about them.

Starting Folder

In this attribute, you will need to specify which content folder you will want to get all the summaries from. There are two options for this attribute:

Value	Description
““	By leaving the value blank, all the summaries from the root content folder will be displayed.
“\Folder Path	You can specify a specific folder to display the summaries from by inserting the folder path

Recursive

When you setup the search to be recursive, you are allowing the search to search all the subfolders associated with the starting folder you had specified. You have two options for this attribute:

Value	Description
1	Recursive - summaries in the starting folder's subfolders will also be displayed.
0	Non-recursive - only summaries in the starting folder will be displayed.

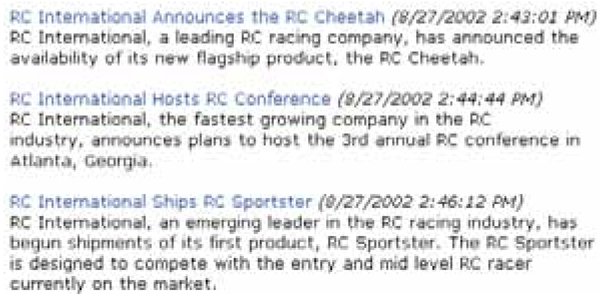
Show Summary

The show summary attribute displays or suppresses the summary in the summary list. You have two options for this attribute.

Attribute	Web Page View
0	RC International Ships RC Sportster RC International Hosts RC Conference RC International Announces the RC Cheetah
1	RC International Announces the RC Cheetah *(8/27/2002 2:43:01 PM)* RC International, a leading RC racing company, has announced the availability of its new flagship product, the RC Cheetah. RC International Hosts RC Conference *(8/27/2002 2:44:44 PM)* RC International, the fastest growing company in the RC industry, announces plans to host the 3rd annual RC conference in Atlanta, Georgia. RC International Ships RC Sportster *(8/27/2002 2:46:12 PM)* RC International, an emerging leader in the RC racing industry, has begun shipments of its first product, RC Sportster. The RC Sportster is designed to compete with the entry and mid level RC racer currently on the market.

Style Info

In this field, you may enter inline style information for the generated text hyperlinks displayed on the screen.

Style Info	Web Page View
““	 RC International Announces the RC Cheetah (8/27/2002 2:43:01 PM) RC International, a leading RC racing company, has announced the availability of its new flagship product, the RC Cheetah. RC International Hosts RC Conference (8/27/2002 2:44:44 PM) RC International, the fastest growing company in the RC industry, announces plans to host the 3rd annual RC conference in Atlanta, Georgia. RC International Ships RC Sportster (8/27/2002 2:46:12 PM) RC International, an emerging leader in the RC racing industry, has begun shipments of its first product, RC Sportster. The RC Sportster is designed to compete with the entry and mid level RC racer currently on the market.
"font-family:arial; font-weight:bold; background-color:#cccccc; border:solid blue 1pt; margin:2px; width:100%;"	 RC International Announces the RC Cheetah RC International, a leading RC racing company, has announced the availability of its new flagship product, the RC Cheetah. RC International Hosts RC Conference RC International, the fastest growing company in the RC industry, announces plans to host the 3rd annual RC conference in Atlanta, Georgia. RC International Ships RC Sportster RC International, an emerging leader in the RC racing industry, has begun shipments of its first product, RC Sportster. The RC Sportster is designed to compete with the entry and mid level RC racer currently on the market.

Order By

This attribute will sort the summary results by different options. There are five different ways to sort the summaries:

Value	Summaries sorted by
Title	title
DateModified	date modified
Date Created	date created
Startdate	The Start Date assigned to the content block when created.
AuthorFname	author’s first names
AuthorLname	author’s last name

Ascending/Descending

This attribute is an addition to the previous OrderBy attribute. By default, the list of the summaries are descending, meaning they will follow the path of A-B-C, or 1-2-3. When set to ascending, they will order by Z-Y-X or 3-2-1.You will have the option to re arrange these to display either in ascending or descending order.

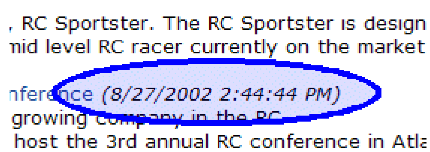
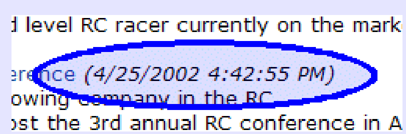
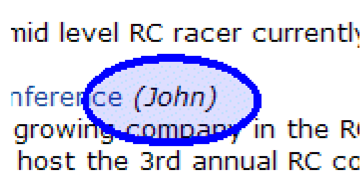
To do this, add the following to the OrderBy attribute:

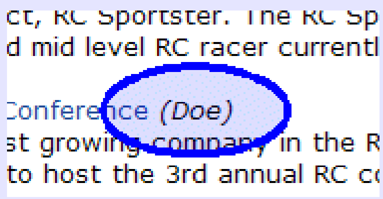
Value	Description
asc, 1	This will order the Summaries in an ascending order
desc, 0	This will order the Summaries in a descending order. This is the default setting.

By using the ascending/descending option, you will have the option to set the order of content blocks from most recent to oldest, or vice versa. As well as ordering the list by the user's first names or last names in ascending or descending order.

Show Info

The show info field determines what sort of information is displayed to the right of the hyperlinked title. There are four different options that you may choose from:

Value	Description	Web Page View
DateModified	Displays the date the content was last modified.	
***DateCreated	Displays the date when the content was first created.	
AuthorFname	Displays the first name of the user who last edited the content block.	

Value	Description	Web Page View
AuthorLname	Displays the last name of the user who last edited the content block.	

Max Number

This attribute determines how many summaries appear on a page. Enter the number of summaries to be displayed. To display all summaries, enter 0 (zero) and you will display unlimited results.

XML List Summary Function

The XML List Summary function wraps XML around the properties of a list of content that's created as a list summary in the Ektron CMS400.NET Workarea. Once created, you can use the XML to display the list summary information. The ecmListSummaryXML function allows you to easily define how the list summary data appears on the Web page.

Shown here is the format of the ecmListSummaryXML function.

<% ecmListSummaryXML	**"Folder", "Recursive", "OrderBy", "MaxNumber", "ObjType", "SummaryType"**	**%>**

The ecmListSummaryXml function attributes are explained below.

Attribute	Description	Options
Folder	This is the folder the summary information will come from. See Also: "Starting Folder" on page 21-276	Any folder

Attribute	Description	Options
Recursive	Allow the tag to get summary info from the child folders. See Also: "Recursive" on page 21-277	0 = Not Recursive 1 = Recursive
OrderBy, ASC/DESC	Order the hyperlinks by: See Also: "Order By" on page 21-278	"Title" "DateModified" "DateCreated" "Startdate" "AuthorFname" "AuthorLname"
	Order the hyperlinks in ascending or descending order.	"Title,asc" "Title,desc"
MaxNumber	Maximum number of summaries returned. See Also: . "Max Number" on page 21-280	**0** (Zero) = Unlimited
ObjType	Determines whether the list summary is for the folder or a single piece of content. For example: If the `Folder` property = **\books** and **"Folder"** is chosen as the `ObjType`, the list summary for the folder with books appears. If the `Folder` property = **1** and you choose **"Content"** as the `ObjType`, a single summary for content with an ID = 1 appears. See Also: "Single Summary Function" on page 21-286 The default `ObjType` is **"Folder"** when left blank.	"" "Folder" "Content"

Attribute	Description	Options
SummaryType	Used as a filter, this property determines the type of content that appears in the list summary. The default is **"Content"** when left blank.	**"AllTypes"** - displays all of the content types for the given folder. **"Content"** - displays a list of content blocks. **"Forms"** - forms appear in the list summary. **"Archive_Content"** - archived content blocks appear in the list summary. **"Archive_Forms"** - archived forms appear in the list summary. **"Assets"** - assets, such as offices documents, appear in the list summary. **"Archive_Assets"** - archived assets appear in the list summary. **"LibraryItem"** - library items appear in the list summary. **"NonLibraryContent"** - all types of content appear in the list summary except for library items.

When using the XML list summary function, the following tags are created around the properties of each item in the list summary.

XML Tags	Description
<Content></Content>	Declares a new section of content in the XML collection.
<ID></ID>	The content block ID. For example: `<ID>27</ID>`
<Title></Title>	The title of the content block. For example: `<Title>HTML for the World Wide Web with XHTML and CSS</Title>`
<QuickLink></QuickLink>	The quicklink associated with the content block. For example:

XML Tags	Description
	`<QuickLink>/CMS400Developer/ collection.aspx?id=27</QuickLink>`
<Teaser></Teaser>	The summary of the content block. For example: `<Teaser>The easiest HTML book weve seen that still manages to be comprehensive.</Teaser>`
<StartDate></StartDate>	The content block's start date formatted as a .NET date type For example: `<StartDate>1/1/0001 12:00:00 AM</StartDate>`
<DateModified></DateModified>	The last date the content block was modified. For example: `<DateModified>1/19/2005 4:18:06 PM</DateModified>`
<EndDate></EndDate>	The date the content block stops running on the Web site For example: `<EndDate>12/31/9999 12:00:00 AM</EndDate>`
<LastEditorFname></LastEditorFname>	The first name of the last person who edited the content block. For example: `<LastEditorFname>John</LastEditorFname>`
<LastEditorLname></LastEditorLname>	The last name of the last person who edited the content block. For example: `<LastEditorLname>Johnson</LastEditorLname>`
<DisplayStartDate></DisplayStartDate>	The content block's start date. It is formatted as a string that represents Ektron CMS400's display of the date.
<FolderID></FolderID>	The ID of the folder in which the content block is contained. For example: `<FolderID>0</FolderID>`
<ContentStatus></ContentStatus>	The status of the content block.

XML Tags	Description
<Language></Language>	The language of the content block. For example: <Language>1033</Language>
<DisplayDateModified></DisplayDateModified>	edited. It is formatted as a string that represents Ektron CMS400's display of the date. For example: `<DisplayDateModified>1/19/2005 4:18:06 PM</DisplayDateModified>`
<DisplayEndDate></DisplayEndDate>	The content block's end date. It is formatted as a string that represents Ektron CMS400's display of the date. For example: `<DisplayEndDate>12/31/9999 12:00:00 AM</DisplayEndDate>`

Here is how the raw XML list summary output appears before an XSLT is applied.


```
<Content>
<ID>24</ID>
<Title>ASP.NET Unleashed</Title>
<QuickLink>/CMS400Developer/collection.aspx?id=24</QuickLink>
<Teaser><p><em>ASP.NET Unleashed, Second Edition</em> is really big, really thorough,
and really <i>good</i>.</p></Teaser>
<StartDate>1/1/0001 12:00:00 AM</StartDate>
<DateModified>1/12/2005 7:53:31 PM</DateModified>
<EndDate>12/31/9999 12:00:00 AM</EndDate>
<LastEditorFname>Application</LastEditorFname>
<LastEditorLname>Administrator</LastEditorLname>
<DisplayStartDate></DisplayStartDate>
<FolderID>0</FolderID>
<ContentStatus></ContentStatus>
<Language>0</Language>
<DisplayDateModified>1/12/2005 7:53:31 PM</DisplayDateModified>
<DisplayEndDate></DisplayEndDate>
</Content>
<Content>
<ID>25</ID>
<Title>Microsoft ASP.NET Programming with Microsoft Visual C#.NET</Title>
<QuickLink>/CMS400Developer/collection.aspx?id=25</QuickLink>
<Teaser><p>Teach yourself how to write high-performance Web applications with ASP.NET
and Visual C# .NET--one step at a time.</p></Teaser>
```

```
<StartDate>1/1/0001 12:00:00 AM</StartDate>
<DateModified>1/4/2005 7:16:21 PM</DateModified>
<EndDate>12/31/9999 12:00:00 AM</EndDate>
<LastEditorFname>Application</LastEditorFname>
<LastEditorLname>Administrator</LastEditorLname>
<DisplayStartDate></DisplayStartDate>
<FolderID>0</FolderID>
<ContentStatus></ContentStatus>
<Language>0</Language>
<DisplayDateModified>1/4/2005 7:16:21 PM</DisplayDateModified>
<DisplayEndDate></DisplayEndDate>
</Content>
```

Archive List Summary Function

The Archive list summary function displays on a Web page a list of content summaries for archived content blocks. For example, you might have a current news page and an archived news page. Use the List Summary Function to display current news, and this function to display older news stories.

On the Content Block **schedule** screen, the user must set an **End Date** then choose the Archive and Display option to have the content blocks appear via this function.

Shown here is the format of the Archive List Summary function:

<% ecmListArchiveSummary	**"StartingFolder", Recursive, ShowSummary, "StyleInfo", "OrderBy, Asc/Desc", "ShowInfo", MaxNumber, "Spare1", "Spare2"**	**%>**

This function has the same parameters as the List Summary Function. See "List Summary Function" on page 21-274 for details.

Single Summary Function

The single summary tag is used to display the summary of one content block in the Ektron CMS400.NET Web site, instead of a list of all the summaries in a content folder. Seen below is the single summary tag:

<% ecmSingleSummary	**"ContentID", ShowSummary, "StyleInfo", "ShowInfo", "Spare1"**	**%>**

You can look at the single summary tag as just a simpler form of the List summary tag. The format for each of them is almost identical, but the single summary tag does not require as many attributes to be passed.

A list and description of the attributes are shown in this table:

Attribute	Description	Required?
Content ID	This is the ID number of the content block the summary information will come from.	Yes
ShowSummary	Do you want the content summary to be displayed?	Yes
StyleInfo	Inline style information for the generated text hyperlink.	No
ShowInfo	Information that will appear to the right of the hyperlink.	No
Spare1	Not yet implemented	MUST BE ““

Single Summary Example

Shown below is an example of the single summary function in an ASP Web page.

```
<TR>
<TD>
<% ecmSingleSummary "14",1,"","DateModified","" %>
</TD>
</TR>
```

The previous example had the following properties:

- Displays the summary for the content block with an ID=14

- The summary will be shown
- No style was applied to the hyperlinks
- The last date the content was modified will be displayed

Here is how the summary will appear on the web page.

Single Summary Attributes

Listed below are all the different attributes and descriptions about them.

Content ID

In this attribute, you will need to specify which content block you will want the summary to be displayed from.

Show Summary

The show summary attribute will allow or disallow the summary to be displayed in the summary list. You have two options for this attribute:

Value	Web Page View
0	Servo Control Engineer #124
1	Servo Control Engineer #124 RC International is looked for a highly skilled servo control engineer to join our team.

Style Info

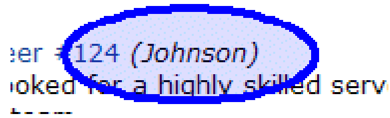
In this field, you may enter inline style information for the generated text hyperlinks displayed on the screen.

Style Info	Web Page View
““	Servo Control Engineer #124 RC International is looked for a highly skilled servo control engineer to join our team.
font-family:arial; font-weight:bold; background-color:#cccccc; border:solid blue 1pt; margin:2px; width:100%;	**Servo Control Engineer #124** RC International is looked for a highly skilled servo control engineer to join our team.

Show Info

The show info field determines what sort of information is displayed to the right of the hyperlinked title. There are five different options that you may choose from:

Value	Displays the...	Web Page View
ID	ID number for the content block.	#124 (14)
DateModified	date the content was last modified.	124 (8/27/2002 2:40:26 PM) highly skilled servo control
DateCreated	date when the content was first created.	24 (4/25/2002 4:54:42 PM) highly skilled servo control
AuthorFname	first name of the user who last edited the content block.	24 (Mike) skilled ser

Value	Displays the...	Web Page View
AuthorLname	last name of the user who last edited the content block	

Spare 1

There is one attribute fields at the end that are currently not used. This is here for future scalability. When you insert a single summary tag into your template, you must leave this attributes as ""

RSS Summary Function

The RSS summary function is used to create an XML list of content summaries formatted for RSS Syndication.

Shown here is the format of the RSS summary function:

<% ecmRssSummary	**"Folder", Recursive, "OrderBy, Asc/Desc", MaxNumber,**	**%>**

A list and description of the attributes are shown in this table:

Attribute	Description	Options
Folder	This is the folder the summary information will come from.	Any folder
Recursive	Allow the tag to get summary info from the child folders.	0 = Not Recursive 1 = Recursive

Attribute	Description	Options
OrderBy, ASC/DESC	Order the hyperlinks by:	“Title” “DateModified” “DateCreated” “Startdate” “AuthorFname” “AuthorLname”
	Order the hyperlinks in ascending or descending order.	“Title,asc” “Title,desc”
MaxNumber	Maximum number of summaries returned.	0 = Unlimited

RSS Summary Example

Shown below is an example of the ecmRssSummary function in an ASP Web page.

```
<TR>
<TD>
<% ecmRssSummary "\CMS400Developer\", 0, "Title,asc", 0 %>
</TD>
</TR>
```

The previous example has the following properties:

- Displays summaries from the \CMS400Developer\ folder.
- Not recursive.
- The results will be displayed in ascending order by title.
- Unlimited results will be shown.

Here is how an RSS summary appears when viewed without an RSS reader on a web page.

```
<?xml version=”1.0” ?>
- <rss xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" version="2.0">
- <channel>
<title>example listsummary</title>
<link>http://localhost/CMS400Developer/developer/ListSummary/RSS.aspx?show=true</link>
<description />
- <item>
<title>eWebEditPro+XML V4.2 supports the vision of create content once, reuse many
times</title>
<link>http://192.168.0.82/CMS400Developer/Developer/ListSummary/pr.aspx?id=290</link>
- <description>
- <![CDATA[ &lt;p&gt;Ektrons XML Authoring Tool Makes it Easier to Create Structured,
Validated Content to Support an Organizations Information and Content Management
```

```
Strategies&lt;/p&gt; ]]>
</description>
<author>Application Administrator</author>
<pubDate>3/7/2006 2:00:46 PM</pubDate>
</item>
- <item>
<title>Ektron Offers a Visual Development Environment for Rapid CMS Integration and
Deployment</title>
<link>http://192.168.0.82/CMS400Developer/Developer/ListSummary/pr.aspx?id=282</link>
- <description>
- <![CDATA[&lt;p&gt;Ektron leverages strong capabilities of Visual Studio to give
developers a truly visual environment for integrating CMS components into Web
templates&lt;/p&gt; ]]>
</description>
<author>Application Administrator</author>
<pubDate>3/7/2006 2:02:19 PM</pubDate>
</item>
- <item>
<title>Ektron Announces Winner of All-Stars Customer Competition</title>
<link>http://192.168.0.82/CMS400Developer/Developer/ListSummary/pr.aspx?id=292</link>
- <description>
- <![CDATA[ &lt;p&gt;&lt;em&gt;-- All-Stars competition identifies the most innovative
and effective implementations of Ektrons Web solutions and tools --
&Lt.;/em&gt;&lt;/p&gt; ]]>
</description>
<author>Application Administrator</author>
<pubDate>3/6/2006 10:51:52 AM</pubDate>
</item>
</channel>
</rss>
```

RSS Summary Attributes

Listed below are all the different attributes and descriptions about them.

Starting Folder

In this attribute, you will need to specify which content folder you will want to get all the summaries from. There are two options for this attribute:

Value	Description
““	By leaving the value blank, all the summaries from the root content folder will be displayed.
“\Folder Path	You can specify a specific folder to display the summaries from by inserting the folder path

Recursive

When you setup the search to be recursive, you are allowing the search to search all the subfolders associated with the starting folder you had specified. You have two options for this attribute:

Value	Description
1	Recursive - summaries in the starting folder's subfolders will also be displayed.
0	Non-recursive - only summaries in the starting folder will be displayed.

Order By

This attribute will sort the summary results by different options. There are five different ways to sort the summaries:

Value	Summaries sorted by
Title	title
DateModified	date modified
Date Created	date created
Startdate	The Start Date assigned to the content block when created.
AuthorFname	author's first names
AuthorLname	author's last name

Ascending/Descending

This attribute is an addition to the previous OrderBy attribute. By default, the list of the summaries are descending, meaning they will follow the path of A-B-C, or 1-2-3. When set to ascending, they will order by Z-Y-X or 3-2-1.You will have the option to re arrange these to display either in ascending or descending order.

To do this, add the following to the OrderBy attribute:

Value	Description
asc, 1	This will order the Summaries in an ascending order
desc, 0	This will order the Summaries in a descending order. This is the default setting.

By using the ascending/descending option, you will have the option to set the order of content blocks from most recent to oldest, or vice versa. As well as ordering the list by the user's first names or last names in ascending or descending order.

Max Number

This attribute determines how many summaries appear on a page. Enter the number of summaries to be displayed. To display all summaries, enter 0 (zero) and you will display unlimited results.

Collection Function

The collection function is used to display the list of links that were created as a collection in the Ektron CMS400.NET Workarea. The ecmCollection function is highly customizable, allowing you to easily define how the collection data appears on the Web page.

Shown here is the format of the ecmCollection function.

<% ecmCollection	**"id", "Display Function"**	**%>**

The ecmCollection function attributes are explained below.

Attribute	Description
id	The id of the collection that you would like to be displayed is defined here.
displayFunction	Specify a function that is defined in the API and determines how the appearance of the collection data on a Web page. The display function must also be defined in the ecmCollection function.

See Also: "Comparison of Collections, Menus, Taxonomy, and the List Summary Features" on page 1229

Collection Examples

The following are examples of the collection function in the Ektron CMS400.NET sample Web site. One example uses the `ecmNavigation` display function, and the other uses the `ecmTeaser` display function.

The `ecmNavigation` and `ecmTeaser` display functions are sample display functions included with Ektron CMS400.NET.

The ecmNavigation Display Function

The following sample collection function is being used as a navigation menu in the Ektron CMS400.NET sample Web site.

```
<% ecmCollection 1, “ecmNavigation” %>
```

In this example, the collection with an ID=1 is displayed, and the `ecmNavigation` function defines the appearance of the collection data on a Web page.

Here is how a collection might appear on a Web page.

Below is the source code for the `ecmNavigation` display function.

```
Function ecmNavigation(cInfo)
dim html, info
```

```
html = "<table border=""0"" cellspacing=""0"" cellpadding=""0""
width=""100%"">"
for each info in cInfo
html = html & "<tr><td>  <a href="""
html = html & info("ContentLinks")
html = html & """>"
html = html & Cstr(info("ContentTitle"))
html = html & "</a></td></tr><tr><td> </td></tr>"
next
html = html & "</table> "
ecmNavigation = html

end Function
```

As you can see, the `ecmNavigation` function is a simple ASP function that creates a table of the links to the specified collection. It displays the title of the content blocks by using the `info(“ContentTitle”))` building block.

The ecmTeaser Display Function

The following is an example of a collection function being used as a navigation menu in the Ektron CMS400.NET sample Web site.

```
<% ecmCollection 2, “ecmTeaser” %>
```

In this example, the collection with an ID=2 is displayed, and the `ecmTeaser` function defines the appearance of the collection data on the Web page. `ecmTeaser` displays the title and summary of each content block in the collection.

Here is how the collection might appear on a Web page.

The format of the collection on the Web page depends on the displayFunction that is used. Below is the source code for the display function ecmTeaser.

```
Function ecmTeaser(cInfo)
dim html, info
html = "<table border=""0"" cellspacing=""0"" cellpadding=""0""
width=""100%"">"
```

```
for each info in cInfo
html = html & "<tr><td><a href="""
html = html & CStr(info("ContentLinks"))
html = html & """ >"
html = html & Cstr(info("ContentTitle"))
html = html & "</a> ("
html = html & info("DateModified")
html = html & ")</td></tr><tr><td>"
html = html & Cstr(info("ContentTeaser"))
html = html & "</td></tr><tr><td> </td></tr>"
next
html = html & "</table>"
ecmTeaser = html

end Function
```

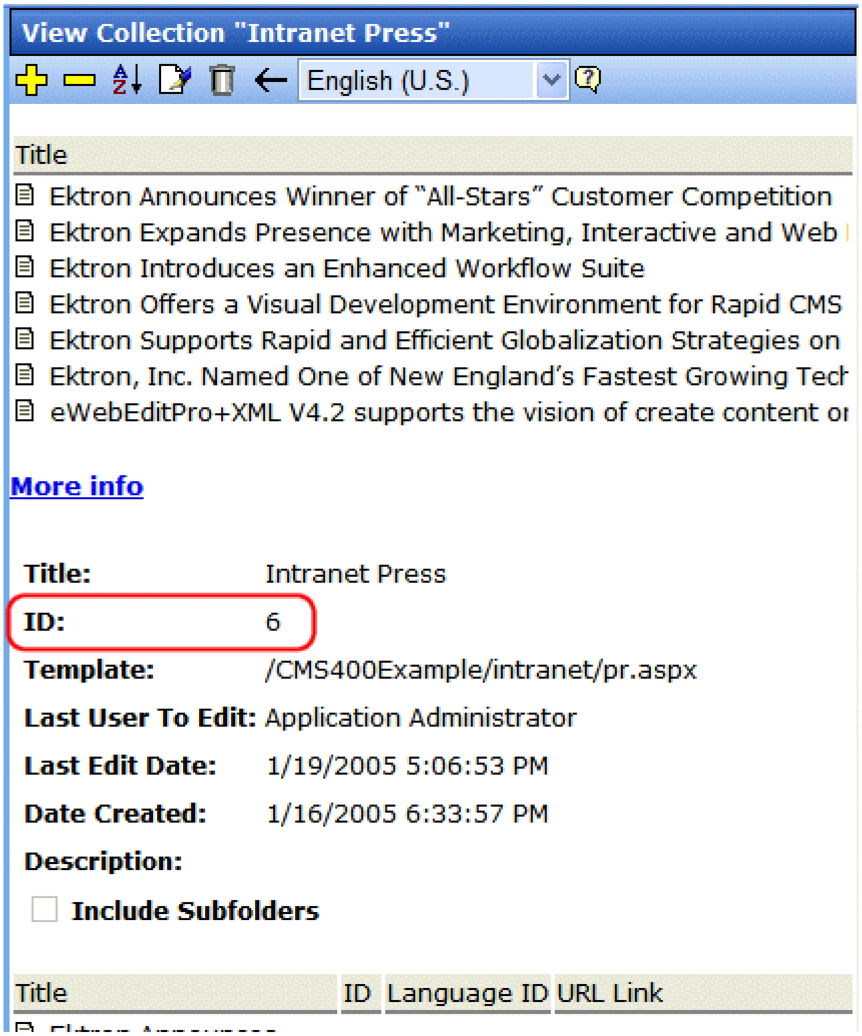
As you can see, the `ecmTeaser` function is an ASP function that creates a table of links to the specified collection. The `ecmTeaser` function displays the:

- Content title
- Date modified
- Content block summary

Collection Attributes

ID

The collection ID number is assigned to the collection when it is created.



DisplayFunction

A display function determines which elements of the content blocks in a collection appear on a Web page. Via ASP scripting, you can create display functions or use any of the three included functions. You must define the display function in two places.

- In the ecmCollection function as a case
- In the API file as a function

RSS Collection Function

The RSS collection function is used to create an XML list of links that were created as a collection in the Ektron CMS400.NET Workarea. The ecmRssCollection function is highly customizable, allowing you to easily define how the collection data appears on the Web page.

Shown here is the format of the ecmRssCollection function.

<% ecmRssCollection	**“id”**	**%>**

The ecmRssCollection function attributes are explained below.

Attribute	Description
id	The id of the collection that you would like to be displayed is defined here.

See Also: ”Comparison of Collections, Menus, Taxonomy, and the List Summary Features” on page 1229

Here is how an RSS Collection appears when viewed without an RSS reader on a web page.

```
<?xml version=”1.0” ?>
<rss xmlns:xsd=”http://www.w3.org/2001/XMLSchema”
xmlns:xsi=”http://www.w3.org/2001/XMLSchema-instance” version=”2.0”>
<channel>
<title>Books</title>
<link>http://localhost/cms400Developer/WorkArea/WebServices/ContentWS.asmx</link>
<description></description>
<item>
<title>Visual Basic.NET How to Program</title>
<link>http://localhost/cms400Developer/collection.aspx?id=23</link>
<description>Visual Basic .NET How to Program, Second Edition is an awesome resource for
the beginning VB.NET developer who is serious about the craft of programming. In 1,500
pages, this book covers an incredible amount of territory, from the evolution of programming
languages and web development all the way to advanced data structures and web
services.</description>
<author>Application Administrator</author>
<pubDate>3/3/2005 5:15:30 PM</pubDate>
</item>
<item>
<title>Simply Visual Basic.NET 2003</title>
```

```
<link>http://localhost/cms400Developer/collection.aspx?id=26</link>
<description>An Application-Driven Tutorial Approach</description>
<author>Application Administrator</author>
<pubDate>1/8/2005 10:50:30 AM</pubDate>
</item>
<item>
<title>Microsoft ASP.NET Programming with Microsoft Visual C#.NET</title>
<link>http://localhost/cms400Developer/collection.aspx?id=25</link>
<description>Teach yourself how to write high-performance Web applications with ASP.NET
and Visual C# .NET--one step at a time.</description>
<author>Application Administrator</author>
<pubDate>1/4/2005 7:16:21 PM</pubDate>
</item>
<item>
<title>HTML for the World Wide Web with XHTML and CSS</title>
<link>http://localhost/cms400Developer/collection.aspx?id=27</link>
<description>The easiest HTML book we’ve seen that still manages to be comprehensive, and
to stay firmly grounded in the reality of today’s demanding users and complex
browsers.</description>
<author>Application Administrator</author>
<pubDate>1/19/2005 4:18:06 PM</pubDate>
</item>
</channel>
</rss>
```

XML Collection Function

The XML collection function wraps XML around the parameters of a list of content that's created as a collection in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the collection information. The ecmCollectionXML function allows you to easily define how the collection data appears on the Web page.

Shown here is the format of the ecmCollectionXML function.

<% ecmCollectionXML	**"id", "GetHtml"**	**%>**

The ecmCollectionXML function attributes are explained below.

Attribute	Description
id	The id of the collection that you would like to be displayed is defined here.
GetHtml	Determines whether the HTML contained within the content is included in the XML output. 0 = Do not get HTML 1 = Get HTML Note: Ektron recommends using 0 (zero). HTML content can be large and this could cause display problems when your XML collection is displayed on your Web page.

See Also: "Comparison of Collections, Menus, Taxonomy, and the List Summary Features" on page 1229

When using the XML Collection function, the following tags are created around the properties of each item in the collection.

XML Tags	Description
<Content></Content>	Declares a new section of content in the XML collection.
<ID></ID>	The content block ID. For example: `<ID>27</ID>`

XML Tags	Description
<Title></Title>	The title of the content block. For example: <Title>HTML for the World Wide Web with XHTML and CSS</Title>
<QuickLink></QuickLink>	The quicklink associated with the content block. For example: <QuickLink>/CMS400Developer/collection.aspx?id=27</QuickLink>
<Teaser></Teaser>	The summary of the content block. For example: <Teaser>The easiest HTML book weve seen that still manages to be comprehensive.</Teaser>
<Html></Html>	All of the HTML content contained in a content block. See Also: "GetHtml" on page 21-300 For example: <Html>ASP.NET Unleashed, Second Edition is really big, really thorough, and really <i>good</i>. The explanations are simple and clear as anything weve seen in a .NET book. The sample code addresses virtually every facet of ASP.NET development, from little gems (code for validating credit cards) to full-fledged web stores. Best of all, Stephen Walther identifies the mistakes ASP.NET developers are most likely to make -- and presents detailed solutions.</Html>
<StartDate></StartDate>	The content block's start date formatted as a .NET date type For example: <StartDate>1/1/0001 12:00:00 AM</StartDate>
<DateModified></DateModified>	The last date the content block was modified. For example: <DateModified>1/19/2005 4:18:06 PM</DateModified>
<EndDate></EndDate>	The date the content block stops running on the Web site For example: <EndDate>12/31/9999 12:00:00 AM</EndDate>

XML Tags	Description
<LastEditorFname></LastEditorFname>	The first name of the last person who edited the content block. For example: `<LastEditorFname>John</LastEditorFname>`
<LastEditorLname></LastEditorLname>	The last name of the last person who edited the content block. For example: `<LastEditorLname>Johnson</LastEditorLname>`
<Hyperlink></Hyperlink>	The hyperlink shown in the collection for linking to the content block. For example: `<Hyperlink><a href="/CMS400Developer /collection.aspx?id=27"> HTML for the World Wide Web with XHTML and CSS</a></Hyperlink>`
<DisplayStartDate></DisplayStartDate>	The content block's start date. It is formatted as a string that represents Ektron CMS400's display of the date.
<FolderID></FolderID>	The ID of the folder in which the content block is contained. For example: `<FolderID>0</FolderID>`
<ContentStatus></ContentStatus>	The status of the content block.
<Language></Language>	The language of the content block.
<DisplayDateModified></DisplayDateModified>	edited. It is formatted as a string that represents Ektron CMS400's display of the date. For example: `<DisplayDateModified>1/19/2005 4:18:06 PM</DisplayDateModified>`
<DisplayEndDate></DisplayEndDate>	The content block's end date. It is formatted as a string that represents Ektron CMS400's display of the date. For example: `<DisplayEndDate>12/31/9999 12:00:00 AM</DisplayEndDate>`

XML Tags	Description
<EndDateAction></EndDateAction>	What should happen to the content block on its end date. - archive display - archive expire - refresh report For example: `<EndDateAction>Archive_ Expire</EndDateAction>`
<Comment></Comment>	Comments contained in the content block. For example: `<Comment>move picture below text</Comment>`

Here is how the raw XML Collection output appears before an XSLT is applied.


```
<Content>
<ID>24</ID>
<Title>ASP.NET Unleashed</Title>
<QuickLink>/CMS400Developer/collection.aspx?id=24</QuickLink>
<Teaser><p><em>ASP.NET Unleashed, Second Edition</em> is really big, really thorough,
and really <i>good</i>.</p></Teaser>
<Html></Html>
<StartDate>1/1/0001 12:00:00 AM</StartDate>
<DateModified>1/12/2005 7:53:31 PM</DateModified>
<EndDate>12/31/9999 12:00:00 AM</EndDate>
<LastEditorFname>Application</LastEditorFname>
<LastEditorLname>Administrator</LastEditorLname>
<Hyperlink><a href="/CMS400Developer/collection.aspx?id=24">ASP.NET
Unleashed</a></Hyperlink>
<DisplayStartDate></DisplayStartDate>
<FolderID>0</FolderID>
<ContentStatus></ContentStatus>
<Language>0</Language>
<DisplayDateModified>1/12/2005 7:53:31 PM</DisplayDateModified>
<DisplayEndDate></DisplayEndDate>
<EndDateAction>Archive_Expire</EndDateAction>
<Comment></Comment>
</Content>
<Content>
<ID>25</ID>
<Title>Microsoft ASP.NET Programming with Microsoft Visual C#.NET</Title>
<QuickLink>/CMS400Developer/collection.aspx?id=25</QuickLink>
<Teaser><p>Teach yourself how to write high-performance Web applications with ASP.NET
```

```
and Visual C# .NET--one step at a time.</p></Teaser>
<Html></Html>
<StartDate>1/1/0001 12:00:00 AM</StartDate>
<DateModified>1/4/2005 7:16:21 PM</DateModified>
<EndDate>12/31/9999 12:00:00 AM</EndDate>
<LastEditorFname>Application</LastEditorFname>
<LastEditorLname>Administrator</LastEditorLname>
<Hyperlink><a href="/CMS400Developer/collection.aspx?id=25">Microsoft ASP.NET
Programming with Microsoft Visual C#.NET</a></Hyperlink>
<DisplayStartDate></DisplayStartDate>
<FolderID>0</FolderID>
<ContentStatus></ContentStatus>
<Language>0</Language>
<DisplayDateModified>1/4/2005 7:16:21 PM</DisplayDateModified>
<DisplayEndDate></DisplayEndDate>
<EndDateAction>Archive_Expire</EndDateAction>
<Comment></Comment>
</Content>
```

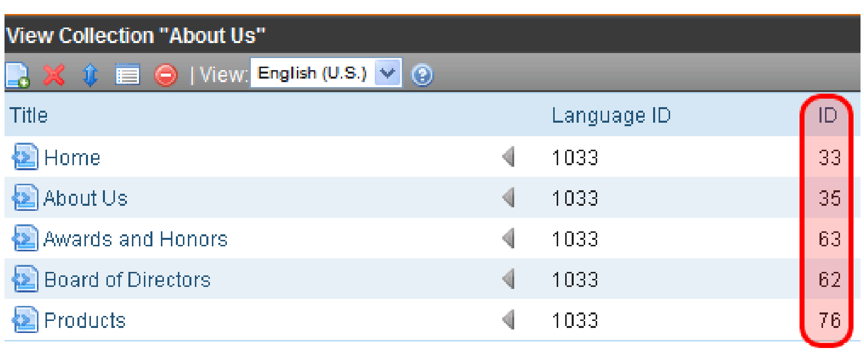
Random Content

The random content function is used to randomly display the content of a content block that belongs in a specified collection.

Displayed here is the format for the random content function

```
<% ShowRandomContent "id", XSLTId %>
```

Where the "**id**" represents the ID number of the collection the content blocks, that will be displayed, belong to



And “**XSLTId**” is the ID number of the display XSLT that will be applied to the content blocks in the collections.

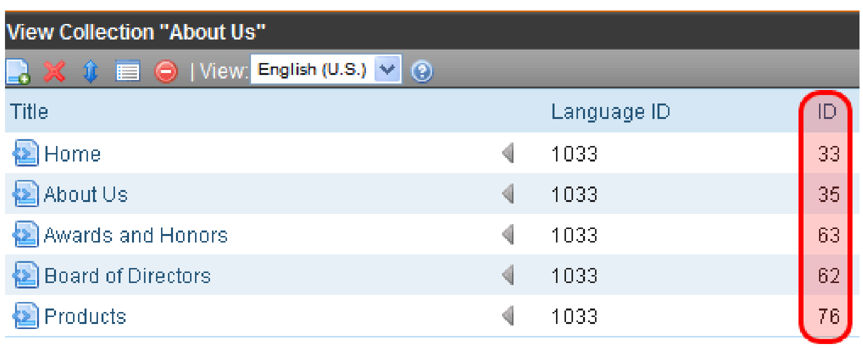
Random Summary

Similar to the random content function, the random summary function randomly displays a content block summary that belongs in a specified collection.

Here is the format for the random content function

```
<% ShowRandomSummary “id” %>
```

The “id” represents ID number of the collection to which the content blocks belong.



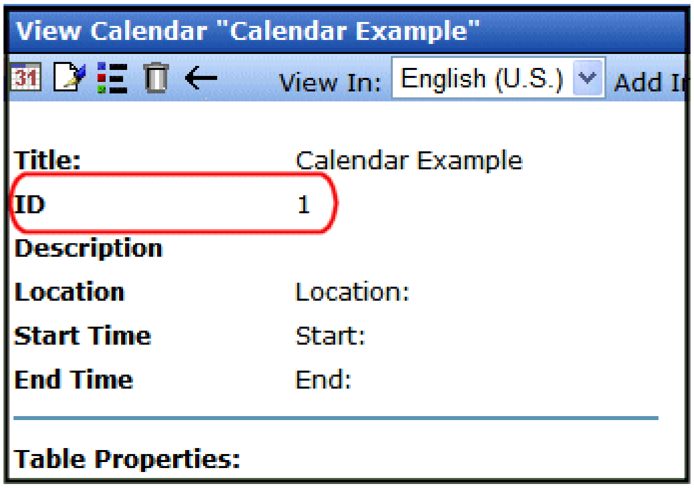
Event Calendar Function

The ecmEvtCalendar function displays a month view event calendar that has been created in Ektron CMS400.NET. Here is the format for the event calendar custom function.

```
<% ecmEvtCalendar “id”
%>
```

Note: You can use ecmCalendar to call a calendar and display a different view, such as daily. For more Information, see Calendar Function

The **“id”** argument represents the ID number of the event calendar in the Workarea.



Event Calendar Style Sheet

Before you insert an event Calendar into your Ektron CMS400.NET template, you should make a reference to the style sheet, `\siteroot\Workarea\csslib\calendarStyles.css`, in your template. This style sheet contains styles that define the Calendar.

Event Calendar Sample

Here is an example of an event Calendar in an Ektron CMS400.NET template.

```
<tr>
<td>
<% ecmEvtCalendar "1" %>
</td>
</tr>
```

When this code is displayed in a browser, the Calendar with an ID-1 is displayed. Here is the calendar displayed on a Web Page

If...	Calendar Display
Logged in	

If...	Calendar Display
	
Logged Out	

As you can see, when you are logged into the Web site, you can add and view Calendar events. When logged out, you can only view calendar events.

(continued in Calendar Function)

Form Function

The ecmFormBlock and ecmFormBlockNoFormTag functions display an HTML form content block. Both functions have the same parameters and display the form the same way. The only

The following is an example of form tags.

```
<form name="myform" action="#" onsubmit="return EkFmValidate(this);" method="post">

</form>
```

When using ecmFormBlock, form tags are added automatically. When using ecmFormBlockNoFormTag, form tags need to be added manually.

For more information about HTML forms, see ”Working with HTML Forms” on page 521.

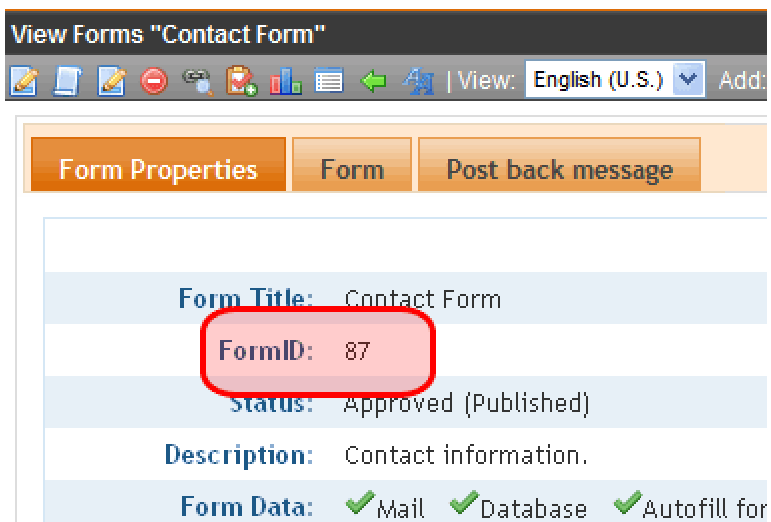
Warning! If you create a template for an existing form content block, you must manually change its quicklink to point to the new template. This change does not occur automatically. This procedure is described in ”Updating Default Template for Multiple Quicklinks” on page 1226.

Here are the two formats for the form custom function.

```
<% ecmFormBlock “id” %>
or
<% ecmFormBlockNoFormTag “id” %>
```

Note: As an alternative, you can use the multipurpose function, which can display either a content block or a content block associated with a form. For more information, see "MultiPurpose Function" on page 21-310.

The “id” argument represents the form’s ID number, visible when viewing the form from the View Form screen.

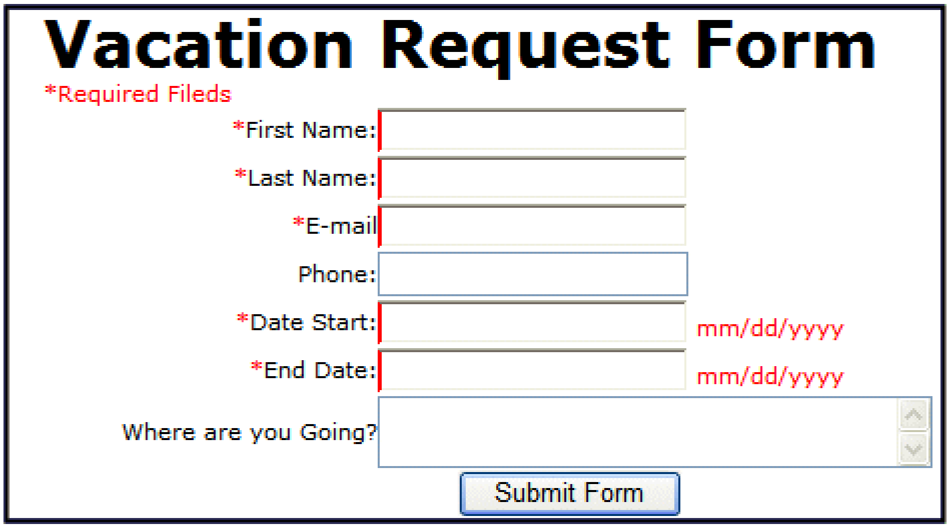


ecmFormBlock and ecmFormBlockNoFormTag are interchangeable when using this function. Here is an example of a form content block in an Ektron CMS400.NET template.

```
<tr>
<td>
<% ecmFormBlock "367" %>
</td>
```

```
</tr>
```

When this code is read by a browser, the following is displayed.



When a visitor to your site submits a form, the form uses the form information to process the data.

MultiPurpose Function

The ecmMultiPurpose function displays either a content block or an content block associated with a form. As a result, you can use one template to display both types of content block.

Here is the format for the Multipurpose function:

```
<% ecmMultiPurpose “id” %>
```

To pass in a standard content block, pass the id value in the url parameter, as illustrated below.

```
http://localhost/cms400sample/index.asp?id=2
```

To pass in a Form content block, pass the ekfrm value in the url parameter, as illustrated below.

```
http://localhost/cms400sample/index.asp?ekfrm=2
```

Note: For more information about passing the id value as a URL parameter, see "Dynamic Content Block" on page 21-254.

If the id value or ekfrm value does not exist, a blank template appears.

If the url parameter is not passed in or recognized, the function calls ecmContentBlock and passes the DefaultID value as the id argument. If the DefaultID value is zero (0), ecmContentBlock is not called.

Metadata Function

The metadata tag is used to display the metadata for one or more content blocks in the Ektron CMS400.NET Web site. This custom tag lets you generate the list of metadata edited by the authors and insert it in the source of the Web page. Below is an example of the metadata custom tag.

```
<% ecmMetaData "ItemList","Spare1" %>
```

The attributes are described below.

Attribute	Description	Required?
ItemList	List of the content block ID numbers, and exclusions See Also: ot exist. "Creating an Item List" on page 21-311 and "Item List" on page 21-314	No
Spare1	Not yet implemented See Also: "Spare 1" on page 21-316	MUST BE ""

Creating an Item List

The Item List for the ecmMetadata tag has the following format.

"[content block id; Exclusion list]...[content block id; Exclusion list]"

Attribute	Description	Required?
[(left bracket)	Delineates the beginning of a content block id/exclusion list pair	Yes
Content Block ID	The ID of the content block whose metadata you want to retrieve	Yes
; (semicolon)	Separator: Separates content block id from the exclusion list	No (**Yes** if including an **exclusion** list)

Attribute	Description	Required?
Exclusion List	A comma delimited list of metadata you do not want to be retrieved for this content block.	No
] (right bracket)	Delineates the end of a content block id/exclusion list pair	Yes

ecmMetadata Example

For this example, our administrator has defined the following metadata types for Ektron CMS400.NET.

Name	Style	Type	Editable	Required	Remove Dups	Case Sensitive
Title	n/a	HTML	Yes	Yes	No	n/a
Keywords	Name	Meta	Yes	Yes	Yes	No
Content-Type	http-equiv	Meta	No	Yes	Yes	n/a

Our example Web page has two content blocks displayed.

- content block 1, the company's home page introduction text
- content block 2, a sidebar containing the lead story for the week

The metadata entered by your content editors for these two content blocks are:

Content Block 1:
Title – "Welcome to Our Home Page"
Keywords – "Home; page; company; Welcome"
Content-Type -- "text/html; charset=iso-8859-1"

Content Block 2:
Title – "Announcing our New Product!"
Keywords – "Announce; company; product; widget"
Content-Type -- "text/html; charset=iso-8859-1"

To include both content blocks' metadata in a Web page, the ecmMetadata call looks like this.

```
<html>
<head>
<% ecmMetadata "[1][2;Title,Content-Type]", "" %>
(rest of head)
</head>
```

```
<body>
(rest of web page document)
</body>
```

</html>

In the above example, the ecmMetadata call is contained in the <head> of the HTML document (since all HTML metadata is required to exist there). When the Web page is viewed, the Web page source contains the following information:

```
<html>
<head>
<Title>Welcome to Our Home Page</Title>
<meta name=”Keywords” content= Home; page; company; Welcome; Announce;
product; widget”>
<meta http-equiv=”Content-Type” content=”text/html; charset=iso-8859-1”>
(rest of head)
</head>
<body>
(rest of web page document)
</body>
```

</html>

The ecmMetadata constructed three HTML tags based on the administrator defined parameters and the ecmMetadata call.

The metadata tag was constructed in the page because:

- **[1]** - Displays all metadata content for the content block ID=1. In this example, the title, keywords, and content-type were defined, so they were displayed as:

```
<Title>Welcome to Our Home Page</Title>
<meta name=”Keywords” content= Home; page; company; Welcome;
Announce; product; widget”>
<meta http-equiv=”Content-Type” content=”text/html;
```

charset=iso-8859-1”>

- **[2;title,content-type]** - Displays all metadata content for content block ID=2, *except* for its title and content-type definitions.

```
<Title>Welcome to Our Home Page</Title>
<meta name=”Keywords” content= Home; page; company; Welcome;
 Announce; product; widget”>
<meta http-equiv=”Content-Type” content=”text/html;
charset=iso-8859-1”>
```

The next section provides more examples.

More ecmMetadata Examples

Shown below is an example of the metadata function in an ASP Web page.

```
<TR>
<TD>
<% ecmMetaData "[1][2;title][14;keywords]","" %>
</TD>
```

</TR>

The previous example has the following properties:

- All metadata for content block ID=1 is inserted into the page
- All metadata for the content block ID=2 except for its title is inserted into the page
- All metadata for the content block ID=14 except for its keywords is inserted into the page

Using a Dynamic Metadata Tag

You can use a metadata tag in a template to define the metadata for a specific content block. However, you can also use a dynamic metadata tag combined with a content block tag to show the metadata for all content blocks on a Web page.

This allows you to create a template and not have to keep updating the tag by adding the new ID and exclusion list. Shown below is the sample code for this.

```
<!-- #include virtual="/CMS400.NETsample/CMS400.NETscripts/ektronAPI.asp" -->
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<% Dim id
if (request.QueryString("id")<> "") then
id = request.QueryString("id")
else
id = 1
end if
ecmMetadata "[" & id & "]", ""
%>
</head>
<body>
<% ecmContentBlock(request.QueryString("id")) %>
</body>
</html>
```

In this example, if you specify a content block in the URL and the page is displayed, the metadata takes that ID and displays the proper metadata in the source for the content block.

ecmMetadata Attributes

Below are the attributes and their descriptions.

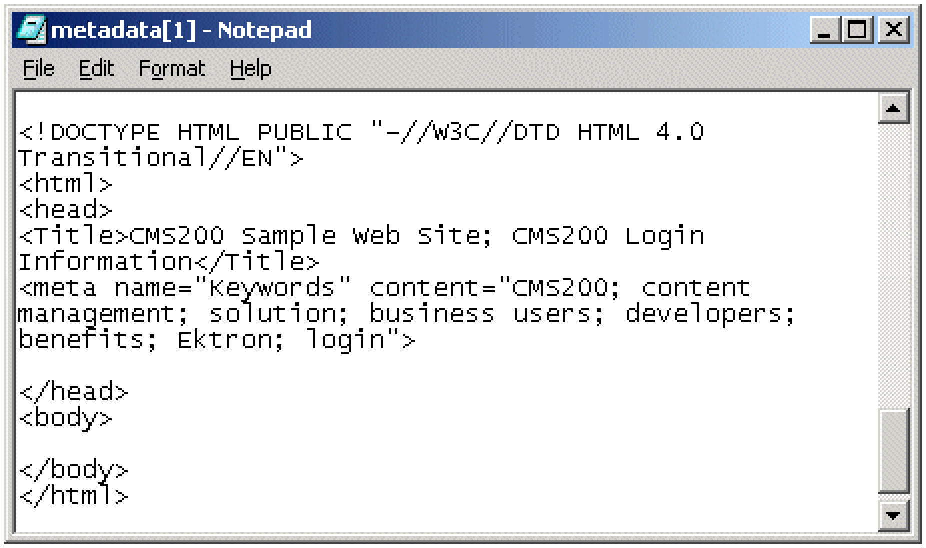
Item List

In this attribute of the ecmMetadata tag, you need to specify two values.

Value	Specifies
ID	The content block ID whose metadata will appear
Exclusion List	The metadata to be excluded. See Also: "Creating an Item List" on page 21-311

Some examples might be:

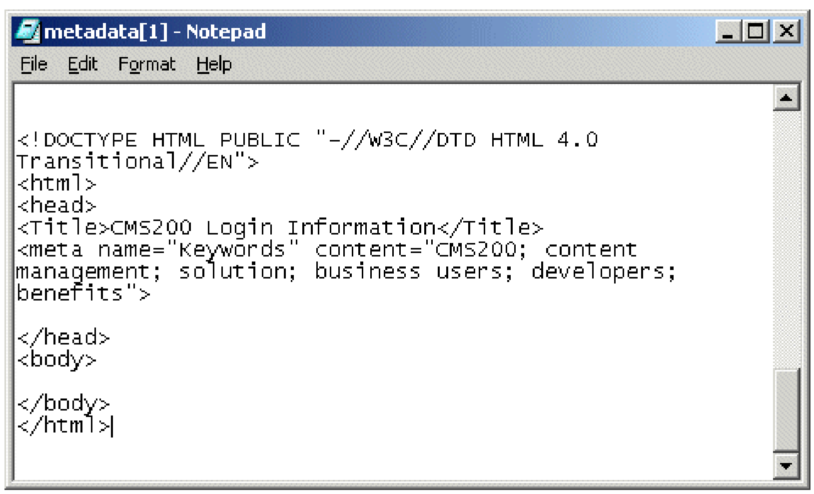
```
<% ecmMetaData "[1][2]","" %>
```



```
metadata[1] - Notepad
File Edit Format Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Sample Web Site; CMS200 Login
Information</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits; Ektron; login">

</head>
<body>

</body>
</html>
```

In this example, all metadata from content block ID=1 and 2 is displayed.

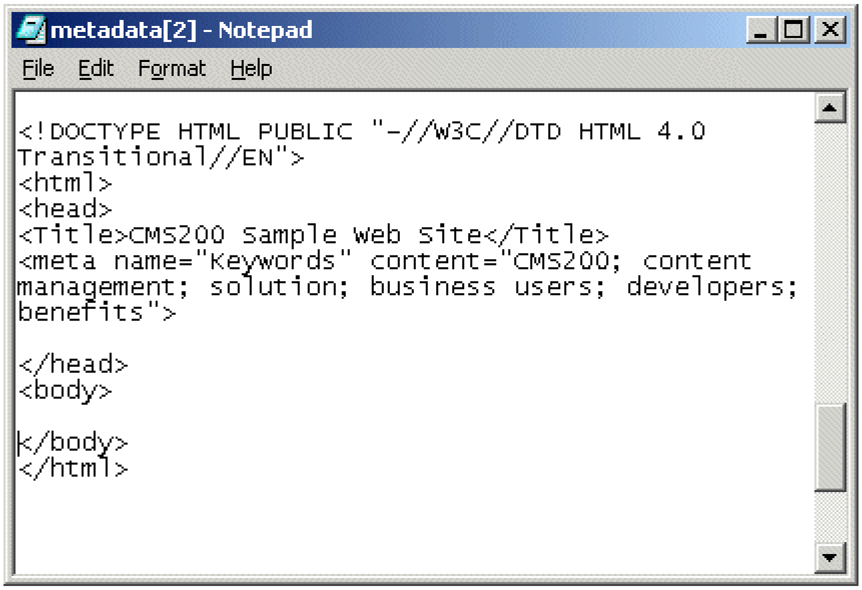
```
<% ecmMetaData "[1;title][2;keywords]","" %>
```



```
metadata[1] - Notepad
File Edit Format Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Login Information</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits">

</head>
<body>

</body>
</html>
```

In this example, all the metadata from content block ID=1 will be displayed *except* for the title. Also, all the metadata for content block ID=2 is displayed *except* its keywords.

```
<% ecmMetaData "[1][2;title,keywords]","" %>
```



In this example, all metadata from content block ID=1 is displayed, and all metadata from content block ID=2 is displayed *except* its title and keywords.

Spare 1

One attribute field at the end is currently not used. It is for future scalability. When you insert a single metadata tag into a template, you must leave this attributes as "".

Show Site Language Function

This function lets a visitor to your Web site select a language in which to view the site. Here is what the function looks like when published on a Web page.

It lists all languages selected on the **Settings** > **Configuration** > **Language settings** screen. (For more information, see "Multi-Language Support" on page 1755.)

Below is an example of the Show Site Language custom tag.

```
<% ecmShowSiteLanguage(FieldName)%>
```

You can place this function in any location of any page on your site. By default, it appears in the lower right corner of the home page.

Note: This function only works with Asp and ASP.Net.

The attribute is described in this table.

Attribute	Description

FieldName	An optional argument. You can leave it blank and allow the drop-down list to be populated by the available languages for your Web site. For example:
	`<%=ecmShowSiteLanguage('')%>`
	Or you can pass in an argument such as:
	`<%=ecmShowSiteLanguage('mysitelanguage')%>`

DHTML Menus

Ektron CMS400.NET's Menu feature lets users create and maintain a dropdown menu system for your Web site. The Menu feature lets you display menu options that link to content blocks, library assets, external hyperlinks and submenus.

To learn more about menus, see "Working with Menus" on page 1392.

Additional Documentation in Ektron Knowledge Base

This chapter explains how to implement standard menus that ship with Ektron CMS400.NET. Ektron's Web site also provides Knowledge Base articles that explain how to extend the standard menu features.

Displaying a Menu on a Web Page

GenerateMenu and DropMenu

Warning! The menu functions described below are only one example of how to implement menus. The scripts reside in the Application API file. You can implement your own menu system using JavaScript.

Use the `GenerateNextGenMenu` and `DropNextGenMenu` custom functions to display a DHTML menu on a Web page. Place `GenerateNextGenMenu` once on the page to provide an infrastructure for `DropNextGenMenu`. Then, place `DropNextGenMenu` as needed to implement individual menus.

Follow these steps to display a menu on a Web template.

1. Place the following code directly after the page's `<body>` tag.

```
<%=(ecmDHTML_GenerateNextGenMenu("menu id number"))%>
```

For example:

```
<%=(ecmDHTML_GenerateNextGenMenu("1"))%>
```

To display more than one menu, separate each id number with a comma. For example:

```
<%=(ecmDHTML_GenerateNextGenMenu("1,2,3"))%>
```

2. If the user clicks *text* to display the menu, place the following code within the template file where the text would appear.

<%= ecmDHTML_DropNextGenMenu(*menu id number*,"*text user clicks to display menu*")%>

For example:

```
<%= ecmDHTML_DropNextGenMenu(1,"Products")%>
```

If the user clicks *a graphic* to invoke the menu, use this syntax:

<%= ecmDHTML_DropNextGenMenu(*menu id number*,'<img src=*graphic file name*>')%>

For example:

<%= ecmDHTML_DropNextGenMenu(1,'<img src=mymenugraphic.jpg>')%>

Displaying Menus in a Multi-language System

If your Web site supports multiple languages, and the user selects a language before viewing the menu, if an edition of the menu is available in that language, it appears. If not, nothing appears.

For more information, see "Working with Menus in a Multi-Language System" on page 1423.

Customizing the Menu's Appearance

You can customize a menu's appearance, such as the font style, color, and size. So, you have the flexibility to coordinate a menu with the design your Web site.

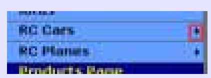
To customize a menu in Ektron CMS400.NET, you can change the ek_menu.js file. See Also: "ek_Menu.js" on page 21-319

ek_Menu.js

You can change the look and feel of a menu by changing the ek_menu.js file. If you used the default settings when installing Ektron CMS400.NET, this file is in `webroot/siteroot/Workarea/java/`.

Use the following table to help you change menu attributes.

Attribute name	Specifies the	Default value
fontSize	Size of menu text	14
fontWeight	Thickness of menu text You can set FontWeight by name (`Bold` or `Plain`) or value. Values range from 0 -1000.	Plain
fontFamily	Font style of menu text See Also: "FontFamily" on page 21-320	arial,helvetica,espy, sans-serif
fontColor	Color of menu text Note: When changing the color, you can specify the color name or code.	#000000
fontColorHiLite	Color of text when menu item is highlighted	#ffffff
bgColor	Color of border between menu items	#555555
menuBorder	Width (in pixels) of border around main menu	1
menuItemBorder	Width (in pixels) of border around each menu item	1

Attribute name	Specifies the	Default value
menuItemBgColor	Background color of menu items	#6699ff
menuLiteBgColor	Color of main menu border highlight See Also: "menuLiteBgColor" on page 21-321	
menuBorderBgColor	Color of the main menu border	#6699ff
menuHiLiteBgColor	Background color of highlighted menu item	#000084
menuContainerBgColor	Background color of the *container* Note: The container is like a <div> tag that displays the menu. When you set the container color, it appears at the top and left side of the menu frame only.	
childMenuIcon	Path to the submenu icon (the image used to indicate that a submenu is available from this menu item).  To display a different image, either provide an external path to it or upload the image to Ektron CMS400.NET then provide a local path.	`./Workarea/images/application/arrows.gif`
childMenuIconHiLite	The path to the icon that appears when you hover the mouse over a menu item that leads to a submenu. To display a different image, either provide an external path to it or upload the image to Ektron CMS400.NET then provide a local path.	`./Workarea/images/application/arrows2.gif`

FontFamily

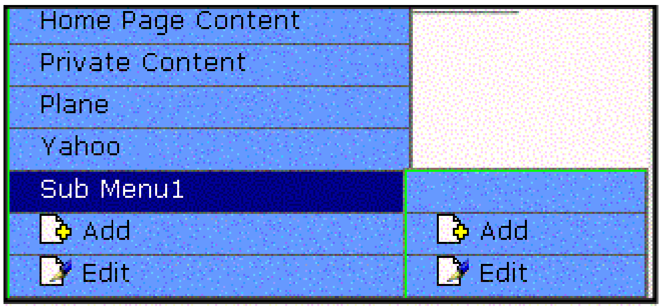
Use the fontFamily attribute to specify the menu font. It must be supported by the browser.

You can assign to this property several, comma-separated values.

Note: To display a font family other than the browser default, specify only the font name and no other comma-separated values. If you specify more than one value for the font family, Ektron CMS400.NET uses the default IE settings.

menuLiteBgColor

Example



XML Menu

The ecmGetMenuXML function wraps XML around the properties of a menu created in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the menu. The ecmGetMenuXML function allows you to easily define how the menu data appears on the Web page.

Shown here is the format of the ecmGetMenuXML function.

<% ecmGetMenuXML	**(id)**	**%>**

The ecmGetMenuXml function attributes are explained below.

Attribute	Description
Id	The id that associated with the menu.

When using the XML Menu function, the following tags are created around the properties of each item in the menu.

XML Tags	Description
<Item></Item>	
<ItemID></ItemID>	For example: `<ItemID>1</ItemID>`
<ItemType></ItemType>	For example: `<ItemType>Submenu</ItemType>`
<ItemTitle></ItemTitle>	For example: `<ItemTitle>MenuExample</ItemTitle>`
<ItemImage></ItemImage>	
<ItemImageOverride></ItemImageOverride>	For example: `<ItemImageOverride> False</ItemImageOverride>`
<Menu></Menu>	
<ID></ID>	For example: `<ID>1</ID>`
<Title></Title>	For example: `<Title>MenuExample</Title>`
<Type></Type>	For example: `<Type>content</Type>`
<Link></Link>	
<ParentID></ParentID>	For example: `<ParentID>0</ParentID>`
<AncestorID></AncestorID>	For example: `<AncestorID>1</AncestorID>`
<FolderID></FolderID>	For example: `<FolderID>0</FolderID>`
<Description></Description>	
<Image></Image>	
<ImageOverride></ImageOverride>	For example: `<ImageOverride>False</ImageOverride>`

XML Tags	Description
<ItemLink></ItemLink>	For example: `<ItemLink>/CMS400Example/contentblock.aspx?id=12</ItemLink>`
<ItemTarget></ItemTarget>	For example: `<ItemTarget>2</ItemTarget>`
<Template></Template>	

Here is how the raw XML Menu output appears before an XSLT is applied.

```
<Item>
 <ItemID>1</ItemID>
 <ItemType>Submenu</ItemType>
 <ItemTitle>MenuExample</ItemTitle>
 <ItemImage></ItemImage>
 <ItemImageOverride>False</ItemImageOverride>
 <Menu>
 <ID>1</ID>
 <Title>MenuExample</Title>
 <Template></Template>
 <Type>content</Type>
 <Link></Link>
 <ParentID>0</ParentID>
 <AncestorID>1</AncestorID>
 <FolderID>0</FolderID>
 <Description></Description>
 <ImageOverride>False</ImageOverride>
 </Item>
 <Item>
 <ItemID>2</ItemID>
 <ItemType>Submenu</ItemType>
 <ItemTitle>Book</ItemTitle>
 <ItemImage></ItemImage>
 <ItemImageOverride>False</ItemImageOverride>
 <Menu>
 <ID>2</ID>
 <Title>Book</Title>
 <Template></Template>
 <Type>content</Type>
 <ParentID>1</ParentID>
 <ImageOverride>False</ImageOverride>
 <Item>
 <ItemID>23</ItemID>
 <ItemType>content</ItemType>
 <ItemTitle>VB.NET How to</ItemTitle>
 <ItemImage></ItemImage>
 <ItemLink>/CMS400Developer/collection.aspx?id=23</ItemLink>
 <ItemTarget>2</ItemTarget>
 </Item>
 </Menu>
 </Item>
```

```
  </Menu>
</Item>
```

Custom ColdFusion Functions

Ektron CMS400.NET maintains and display content through the use of custom Ektron ColdFusion functions and ComObjects.

When using custom ColdFusion functions, the following paths must be updated in the application.cfm.

```
<cfset application.WSDLpath =
"http://localhost/siteroot/WorkArea/WebServices/ContentWS.asmx?WSDL" />
```

and

```
<cfset application.AppPath = "/siteroot/WorkArea/platforms/ColdFusion/" />
```

The application.WSDLpath needs to updated with the location of the WSDL file. For example, For example, if your site is www.example.com, the WSDL path would be http://www.example.com/WorkArea/WebServices/ContentWS.asmx.

The application.AppPath needs to updated with the path to the ColdFusion custom Functions.

To customize you Ektron CMS400.NET application, you will need to be familiar with these tags

Function	Description	More Information
Calendar Functions		
Event Calendar	Displays a month view event calendar	Event Calendar Function
Collection Functions		
Collection	Displays links generated by collections	"Collection Function" on page 21-335
CollectionXML	Creates XML for a collection by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML Collection Function" on page 21-338
Random Content	Randomly displays the content of a collection item	"Random Content Function" on page 21-330

Function	Description	More Information
Random Summary	Randomly displays the summary of a collection item	"Random Summary Function" on page 21-330
RSS Collection	Creates an RSS feed out of the items in a collection.	"RSS Collection Function" on page 21-338
Content Functions		
Add Content	Allows a user to add content to Ektron CMS400.NET progammatically.	"Add Content" on page 21-329
Content Block	Displays and manages a content block	"Content Block Function" on page 21-328
Form	Displays a content block associated with a form	"Form Function" on page 21-339
Multipurpose	Displays either a content block or a form	"MultiPurpose Function" on page 21-339
Language Functions		
Language Select	Lets a site visitor select a language in which to view site.	"Language Select Function" on page 21-343
List Summary Functions		
Archive ListSummary	Displays summaries of archived content blocks	Archive List Summary Function
List Summary	Displays a list of content block summaries	"List Summary Function" on page 21-332

Function	Description	More Information
List Summary XML	Creates XML for a list summary by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML List Summary Function" on page 21-332
RSS List Summary	Creates an RSS feed out of the items in a list summary.	"RSS List Summary Function" on page 21-333
Single Summary	Displays the summary for a content block.	"Single Summary Function" on page 21-334
Login Functions		
Login	Adds the login or logout button	"Login Function" on page 21-328
Menu Functions		
DropHTMLMenu	Used to display a DHTML menu	"DHTML Menus" on page 21-341
GenerateMenu	Works with DropHTML menu to display DHTML menus	"DHTML Menus" on page 21-341
XML Menu	Creates XML for a menu by wrapping tags around all of the menu items properties.	"XML Menu Function" on page 21-343
Metadata Functions		
Metadata	Displays the metadata for the current Web page	"Metadata Function" on page 21-340
Search Functions		
Search	Inserts a text box with a search button	"Search Function (cf)" on page 21-331

Function	Description	More Information
Search Display	Creates an area to display search results	Search Display Function

Login Function

This tag is responsible for displaying the following buttons on the Web page.

This function is basically the same as the Login function in ASP. See "Login Function" on page 21-249 for details. The only difference is the syntax used to implement the function. This is listed below.

Login Tag Example

```
<tr>
<td>
<cfmodule template="#request.ecm.AppPath#ecmLogin.cfm">
</td>

</tr>
```

Content Block Function

The content block and content blockEX tags are used to display a content block on an Ektron CMS400.NET Web page.

Shown here is the format for the content block function:

```
<CFMODULE template="#request.ecm.AppPath#ecmContentBlock.cfm"
ID=""

>
```

Shown here is the format for the content blockEX function:

```
<CFMODULE template="#request.ecm.AppPath#ecmContentBlockEx.cfm"
ID=""
XSLT=""
Override=""

>
```

This functions are basically the same as the ContentBlock and ContenBlockEX function in ASP. See "Content Block Function" on page 21-251 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion examples are below.

Static Content Block

```
<tr>
    <td>
       <CFMODULE id="1" template="#request.ecm.AppPath#ecmContentBlock.cfm">
    </td>

</tr>
```

Dynamic Content Block

```
<tr>
  <td>
       <CFMODULE id="#id#"
template="#request.ecm.AppPath#ecmContentBlock.cfm">
  </td>

</tr>
```

XML Content Block

```
<tr>
  <td>
    <CFMODULE id="13" XSLT= "" override= "1"
    template="#request.ecm.AppPath#ecmContentBlockEx.cfm">
  </td>
</tr>
```

Add Content

The add content function allows you to programmatically add a new content block to Ektron CMS400.NET without the need of logging in.

Here is the format for the add content function:

```
<CFModule template="#request.ecm.AppPath#ecmAddContent.cfm"
Username="",
Password="",
Domain="",
content_title="",
content_comment="",
ContentHtml="",
SummaryHTML="",
ContentLanguage="",
FolderID="",
GoLive="",
```

```
EndDate="",
MetaInfo=""                    >
```

This function is basically the same as the Add Content function in ASP. See "Add Content" on page 21-257 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

Add Content Example

The following is an example of the add content function in a template:.

```
<tr>
<td>
<CFModule template="#request.ecm.AppPath#ecmAddContent.cfm "AddContent UserName="admin",
Password="admin", Domain="", content_title="Content Title", content_comment="Comment",
ContentHTML="This is the <b>body</b> of the content.", SummaryHTML="This is the <i>summary</i>
for the content.", ContentLanguage="1033", FolderID="0", GoLive="", EndDate="", MetaInfo="">
</td>

</tr>
```

Random Content Function

The random content function is used to randomly display the content of a content block that belongs to a specified collection. Below is the format for the random content function:

```
<CFMODULE template="#request.ecm.AppPath#ecmShowRandomContent.cfm"
ID=""
XSLT=""
Override=""

>
```

This function is basically the same as the Random Content function in ASP. See "Random Content" on page 21-304 for details.

Random Summary Function

SImilar to the random content function, the random summary function can randomly display a content block summary that belongs to a specified collection. Here is the format for the random content function

```
<CFMODULE template="#request.ecm.AppPath#ecmShowRandomSummary.cfm"
ID=""
>
```

This function is basically the same as the Random Summary function in ASP. See "Random Summary" on page 21-305 for details.

Search Function (cf)

The search tag is used to display a text box, with a search button on the template. When seen on the template on the Web page, the users will be allowed to enter text and click on the search button to search through all the content on the Web site.

Shown here is the format for the ecmSearch tag.

```
<CFMODULE template="#request.ecm.AppPath#ecmSearch.cfm"
StartingFolder=""
Recursive=""
TargetPage=""
TextBoxSize=""
MaxCharacters=""
ButtonImageSrc=""
ButtonText=""
FontFace=""
FontColor=""
FontSize=""
Horizontal=""

>
```

This function is basically the same as the Search function in ASP. See "Search Functions (ASP)" on page 21-261 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

Search Tag Example

```
<tr>
<td>
<CFMODULE template="#request.ecm.AppPath#ecmSearch.cfm"
StartingFolder="\marketing" Recursive="1" TargetPage="search-
display.cfm" TextBoxSize="25" MaxCharacters="200"
ButtonImageSrc="" ButtonText="Search" FontFace="Verdana"
FontColor="##808080" FontSize="2" Horizontal="0">
</td>

</tr>
```

(continued in Search Display Function)

List Summary Function

The list summary function is used to display the list of content summaries on a Web page. Shown here is the format of the list summary function:

```
<CFMODULE template="#request.ecm.AppPath#ecmListSummary.cfm"
Folder=""
MaxNumber=""
Recursive=""
ShowSummary=""
StyleInfo=""
OrderBy=""
ShowInfo=""
>
```

This function is basically the same as the List Summary function in ASP. See "List Summary Function" on page 21-274 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

List Summary Example

```
<TR>
<TD>
<CFMODULE template="#request.ecm.AppPath#ecmListSummary.cfm"
Folder="\Marketing\News" MaxNumber="0" Recursive="0"
ShowSummary="1" StyleInfo="" OrderBy="Title,asc" ShowInfo="" >
</TD>

</TR>
```

XML List Summary Function

The XML List Summary function wraps XML around the properties of a list of content, created as a list summary in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the list summary information. The ecmListSummaryXML function allows you to easily define how the list summary data appears on the Web page.

```
<TR>
<TD>
<CFMODULE template="#request.ecm.AppPath#ecmListSummaryXML.cfm"
Folder="" Recursive="" OrderBy=""
MaxNumber="" ObjType="" SummaryType="" >
</TD>

</TR>
```

This function is basically the same as the List Summary XML function in ASP. See "XML List Summary Function" on page 21-280 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

XML List Summary Example

```
<TR>
<TD>
<CFMODULE template="#request.ecm.AppPath#ecmListSummaryXML.cfm"
Folder="\books\" Recursive="0" OrderBy="Title,asc"
MaxNumber="0" ObjType="folder" SummaryType="alltypes">
</TD>
```

</TR>

RSS List Summary Function

The RSS summary function is used to create an XML list of content summaries for RSS Syndication. Shown here is the format of the RSS list summary function:

```
<CFMODULE template="#request.ecm.AppPath#ecmListSummary.cfm"
Folder=""
MaxNumber=""
Recursive=""
OrderBy=""
>
```

This function is basically the same as the RSS Summary function in ASP. See "RSS Summary Function" on page 21-289 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

List Summary Example

```
<TR>
<TD>
<CFMODULE template="#request.ecm.AppPath#ecmListSummary.cfm"
Folder="\books" MaxNumber="0" Recursive="0"
OrderBy="Title,asc" >
</TD>
```

</TR>

(continued in Archive List Summary Function)

Archive List Summary Function

The Archive list summary function displays on a Web page a list of content summaries for archived content blocks. For example, you might have a current news page and an archived news page. Use the List Summary Function to display current news, and this function to display older news stories.

On the Content Block **schedule** screen, the user must set an **End Date** then choose the Archive and Display option to have the content blocks appear via this function.

This function has the same parameters as the List Summary Function. See "List Summary Function" on page 21-274 for details.

Single Summary Function

The single summary tag is used to display the summary of one content block in the Ektron CMS400.NET Web site, instead of a list of all the summaries in a content folder. Seen below is the single summary tag:

```
 <cfmodule template="#request.ecm.AppPath#ecmSingleSummary.cfm"
ContentID=""
ShowSummary="1"
StyleInfo=""
ShowInfo=""

>
```

This function is basically the same as the Single Summary function in ASP. See "Single Summary Function" on page 21-286 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

Single Summary Example

```
<TR>
<TD>
<cfmodule template="#request.ecm.AppPath#ecmSingleSummary.cfm"
ContentID="14" ShowSummary="1" StyleInfo=""
ShowInfo="DateModified">
</TD>

</TR>
```

Collection Function

The collection function is used to display the list of links that were created as a collection in the Ektron CMS400.NET Workarea. The ecmCollection function is highly customizable, allowing you to easily define how the collection data will be displayed on the Web page.

Shown here is the format of the ecmCollection function.

```
<CFMODULE template="#request.ecm.AppPath#ecmCollection.cfm"
id="2"
displayFunction="ecmTeaser"

>
```

This function is basically the same as the Collection function in ASP. See "Collection Function" on page 21-293 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

Example Using the ecmNavigation Display Function

The following is an example of a collection function being used as a navigation menu in the Ektron CMS400.NET sample Web site.

```
<CFMODULE id="1" displayFunction="ecmNavigation"

template="#request.ecm.AppPath#ecmCollection.cfm">
```

As stated earlier, the format of the collection on the Web page depends on the displayFunction that is used. Below is the source code for the display function “ecmNavigation”.

```
<cfparam name="Attributes.nId" default="">
<cfparam name="Attributes.href" default="">
<cfparam name="Attributes.target" default="">
<cfparam name="Attributes.startStyle" default="">
<cfparam name="Attributes.endStyle" default="">
<cfset LocalError = "">
<cfobject class="CMS400.NETContentBrv2.CMS400.NETContent" Action="Create" name="cmsObj">

<cfset cNavs =
cmsObj.GetEcmCollectionItems(request.ecm.AppConfStr,Attributes.nId,0,request.ecm.cmsPreview,request.ecm.user_
id,request.ecm.site_id,LocalError)>
<cfif cNavs.Count()>
<cfset nString = "">
<cfloop collection=#cNavs# Item=nav>
<cfset nString = nString & "<a href=""">
<cfif len(Attributes.href)>
<cfif FindNoCase("?", Attributes.hrefs)>
<cfset nString = nString & Attributes.href & "&id=" &
nav.Item("ContentID")>
<cfelse>
<cfset nString = nString & Attributes.href & "?id=" &
```

```
nav.Item("ContentID")>
</cfif>
<cfelse>
<cfset nString = nString & nav.Item("ContentLinks")>
</cfif>
<cfset nString = nString & """ ">
<cfif len(Attributes.target)>
<cfset nString = nString & "target=""" & Attributes.target & """ ">
</cfif>
<cfset nString = nString & ">">
<cfif len(Attributes.startStyle)>
<cfset nString = nString & Attributes.startStyle>
</cfif>
<cfset nString = nString & nav.Item("ContentTitle")>
<cfif len(Attributes.endStyle)>
<cfset nString = nString & Attributes.endStyle>
</cfif>
<cfset nString = nString & "</a>">
</CFLOOP>
<cfmodule str="#nString#" nId="#Attributes.nId#"
template="#request.ecm.AppPath#ecmshowCollectionsContent.cfm">
</cfif>
<cfset nNavs = "Nothing">
```

```
<cfset cmsObj = "Nothing">
```

As you can see, the ecmNavigation function is a simple ASP function that creates a table of the links that belong to the collection specified. The function also displays the title of the content blocks by using the “info(“ContentTitle”)) building block.

Example Using the ecmTeaser Display Function

The following is an example of a collection function being used as a navigation menu in the Ektron CMS400.NET sample Web site.

```
<CFMODULE id="2" displayFunction="ecmTeaser"
```

```
template="#request.ecm.AppPath#ecmCollection.cfm">
```

In this example, the collection with an ID=2 is displayed, and the function “ecmTeaser” defines how to display the collection data on a Web page. Here is how the collection would appear on a Web page.

As stated earlier, the format of the collection on the Web page depends on the displayFunction that is used. Below is the source code for the display function “ecmTeaser”.

```
<cfparam name="Attributes.nID" default="">
<cfparam name="Attributes.href" default="">
<cfparam name="Attributes.ShowSummary" default="">
<cfparam name="Attributes.StyleInfo" default="">
<cfparam name="Attributes.target" default="">
<cfset ErrorString = "">
<cfobject class="CMS400.NETContentBrv2.CMS400.NETContent" Action="Create" name="tObj">
<cfset cTeasers = tObj.GetEcmCollectionItems(request.ecm.AppConfStr, Attributes.nId, 0,
request.ecm.cmsPreview, request.ecm.user_id, request.ecm.site_id, ErrorString)>
<cfset tString = "<table border=""0"" cellspacing=""0"" cellpadding=""0""
width=""100%"">">
<cfif cTeasers.Count()>
<cfloop collection=#cTeasers# Item=cT>
<cfset tString = tString & "<tr><td>">
<cfset tString = tString & "<a href=""">
<cfif len(Attributes.href)>
<cfif FindNoCase("?", Attributes.hrefs)>
<cfset tString = tString & Attributes.href & "&id=" &
cT.Item("ContentID")>
<cfelse>
<cfset tStringi = tString & Attributes.href & "?id=" &
cT.Item("ContentID")>
</cfif>
<cfelse>
<cfset tString = tString & cT.Item("ContentLinks")>
</cfif>
<cfset tString = tString & """ ">
<cfif len(Attributes.target)>
<cfset tString = tString & "target=""" & Attributes.target & """ ">
</cfif>
<cfset tString = tString & ">">
<cfset tString = tString & cT.Item("ContentTitle") & "</a>" & " (" &
DateFormat(cT.Item("DateModified"), "mm/dd/yyyy") & " " &
TimeFormat(cT.Item("DateModified"), "h:mm:ss tt") & ")</td></tr><tr><td>" &
cT.Item("ContentTeaser")>
<cfset tString = tString & "</td></tr><tr><td> </td></tr>">
</cfloop>
<cfset tString = tString & "</table>">
<cfmodule str="#tString#" nId="#Attributes.nId#"
template="#request.ecm.AppPath#ecmshowCollectionsContent.cfm">
```

</cfif>

As you can see, the ecmTeaser function is a simple ASP function that creates a table of the links that belong to the collection specified.

The ecmTeaser function also displays the:

- Content Title
- Date Modified
- Content Teaser

Collection Variables

See "Collection Attributes" on page 21-296

DisplayFunction

The display function defines how collection data appears on a Web page. Using ColdFusion scripting, you can create your own display functions, or use the three included functions.

XML Collection Function

The XML collection function wraps XML around the parameters of a list of content that's created as a collection in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the collection information. The ecmCollectionXML function allows you to easily define how the collection data appears on the Web page.

Shown here is the format of the ecmCollection function.

```
<CFMODULE template="#request.ecm.AppPath#ecmCollectionXML.cfm"
id=""
getHtml=""

>
```

This function is basically the same as the XML Collection function in ASP. See "XML Collection Function" on page 21-300 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

```
<CFMODULE template="#request.ecm.AppPath#ecmCollectionXML.cfm" id="3" getHtml="0">
```

RSS Collection Function

The RSS collection function is used to create an XML list of links that were created as a collection in the Ektron CMS400.NET Workarea and display them in RSS Syndication.

Shown here is the format of the ecmRssCollection function.

```
<CFMODULE template="#request.ecm.AppPath#ecmRssCollection.cfm"
id="2"

>
```

This function is basically the same as the RSS Collection function in ASP. See "RSS Collection Function" on page 21-298 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it.

(continued in Event Calendar Function)

Form Function

The ecmFormBlock function displays an HTML form content block. For more information about HTML forms, see ”Working with HTML Forms” on page 521.

Warning! If you create a template for an existing form content block, you must manually change its quicklink to point to the new template. This change does not occur automatically. This procedure is described in “Updating Default Template for Multiple Quicklinks” on page 1226.”

Here is the format for the form custom function

```
<CFMODULE template="#request.ecm.AppPath#ecmFormBlock.cfm" ID="" >
```

This function is basically the same as the Form function in ASP. See "Form Function" on page 21-307 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion example is below.

Here is an example of a form content block in an Ektron CMS400.NET template.

```
        <tr>
              <td>
                       <CFModule template="#request.ecm.AppPath#ecmFormBlock" form_
id="1">
              </td>

     </tr>
```

MultiPurpose Function

The ecmMultiPurpose function displays either a content block or an content block associated with a form. As a result, you can use one template to display both types of content block.

Here is the format for the Multipurpose function

```
<CFMODULE template="#request.ecm.AppPath#ecmMultiPurpose.cfm" Defaul-
tID="" >
```

To pass in a standard content block, pass the id value in the url parameter, as illustrated below.

```
http://localhost/CMS400Developer/index.asp?id=2
```

To pass in a Form content block, pass the ekfrm value in the url parameter, as illustrated below.

```
http://localhost/CMS400Developer/index.asp?ekfrm=2
```

Note: For more information about passing the id value as a URL parameter, see "Dynamic Content Block" on page 21-329.

If the id value or ekfrm value does not exist, a blank template appears.

If the url parameter is not passed in or recognized, the function calls ecmContentBlock and passes the DefaultID value as the id argument. If the DefaultID value is zero (0), ecmContentBlock is not called.

Metadata Function

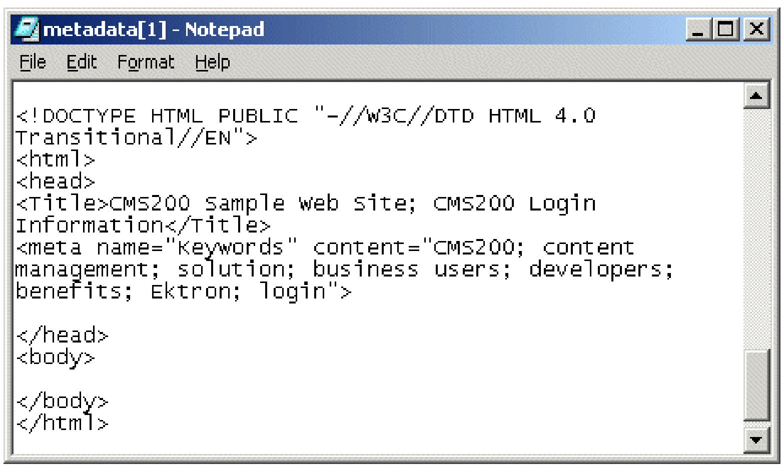
The metadata tag is used to display the metadata for one or more content blocks in the Ektron CMS400.NET Web site. Inserting this custom tag will allow you to generate the list of metadata that is edited by the authors, and insert it in the source of the Web page. Shown below is an example of what the metadata custom tag looks like.

<cfmodule template="#request.ecm.AppPath#ecmMetadata.cfm" ItemList="" >

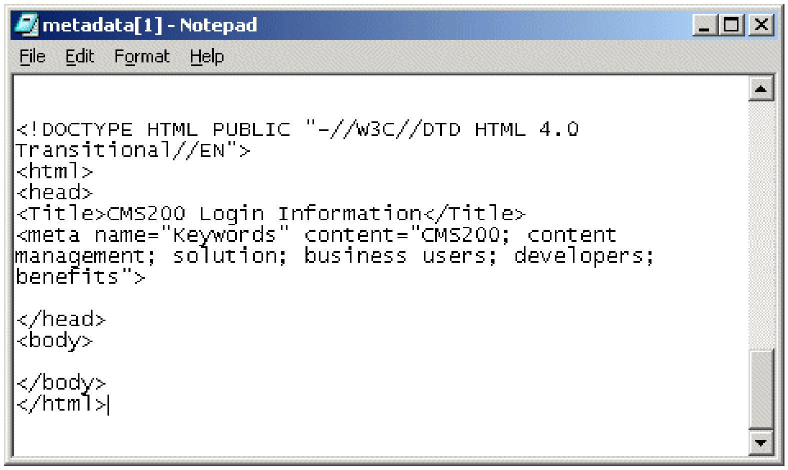
This function is basically the same as the Metadata function in ASP. See "Metadata Function" on page 21-311 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The ColdFusion examples are below.

```
<cfmodule template="#request.ecm.AppPath#ecmMetadata.cfm" ItemList="[1][2]">
```

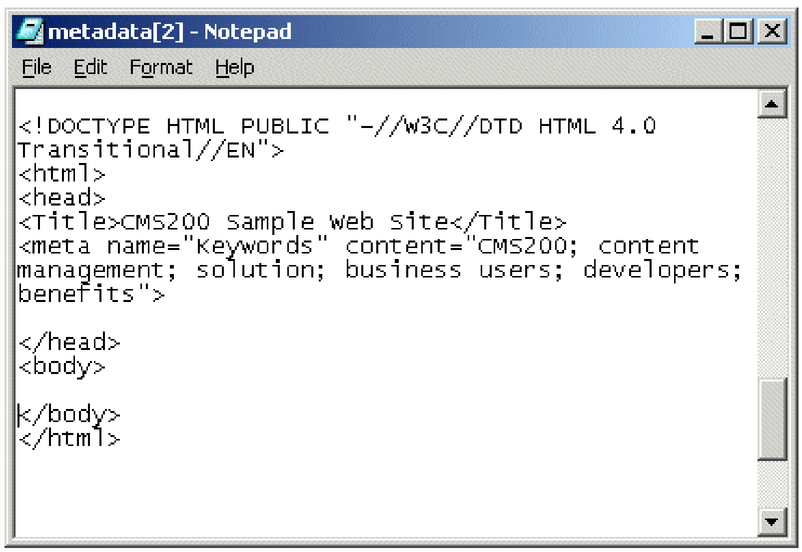



```
<cfmodule template="#request.ecm.AppPath#ecmMetadata.cfm"
ItemList="[1;title][2;keywords]>
```




```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Login Information</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits">

</head>
<body>

</body>
</html>
```

```
<cfmodule template="#request.ecm.AppPath#ecmMetadata.cfm"
ItemList="[1][2;title,keywords]>
```




```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Sample Web Site</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits">

</head>
<body>

</body>
</html>
```

DHTML Menus

Ektron CMS400.NET's Menu feature lets users create and maintain a dropdown menu system for your Web site. The Menu feature lets you display menu options that link to content blocks, library assets, external hyperlinks and submenus.

To learn more about menus, see "Working with Menus" on page 1392.

Additional Documentation in Ektron Knowledge Base

This chapter explains how to implement standard menus that ship with Ektron CMS400.NET. Ektron's Web site also provides Knowledge Base articles that explain how to extend the standard menu features.

Displaying a Menu on a Web Page

GenerateMenu and DropMenu

Warning! The menu functions described below are only one example of how to implement menus. You can implement your own menu system using JavaScript.

Use the `GenerateNextGenMenu` and `DropNextGenMenu` custom functions to display a DHTML menu on a Web page. Place `GenerateNextGenMenu` once on the page to provide an infrastructure for `DropNextGenMenu`. Then, place `DropNextGenMenu` as needed to implement individual menus.

Follow these steps to display a menu on a Web template.

1. Place the following code directly after the page's `<body>` tag.

```
<CFMODULE Ids="menu id number" template="#request.ecm.AppPath#ecmDHTML_
GenerateNextGenMenu.cfm">
```

For example:

```
<CFMODULE Ids="1" template="#request.ecm.AppPath#ecmDHTML_
GenerateNextGenMenu.cfm">
```

To display more than one menu, separate each id number with a comma. For example:

```
<CFMODULE Ids="1,2,3" template="#request.ecm.AppPath#ecmDHTML_
GenerateNextGenMenu.cfm">
```

2. If the user clicks *text* to display the menu, place the following code within the template file where the text would appear.

```
<CFMODULE MenuId="menu id number" Title="text user clicks to display menu" template="#request.ecm.AppPath#ecmDHTML_DropNextGenMenu.cfm">
```

For example:

```
<CFMODULE MenuId="1" Title="Products" template="#request.ecm.AppPath#ecmDHTML_
DropNextGenMenu.cfm">
```

If the user clicks *a graphic* to invoke the menu, use this syntax:

```
<CFMODULE MenuId="menu id number" Title= '<img src=graphic file name>' template="#request.ecm.AppPath#ecmDHTML_DropNextGenMenu.cfm">
```

For example:

```
<CFMODULE MenuId="1" Title= '<img src=mymenugraphic.jpg>'
template="#request.ecm.AppPath#ecmDHTML_DropNextGenMenu.cfm">
```

Customizing the Menu's Appearance

You can customize a menu's appearance, such as the font style, color, and size. So, you have the flexibility to coordinate a menu with the design your Web site.

To customize a menu in Ektron CMS400.NET, you can change the ek_Menu.js file.

ek_Menu.js

You can change the look and feel of a menu by changing the ek_menu.js file. If you used the default settings when installing Ektron CMS400.NET, this file is in *webroot*/CMS400Developer/Workarea/java/. For a description of the ek_menu.js file, see "ek_ Menu.js" on page 21-319.

XML Menu Function

The ecmGetMenuXML function wraps XML around the properties of a menu created in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the menu. The ecmGetMenuXML function allows you to easily define how the menu data appears on the Web page.

<CFMODULE id="" template="#request.ecm.AppPath#ecmGetMenuXML.cfm">

This function is basically the same as the XML Menu function in ASP. See "XML Menu" on page 21-321 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it. The Coldfusion example is below.

```
<CFMODULE id="1" template="#request.ecm.AppPath#ecmGetMenuXML.cfm">
```

Language Select Function

This function lets a visitor to your Web site select a language in which to view the site. Here is what the function looks like when published on a Web page.

Shown here is the format of the ecmLanguageSelect function.

```
<CFMODULE template="#request.ecm.AppPath#ecmLanguageSelect.cfm">
```

This function is basically the same as the Show Site Language function in ASP. See "Show Site Language Function" on page 21-316 for details.

The only difference between the Coldfusion function and the ASP one is the syntax for implementing it.

Custom PHP Functions

Ektron CMS400.NET maintains and displays content via custom Ektron PHP functions and ComObjects. For the custom PHP functions to work properly, do the following:

- Make sure the php_soap.dll file is in the c:\php folder on the server where you installed PHP.
- Add the following line to the php.ini file.

```
extension=php_soap.dll
```

The php.ini file is located in C:\Windows\php.ini.

- In the ApplicationAPI.php file, set the WSDLpath. The applicationAPI.php file is located by default in:

```
http:/-
/localhost/siteroot/WorkArea/platforms/PHP/applicationAPI.php
```

Warning! `ContentWS.asmx` is the web services (WSDL) file that the custom PHP functions use to talk to Ektron CMS400.NET. The WSDLpath located in the `applicationAPI.php` file must be set to location of the WSDL file. The default WSDLpath is `http://localhost/`siteroot`/WorkArea/WebServices/ContentWS.asmx`. If you have changed the location of `ContentWS.asmx` you need to update the WSDLpath. For example, if your site is `www.example.com`, the WSDLpath would be `http://www.example.com/WorkArea/WebServices/ContentWS.asmx`.

- Add the following line to the top of each template.

```
<?php include 'applicationAPI.php'; ?>
```

This file calls the Ektron custom functions file to allow the page to function properly. It *must* appear at the top of the template file.

- If you have upgraded your Ektron CMS400.NET from an Ektron CMS300 version, add the following line between the head tags for each template.

Warning! This only needs to be done if you are upgrading from CMS300 to CMS400.NET

```
<meta http-equiv="Content-type" content="text/html; charset=utf-8"
/>
```

To customize you Ektron CMS400.NET application, you need to be familiar with these functions.

Function	Description	More Information
Calendar Functions		
Event Calendar	Displays a month view event calendar	Event Calendar Function

Function	Description	More Information
Collection Functions		
Collection	Displays links generated by collections	"Collection Function" on page 21-355
CollectionXML	Creates XML for a collection by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML Collection Function" on page 21-358
Random Content	Randomly displays the content of a collection item	"Random Content Function" on page 21-359
Random Summary	Randomly displays the summary of a collection item	"Random Summary Function" on page 21-359
RSS Collection	Creates an RSS feed out of the items in a collection.	"RSS Collection Function" on page 21-358
Content Functions		
Add Content	Allows a user to add content to Ektron CMS400.NET progammatically.	"Add Content" on page 21-350
Content Block	Displays and manages a content block	"Content Block Function" on page 21-349
Form	Displays a content block associated with a form	"Form Function" on page 21-359
Multipurpose	Displays either a content block or a form	"MultiPurpose Function" on page 21-361
List Summary Functions		

Function	Description	More Information
Archive ListSummary	Displays summaries of archived content blocks	"Archive List Summary Function" on page 21-334
List Summary	Displays a list of content block summaries	"List Summary Function" on page 21-353
List Summary XML	Creates XML for a list summary by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML List Summary Function" on page 21-354
RSS List Summary	Creates an RSS feed out of the items in a list summary.	"RSS List Summary Function" on page 21-355
Single Summary	Displays the summary for a content block	"Single Summary Function" on page 21-354
Login Functions		
Login	Adds the login or logout button	"Login Function" on page 21-348
Menu Functions		
DropHTMLMenu	Used to display a DHTML menu	"DHTML Menus" on page 21-364
GenerateMenu	Works with DropHTML menu to display DHTML menus	"DHTML Menus" on page 21-364
XML Menu	Creates XML for a menu by wrapping tags around all of the menu items properties.	"XML Menu Function" on page 21-365
Metadata Functions		

Function	Description	More Information
Metadata	Displays the metadata for the current Web page	"Metadata Function" on page 21-362
Search Functions		
Search	Inserts a text box with a search button	"Search Function" on page 21-351
Search Display	Creates an area to display search results	"Search Display Function" on page 21-352
Language Functions		
Language Select	Lets a site visitor select a language in which to view site.	"Language Select Function" on page 21-366

Login Function

This function is responsible for displaying the following buttons on the Web page.

Button	Name	Description
	Login	When user is not logged into Ektron CMS400.NET, this button appears. Click this button to let the user log in to the application.
	Logout	Once logged in, this button replaces the login button to allow the user to log out from the Ektron CMS400.NET Web site.
	Workarea	When logged in, this button appears under the logout button allowing the user to access their workarea.

Button	Name	Description
	Preview On	Lets the user to preview the entire Web site as if all checked-in content was published.
	Preview Off	Turns off preview mode.

This function is basically the same as the Login function in ASP. See "Login Function" on page 21-249 for details. The only difference is the syntax used to implement the function. This is listed below.

Login Function Example

```
<tr>
<td>
<?php ecmlogin(); ?>
</td>

</tr>
```

Content Block Function

The ecmContentBlock and ecmContentBlockEX functions are used to display a content block on an Ektron CMS400.NET Web page.

Shown here is the format for the ecmContentBlock function:

```
<?php ecmContentBlock (ID) ?>
```

Here is the format for the ecmContentBlockEX function:

```
<?php ecmContentBlockEx (ID, "XSLT", Override) ?>
```

Note: As an alternative, you can use the multipurpose function, which can display either a content block or a content block associated with a form. For more information, see "MultiPurpose Function" on page 21-361.

This function is basically the same as the Content Block function in ASP. See "Content Block Function" on page 21-251 for details.

The only differences between the PHP function and the ASP one are the examples of implementing it. The PHP examples are below.

Static Content Block

```
<tr>
   <td>
      <?php ecmContentBlock(1) ?>
   </td>
</tr>
```

Dynamic Content Block

```
<tr>
   <td>
      <?php ecmContentBlock($id) ?>
   </td>
</tr>
```

XML Content Block

```
<tr>
    <td>
       <?php ecmContentBlockEx (13, "", 1) ?>
    </td>
</tr>
```

Add Content

The add content function allows you to programmatically add a new content block to Ektron CMS400.NET without the need of logging in.

Here is the format for the add content function:

<? AddContent	**("Username" "Password", "Domain", 'content_title", "content_comment", "ContentHtml", "SummaryHTML", "ContentLanguage", "FolderID", "GoLive", "EndDate", "MetaInfo");**	**?>**

This function is basically the same as the Add Content function in ASP. See "Add Content" on page 21-257 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

Add Content Example

The following is an example of the add content function in a template:.

```
<tr>

        <td>

<? AddContent ("admin", "admin", "", "Content Title", "Comment",
 "This is the <b>body</b> of the content.", "This is the <i>summary</i>
 for the content.", "1033", "0", "", "", ""); ?>

        </td>

</tr>
```

Search Function

The search function is used to display a text box with a search button on the template. When seen on the template on the Web page, a user can enter text and click the search button to search through all the content on the Web site.

Ektron has created two search functions:

- ecmSearch
- ecmSearchNoFormTag

Both functions have the same parameters and perform the same search. The only difference is ecmSearch automatically inserts form tags, ecmSearchNoFormTag does not.

The following is an example of form tags.

```
<form name="ecmsearch" method="post" action='search-display.asp'>

</form>
```

When using ecmSearch, form tags are added automatically. When using ecmSearchNoFormTag you need to add the tags manually

Here is the format for the search function. You can interchange ecmSearch and ecmSearchNoFormTag when using this function.

```
<?php ecmSearch( “StartingFolder”,
Recursive,
"targetpage",
textbox,
MaxCharacters,
"ButtonImgSrc",
```

```
"ButtonText",
"FontFace",
"FontColor",
"FontSize",
Horizontal,
"Spare" );
?>
```

This function is basically the same as the Search function in ASP. See "Search Functions (ASP)" on page 21-261 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

Search Function Example

```
<TR>
 <TD>
  <?php ecmSearch("\\Marketing",1,"search-
 display.php",25,200,"","Search","Verdana","#808080","2",0,""); ?>
 </TD>
</TR>
```

Search Display Function

The search display custom function created the area where all the search results show after the search has been executed.

Here is the format of the ecmSearchDisplay function:

```
<?php ecmSearchDisplay( MaxNumbers,"StyleInfo", ShowDate ); ?>
```

This function is basically the same as the Search Display function in ASP. See "Search Display Function" on page 21-270 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

Search Display Function Example

```
    <tr>
       <td>
          <?php ecmSearchDisplay( 0,"",1); ?>
       </td>
    </tr>
```

List Summary Function

The list summary function is used to display the list of content summaries on a Web page. Here is the format of the list summary function.

```
<?php ecmListSummary ( "Folder",
Recursive,
ShowSummary,
"StyleInfo",
"OrderBy",
"ShowInfo",
MaxNumber,
"Spare 1",
"Spare2");
?>
```

This function is basically the same as the List Summary function in ASP. See "List Summary Function" on page 21-274 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

List Summary Example

```
<TR>
<TD>
<?PHP ecmListSummary ("\Marketing\News",0,1,"",
"Title,asc","DateModified",0,"",""); ?>
</TD>
</TR>
```

Archive List Summary Function

The Archive list summary function displays on a Web page a list of content summaries for archived content blocks. For example, you might have a current news page and an archived news page. Use the List Summary Function to display current news, and this function to display older news stories.

On the Content Block **schedule** screen, the user must set an **End Date** then choose the Archive and Display option to have the content blocks appear via this function.

This function has the same parameters as the List Summary Function. See List Summary Function for details.

(continued in Single Summary Function)

Single Summary Function

The single summary function is used to display the summary of one content block in the Ektron CMS400.NET Web site, instead of a list of all the summaries in a content folder. Seen below is the single summary function:

```
<?php ecmSingleSummary( “ContentID”,
ShowSummary,
“StyleInfo”,
“ShowInfo”,
“Spare1”);
?>
```

This function is basically the same as the Single Summary function in ASP. See "Single Summary Function" on page 21-286 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

Single Summary Example

```
<TR>
   <TD>
       <?PHP ecmSingleSummary ("14",1,"","DateModified",""); ?>
   </TD>
</TR>
```

XML List Summary Function

The XML List Summary function wraps XML around the properties of a list of content, created as a list summary in the Ektron CMS400.NET Workarea. Once created, you can use the XML to display the list summary information. The ecmListSummaryXML function allows you to easily define how the list summary data appears on the Web page.

<?php ecmListSummaryXML (“Folder”, Recursive, “OrderBy”, MaxNumber, “ObjType”, “SummaryType”); ?>

This function is basically the same as the List Summary XML function in ASP. See "XML List Summary Function" on page 21-280 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

```
<?php ecmListSummaryXML("\books\\",0,"Title,asc",0,"folder",""); ?>
```

RSS List Summary Function

The RSS summary function is used to create an XML list of content summaries for RSS Syndication. Shown here is the format of the RSS list summary function:

<?php ecmRssSummary (“Folder”, Recursive, “OrderBy”, MaxNumber); ?>

This function is basically the same as the RSS Summary function in ASP. See "RSS Summary Function" on page 21-289 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

```
<?php ecmRssSummary("\CMS400Developer\\", 0, "Title,asc", 0); ?>
```

Collection Function

The collection function is used to display the list of links that were created as a collection in the Ektron CMS400.NET Workarea. The ecmCollection function is highly customizable, allowing you to easily define how the collection data will be displayed on the Web page.

Shown here is the format of the ecmCollection function.

```
<?PHP ecmCollection( “id”,
“displayFunction”;
?>
```

This function is basically the same as the Collection function in ASP. See "Collection Function" on page 21-293 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

Collection Examples

Example Using the ecmNavigation Display Function

The following is an example of a collection function being used as a navigation menu in the Ektron CMS400.NET sample Web site.

```
<?php ecmCollection(1, "ecmNavigation") ?>
```

In this example, the collection with an ID=1 is displayed, and the function “ecmNavigation” is used to define how the collection data is displayed on the Web page.

Here is how the collection would appear on the Web page.

The format of the collection on the Web page depends on the displayFunction that is used.

Below is the source code for the display function “ecmNavigation”.

```
Function ecmNavigation($cInfo){
global $html, $info;
$html = "<table border=\"0\" cellspacing=\"0\" cellpadding=\"0\"
width=\"100%\">";
$mycount = $cInfo->count();
for ($iloop=0; $iloop < $mycount; ++$iloop) {
$info = $cInfo->Item($iloop+1);
$html = $html."<tr><td>  <a href=\"";
$html = $html.$info->Item("ContentLinks");
$html = $html."\">";
$html = $html.$info->Item("ContentTitle");
$html = $html."</a></td></tr><tr><td> </td></tr>";
}
$html = $html."</table>";
return $html;
}
```

As you can see, the ecmNavigation function is a simple PHP function that creates a table of the links that belong to the collection specified.

The ecmNavigation function also displays the title of the content blocks by using the “info(“ContentTitle”)) building block.

Example Using the ecmTeaser Display Function

The following is an example of a collection function being used as a navigation menu in the Ektron CMS400.NET sample Web site.

```
<?php ecmCollection (2, "MyDisplayFunction"); ?>
```

In this example, the collection with an ID=2 is displayed, and the function “ecmTeaser” is used to define how the collection data is displayed on the Web page.

Shown here is how the collection would appear on the Web page.

As stated earlier, the format of the collection on the Web page depends on the displayFunction that is used.

Shown below is the source code for the display function “ecmTeaser”

```
Function ecmTeaser($cInfo){
global $html, $info;
$html = "<table border=\"0\" cellspacing=\"0\" cellpadding=\"0\" width=\"100%\">";
$mycount = $cInfo->count();
for ($iloop=0; $iloop < $mycount; ++$iloop) {
$info = $cInfo->Item($iloop+1);
$html = $html."<tr><td><a href=\"";
$html = $html.$info->Item("ContentLinks");
$html = $html."\" >";
$html = $html.$info->Item("ContentTitle");
$html = $html."</a> (";
$html = $html.date("m/d/Y g:i:s A", $info->Item("DateModified"));
$html = $html.")</td></tr><tr><td>";
$html = $html.$info->Item("ContentTeaser");
$html = $html."</td></tr><tr><td> </td></tr>";
}
$html = $html."</table>";
return $html;

}
```

As you can see, the ecmTeaser function is a simple ASP function that creates a table of the links that belong to the collection specified.

The ecmTeaser function also displays the:

- Content Title
- Date Modified
- Content Teaser

Collection Variables

See "Collection Attributes" on page 21-296

DisplayFunction

As explained earlier, the display function is a function that you create that will define how the collection data will be displayed on the Web page.

By using simple PHP scripting, you can create your own display functions, or use the three included functions.

XML Collection Function

The XML collection function wraps XML around the parameters of a list of content that's created as a collection in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the collection information. The ecmCollectionXML function allows you to easily define how the collection data appears on the Web page.

Shown here is the format of the ecmCollection function.

<?php ecmCollectionXML (id, GetHtml); ?>

This function is basically the same as the XML Collection function in ASP. See "XML Collection Function" on page 21-300 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

```
<?php ecmCollectionXML (3,0); ?>
```

RSS Collection Function

The RSS collection function is used to create an XML list of links that were created as a collection in the Ektron CMS400.NET Workarea and display them in RSS Syndication.

Shown here is the PHP format of the ecmRssCollection function.

<?php ecmRssCollection (id); ?>

This function is basically the same as the RSS Collection function in ASP. See "RSS Collection Function" on page 21-298 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it.

Random Content Function

The random content function is used to randomly display the content of a content block that belongs in a specified collection.

Displayed here is the format for the random content function

<?php ShowRandomContent (id); ?>

This function is basically the same as the Random Content function in ASP. See "Random Content" on page 21-304 for details.

Random Summary Function

SImilar to the random content function, the random summary function is used to randomly display the summary of a content block that belongs in a specified collection.

Displayed here is the format for the random content function

<?php ShowRandomSummary (id, XsltID); ?>

This function is basically the same as the Random Summary function in ASP. See "Random Summary" on page 21-305 for details.

(continued in Event Calendar Function)

Form Function

The ecmFormBlock and ecmFormBlockNoFormTag functions display an HTML form content block. Both functions have the same parameters and display the form the same way. The only

The following is an example of form tags.

```
<form name="myform" action="#" onsubmit="return EkFmValidate(this);" method="post">

</form>
```

When using ecmFormBlock, form tags are added automatically. When using ecmFormBlockNoFormTag, form tags need to be added manually.

For more information about HTML forms, see "Working with HTML Forms" on page 521.

Warning! If you create a template for an existing form content block, you must manually change its quicklink to point to the new template. This change does not occur automatically. This procedure is described in "Updating Default Template for Multiple Quicklinks" on page 1226.

Here is the format for the form custom function

<?php ecmFormBlock(id); ?>

<?php ecmFormBlockNoForTag(id); ?>

This function is basically the same as the Form function in ASP. See "Form Function" on page 21-307 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

```
<tr>
      <td>
           <?php ecmFormBlock(1); ?>
      </td>
</tr>
```

Note: As an alternative, you can use the multipurpose function, which can display either a content block or a content block associated with a form. For more information, see "MultiPurpose Function" on page 21-310.

MultiPurpose Function

The ecmMultiPurpose function displays either a content block or a content block associated with a form. As a result, you can use one template to display both types of content block.

Here is the format for the Multipurpose function

<?php ecmMultiPurpose(ID); ?>

To pass in a standard content block, pass the id value in the url parameter, as illustrated below.

```
http://localhost/CMS400Developer/index.asp?id=2
```

To pass in a Form content block, pass the ekfrm value in the url parameter, as illustrated below.

```
http://localhost/CMS400Developer/index.asp?ekfrm=2
```

Note: For more information about passing the id value as a URL parameter, see "Dynamic Content Block" on page 21-254.

If the id value or ekfrm value does not exist, a blank template appears.

If the url parameter is not passed in or recognized, the function calls ecmContentBlock and passes the DefaultID value as the id argument. If the DefaultID value is zero (0), ecmContentBlock is not called.

Metadata Function

The metadata function is used to display the metadata for one or more content blocks in the Ektron CMS400.NET Web site. Inserting this custom function allows you to generate the list of metadata that is edited by the authors, and insert it in the source of the Web page. Shown below is an example of what the metadata custom function looks like.:

```
<?php ecmMetaData ("ItemList","Spare1";) ?>
```

This function is basically the same as the Metadata function in ASP. See "Metadata Function" on page 21-311 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP examples are below.

To include both content blocks' metadata in the web page, an ecmMetadata call would look like this.

```
<html>
<head>
<?php ecmMetadata ("[1][2;Title,Content-Type]", ""); ?>
(rest of head)
</head>
<body>
(rest of web page document)
</body>
```

</html>

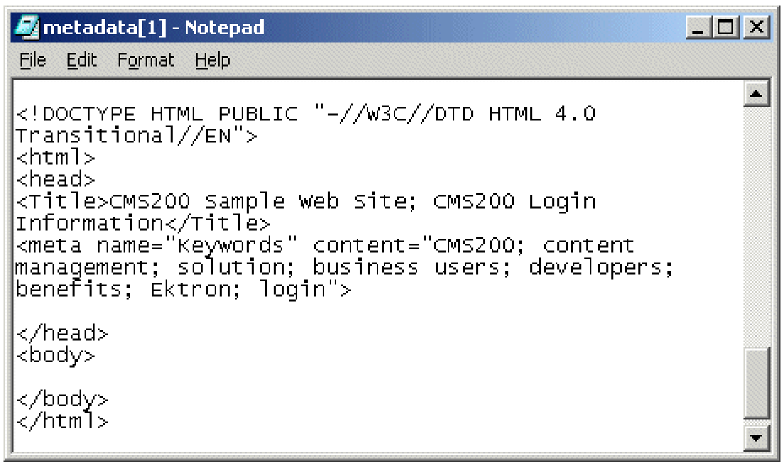
In the above example the ecmMetadata call is contained in the <head> of the HTML document (since all HTML metadata is required to exist there). Once the Web page is viewed the Web page source will contain the following information:

```
<html>
<head>
<Title>Welcome to Our Home Page</Title>
```

```
<meta name="Keywords" content= Home; page; company; Welcome; Announce;
product; widget">
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
(rest of head)
</head>
<body>
(rest of web page document)
</body>
```

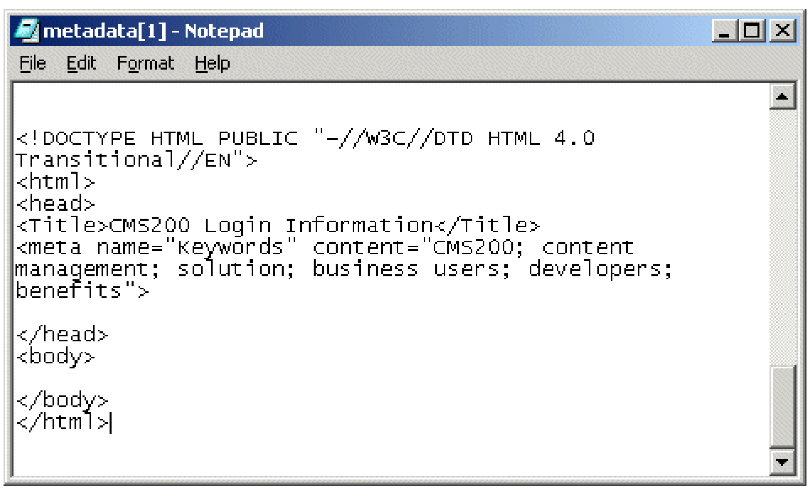
</html>

```
<?PHP ecmMetaData ("[1][2]","") ?>
```



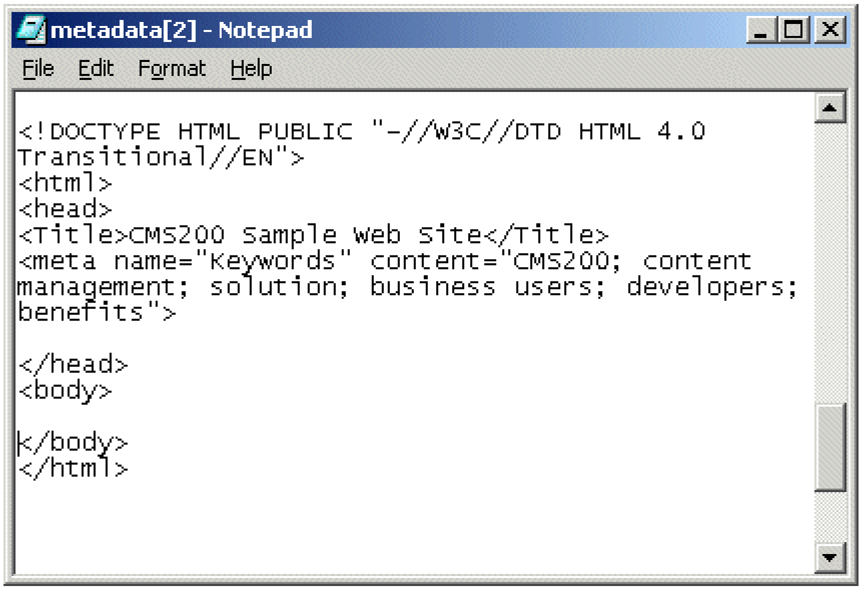

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Sample Web Site; CMS200 Login
Information</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits; Ektron; login">

</head>
<body>

</body>
</html>
```

```
<?PHP ecmMetaData ("[1;title][2;keywords]","") ?>
```




```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Login Information</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits">

</head>
<body>

</body>
</html>
```

```
<?PHP ecmMetaData ("[1][2;title,keywords]","") ?>
```



metadata[2] - Notepad

File Edit Format Help

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<Title>CMS200 Sample Web Site</Title>
<meta name="Keywords" content="CMS200; content
management; solution; business users; developers;
benefits">

</head>
<body>

</body>
</html>
```

DHTML Menus

Ektron CMS400.NET’s Menu feature lets users create and maintain a dropdown menu system for your Web site. The Menu feature lets you display menu options that link to content blocks, library assets, external hyperlinks and submenus.

To learn more about menus, see ”Working with Menus” on page 1392.

Additional Documentation in Ektron Knowledge Base

This chapter explains how to implement standard menus that ship with Ektron CMS400.NET. Ektron’s Web site also provides Knowledge Base articles that explain how to extend the standard menu features.

Displaying a Menu on a Web Page

GenerateMenu and DropMenu

Warning! The menu functions described below are only one example of how to implement menus. You can implement your own menu system using JavaScript.

Use the `GenerateNextGenMenu` and `DropNextGenMenu` custom functions to display a DHTML menu on a Web page. Place `GenerateNextGenMenu` once on the page to provide an infrastructure for `DropNextGenMenu`. Then, place `DropNextGenMenu` as needed to implement individual menus.

Follow these steps to display a menu on a Web template.

1. Place the following code directly after the page's `<body>` tag.

```
<?php ecmDHTML_GenerateNextGenMenu("menu id number"); ?>
```

   For example:

```
<?php ecmDHTML_GenerateNextGenMenu("1"); ?>
```

   To display more than one menu, separate each id number with a comma. For example:

```
<?php ecmDHTML_GenerateNextGenMenu("1,2,3"); ?>
```

2. If the user clicks *text* to display the menu, place the following code within the template file where the text would appear.

<?php ecmDHTML_DropNextGenMenu menu ID number,"*text user clicks to display menu*"; ?>"

   For example:

```
<?php ecmDHTML_DropNextGenMenu 1,"MyMenu1"; ?>
```

   If the user clicks *a graphic* to invoke the menu, use this syntax:

```
<?php ecmDHTML_DropNextGenMenu menu ID number, '<img src=graphic file name>'; ?>
```

   For example:

```
<?php ecmDHTML_DropNextGenMenu 1,'<img src=mymenugraphic.jpg>'; ?>
```

Customizing the Menu's Appearance

You can customize a menu's appearance, such as the font style, color, and size. So, you have the flexibility to coordinate a menu with the design your Web site.

To customize a menu in Ektron CMS400.NET, you can change the ek_Menu.js file.

ek_Menu.js

You can change the look and feel of a menu by changing the ek_menu.js file. If you used the default settings when installing Ektron CMS400.NET, this file is in `webroot/`*siteroot*`/Workarea/java/`. For a description of the ek_menu.js file, see "ek_Menu.js" on page 21-319.

XML Menu Function

The ecmGetMenuXML function wraps XML around the properties of a menu created in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the menu. The ecmGetMenuXML function allows you to easily define how the menu data appears on the Web page.

<?php ecmGetMenuXML($Id); ?>

This function is basically the same as the XML Menu function in ASP. See "XML Menu" on page 21-321 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it. The PHP example is below.

```
<?php ecmGetMenuXML(1); ?>
```

Language Select Function

This function lets a visitor to your Web site select a language in which to view the site. Here is what the function looks like when published on a Web page.

Shown here is the format of the ecmLanguageSelect function.

```
<?php ecmLanguageSelect(); ?>
```

This function is basically the same as the Show Site Language function in ASP. See "Show Site Language Function" on page 21-316 for details.

The only difference between the PHP function and the ASP one is the syntax for implementing it.

Custom API

As you have seen, the formatting for the custom functions used in Ektron CMS400.NET for PHP are defined in the file ApplicationAPI.php. As a developer, you may make changes to this file to further enhance how the custom functions appear on your Web site.

However, Ektron recommends creating a copy of the file, and renaming it to an arbitrary name, for example, MyCustomAPI.php, and including that file when creating Ektron CMS400.NET templates. This ensures that your custom API will not be overwritten if you upgrade to another version of Ektron CMS400.NET.

Custom JSP Functions

Ektron CMS400.NET maintains and displays content via custom Ektron JSP functions. For the custom JSP functions to work properly, do the following:

- In the applicationapi.jsp file, set the WSSoap_address. The applicationapi.jsp file is located by default in:

```
http:/-
/localhost/siteroot/WorkArea/platforms/JSP/applicationapi.jsp
```

Warning! `ContentWS.asmx` is the web services file that the custom JSP functions use to talk to Ektron CMS400.NET. The WSSoap_address located in the `applicationapi.jsp` file must be set to location of the Web services file. The default WSSoap_address is `http://localhost/`siteroot`/Wor-kArea/WebServices/ContentWS.asmx.` If you have changed the location of `ContentWS.asmx` you need to update the WSSoap_address. For example, if your site is `www.example.com`, the WSSoap_address would be `http://www.example.com/WorkArea/WebServices/ContentWS.asmx.`

- Add the following line to the top of each template.

```
<%@ include file="applicationapi.jsp" %>
```

This file calls the Ektron custom functions file to allow the page to function properly. It *must* appear at the top of the template file.

- Make sure the contentws.jar file is included in your JSP environment
- Ektron recommends running Axis when using a JSP environment. We have tested on TomCat and JRUN with Axis v1.2.1. You can download Axis from http://ws.apache.org/axis/java/.

To customize you Ektron CMS400.NET application, you need to be familiar with these functions.

Function	Description	More Information
Calendar Functions		
Calendar	Displays a calendar with different display types. For example, a daily view calendar.	Calendar Function
Event Calendar	Displays a month view event calendar	Event Calendar Function
Collection Functions		
Collection	Displays links generated by collections	"Collection Function" on page 21-371

Function	Description	More Information
CollectionXML	Creates XML for a collection by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML Collection Function" on page 21-372
Random Content	Randomly displays the content of a collection item	"Random Content Function" on page 21-372
Random Summary	Randomly displays the summary of a collection item	"Random Summary Function" on page 21-373
RSS Collection	Creates an RSS feed out of the items in a collection.	"RSS Collection Function" on page 21-373
Content Functions		
Add Content	Allows a user to add content to Ektron CMS400.NET progammatically.	"Add Content" on page 21-373
Content Block	Displays and manages a content block	"Content Block Function" on page 21-374
Form	Displays a content block associated with a form	"Form Function" on page 21-375
Language Functions		
Language Select	Lets a site visitor select a language in which to view site.	"Language Select Function" on page 21-376
Login Functions		
Login	Adds the login or logout button	"Login Function" on

Function	Description	More Information
		page 21-377
Menu Functions		
DropHTMLMenu	Used to display a DHTML menu	"DHTML Menus" on page 21-378
GenerateMenu	Works with DropHTMLMenu to display DHTML menus.	"DHTML Menus" on page 21-378
XML Menu	Creates XML for a menu by wrapping tags around all of the menu items properties.	"XML Menu Function" on page 21-379
Metadata Functions		
Metadata	Displays the metadata for the current Web page.	"Metadata Function" on page 21-379
Search Functions		
Search	Inserts a text box with a search button.	"Search Function" on page 21-382
Search Display	Creates an area to display search results.	"Search Display Function" on page 21-383
Summary Functions		
List Summary	Displays a list of content block summaries.	"List Summary Function" on page 21-383
List Summary XML	Creates XML for a list summary by wrapping tags around all of the collection items and their properties. This allows you to use an XSLT to define how the XML collection is displayed.	"XML List Summary Function" on page 21-384

Function	Description	More Information
RSS List Summary	Creates an RSS feed out of the items in a list summary.	"RSS List Summary Function" on page 21-384
Single Summary	Displays the summary for a content block.	"Single Summary Function" on page 21-384

(continued in Calendar Function)

Collection Function

The collection function is used to display the list of links that were created as a collection in the Ektron CMS400.NET Workarea. The ecmCollection function is highly customizable, allowing you to easily define how the collection data will be displayed on the Web page.

Shown here is the format of the ecmCollection function.

```
<%= ecmCollection(int id, String “displayFunction”) %>
```

This function is basically the same as the Collection function in ASP. See "Collection Function" on page 21-371 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it.

Collection Sample

Here is an example of the Collection function in an Ektron CMS400.NET template.

```
<tr>

<td>

<%= ecmCollection(24, “ecmTeaser”) %>

</td>

</tr>
```

XML Collection Function

The XML collection function wraps XML around the parameters of a list of content that's created as a collection in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the collection information. The ecmCollectionXML function allows you to easily define how the collection data appears on the Web page. Shown here is the format of the ecmCollection function.

<%= ecmCollectionXML (int id, boolean GetHtml) %>

This function is basically the same as the XML Collection function in ASP. See "XML Collection Function" on page 21-300 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

```
<tr>

<td>

<%= ecmCollectionXML(24, True) %>

</td>

</tr>
```

Random Content Function

The random content function is used to randomly display the content of a content block that belongs in a specified collection.

Displayed here is the format for the random content function

<%= ecmShowRandomContent (int collectionID, int xsltId) %>

This function is basically the same as the Random Content function in ASP. See "Random Content" on page 21-304 for details.

Random Summary Function

SImilar to the random content function, the random summary function is used to randomly display the summary of a content block that belongs in a specified collection.

Displayed here is the format for the random content function

<%= ShowRandomSummary (int collectionID) %>

This function is basically the same as the Random Summary function in ASP. See "Random Summary" on page 21-305 for details.

RSS Collection Function

The RSS collection function is used to create an XML list of links that were created as a collection in the Ektron CMS400.NET Workarea and display them in RSS Syndication.

Shown here is the JSP format of the ecmRssCollection function.

<%= ecmRssCollection (int id) %>

This function is basically the same as the RSS Collection function in ASP. See "RSS Collection Function" on page 21-298 for details.

Add Content

The add content function allows you to programmatically add a new content block to Ektron CMS400.NET without the need of logging in.

Here is the format for the add content function:

<%= ecmAddContent (String UserName, String Password, String Domain, String content_title, String content_comment, String ContentHtml, String SummaryHTML, String ContentLanguage, String FolderID, String GoLive, String EndDate, String MetaInfo) %>

This function is basically the same as the Add Content function in ASP. See "Add Content" on page 21-257 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

Add Content Example

The following is an example of the add content function in a template:.

```
<tr>
<td>
<%= ecmAddContent ("admin", "admin", "", "Content Title", "Comment", "This is
the <b>body</b> of the content.", "This is the <i>summary</i> for the
content.", "1033", "0", "", "", "") %>
</td>
</tr>
```

Content Block Function

The ecmContentBlock and ecmContentBlockEX functions are used to display a content block on an Ektron CMS400.NET Web page.

Shown here is the format for the ecmContentBlock function:

```
<%= ecmContentBlock (int id) %>
```

Here is the format for the ecmContentBlockEX function:

```
<%= ecmContentBlockEX (int id, String xslt, int OverrideId) %>
```

These function is basically the same as the Content Block functions in ASP. See "Content Block Function" on page 21-251 for details.

The only difference between the JSP function and the ASP one is the examples of implementing it. The JSP examples are below.

Static Content Block

```
<tr>
   <td>
      <%= ecmContentBlock(1) %>
   </td>
</tr>
```

Dynamic Content Block

```
<tr>
   <td>
      <%= ecmContentBlock($id) %>
   </td>
</tr>
```

XML Content Block

```
<tr>
    <td>
       <%= ecmContentBlockEx (13, “”, 1) %>
    </td>
</tr>
```

Form Function

The ecmFormBlock function displays an HTML form content block. This function has a parameter that lets you decide whether to have form tags added automatically or manually. The following is an example of form tags.

```
<form name="myform" action="#" onsubmit="return EkFmValidate(this);" method="post">

</form>
```

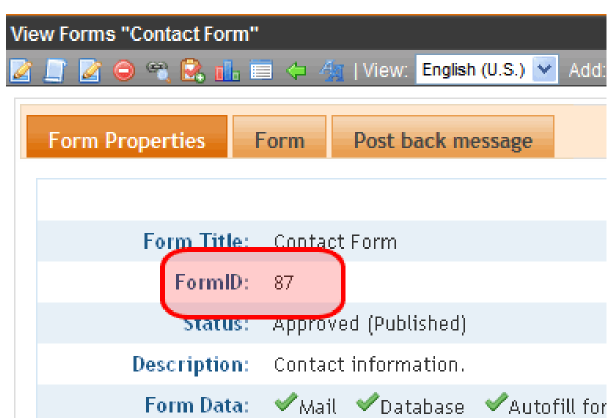
For more information about HTML forms, see ”Working with HTML Forms” on page 521.

Warning! If you create a template for an existing form content block, you must manually change its quicklink to point to the new template. This change does not occur automatically. This procedure is described in ”Updating Default Template for Multiple Quicklinks” on page 1226.

Here is the format for the ecmFormBlock function:

<%= ecmFormBlock (int id, boolean formTagReqd) %>

The ecmFormBlock function attributes are explained below.

Attribute	Description
id	The “id” argument represents the form’s ID number, visible when viewing the form from the View Form screen. 

Attribute	Description

formTagReqd	Allows form tags to be added automatically.
	This is an example of form tags.
	`<form name="myform" action="#" onsubmit="return EkFmValidate(this);" method="post">`
	`</form>`
	true = Add form tags automatically
	false = Add form tags manually

This function is basically the same as the Form function in ASP. See "Form Function" on page 21-307 for details.

The only differences between the JSP function and the ASP one are the formTagReqd parameter and the syntax for implementing it. The JSP example is below.

```
<tr>
      <td>
           <%= ecmFormBlock(1, true) %>
      </td>
</tr>
```

Language Select Function

This function lets a visitor to your Web site select a language in which to view the site. Here is what the function looks like when published on a Web page.

Shown here is the format of the ecmLanguageSelect function.

<%= ecmLanguageSelect() %>

This function is basically the same as the Show Site Language function in ASP. See "Show Site Language Function" on page 21-316 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it.

Login Function

This function is responsible for displaying the following buttons on the Web page.

Button	Name	Description
	Login	When user is not logged into Ektron CMS400.NET, this button appears. Click this button to let the user log in to the application.
	Logout	Once logged in, this button replaces the login button to allow the user to log out from the Ektron CMS400.NET Web site.
	Workarea	When logged in, this button appears under the logout button allowing the user to access their workarea.
	Preview On	Lets the user to preview the entire Web site as if all checked-in content was published.
	Preview Off	Turns off preview mode.

Shown here is the format of the ecmLogin function.

<%= ecmlogin() %>

This function is basically the same as the Login function in ASP. See "Login Function" on page 21-249 for details. The only difference is the syntax used to implement the function. This is listed below.

Login Function Example

```
<tr>
```

```
<td>
<%= ecmlogin() %>
</td>
</tr>
```

DHTML Menus

Ektron CMS400.NET's Menu feature lets users create and maintain a dropdown menu system for your Web site. The Menu feature lets you display menu options that link to content blocks, library assets, external hyperlinks and submenus.

To learn more about menus, see "Working with Menus" on page 1392.

Additional Documentation in Ektron Knowledge Base

This chapter explains how to implement standard menus that ship with Ektron CMS400.NET. Ektron's Web site also provides Knowledge Base articles that explain how to extend the standard menu features.

Displaying a Menu on a Web Page

GenerateMenu and DropMenu

Warning! The menu functions described below are only one example of how to implement menus. You can implement your own menu system using JavaScript.

Use the `GenerateNextGenMenu` and `DropNextGenMenu` custom functions to display a DHTML menu on a Web page. Place `GenerateNextGenMenu` once on the page to provide an infrastructure for `DropNextGenMenu`. Then, place `DropNextGenMenu` as needed to implement individual menus.

Follow these steps to display a menu on a Web template.

1. Place the following code directly after the page's `<body>` tag.

```
<%= ecmDHTML_GenerateNextGenMenu("menu id number") %=>
```

For example:

```
<%= ecmDHTML_GenerateNextGenMenu("1") %>
```

To display more than one menu, separate each id number with a comma. For example:

```
<%= ecmDHTML_GenerateNextGenMenu("1,2,3") %>
```

2. If the user clicks *text* to display the menu, place the following code within the template file where the text would appear.

<%= ecmDHTML_DropNextGenMenu menu ID number,"*text user clicks to display menu*" %>"

For example:

```
<%= ecmDHTML_DropNextGenMenu 1,"MyMenu1" %>
```

If the user clicks *a graphic* to invoke the menu, use this syntax:

```
<%= ecmDHTML_DropNextGenMenu menu ID number, '<img src=graphic file name>'
%>
```

For example:

```
<%= ecmDHTML_DropNextGenMenu 1,'<img src=mymenugraphic.jpg>' %>
```

Customizing the Menu's Appearance

You can customize a menu's appearance, such as the font style, color, and size. So, you have the flexibility to coordinate a menu with the design your Web site.

To customize a menu in Ektron CMS400.NET, you can change the ek_Menu.js file.

ek_Menu.js

You can change the look and feel of a menu by changing the ek_menu.js file. If you used the default settings when installing Ektron CMS400.NET, this file is in `webroot/siteroot/Workarea/java/`. For a description of the ek_menu.js file, see "ek_Menu.js" on page 21-319.

XML Menu Function

The ecmGetMenuXML function wraps XML around the properties of a menu created in the Ektron CMS400.NET Workarea. Once created you can use the XML to display the menu. The ecmGetMenuXML function allows you to easily define how the menu data appears on the Web page.

<%= ecmGetMenuXML(int id) %>

This function is basically the same as the XML Menu function in ASP. See "XML Menu" on page 21-321 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

```
<%= ecmGetMenuXML(1) %>
```

Metadata Function

The metadata function is used to display the metadata for one or more content blocks in the Ektron CMS400.NET Web site. Inserting this custom function allows you to generate the list of metadata that is edited by the authors, and insert it in the source of the Web page. Shown below is an example of what the metadata custom function looks like:

<%= ecmMetadata(String itemlist, java.lang.object spare1) %>

This function is basically the same as the Metadata function in ASP. See "Metadata Function" on page 21-311 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP examples are below.

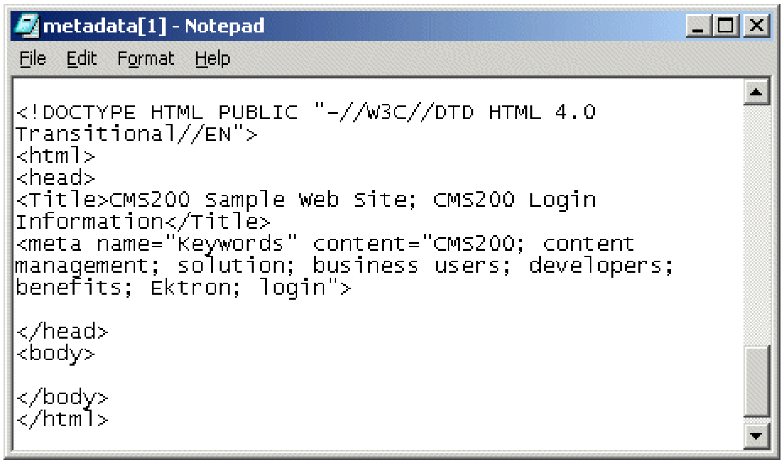
To include both content blocks' metadata in the web page, an ecmMetadata call would look like this.

```
<html>
<head>
<%= ecmMetadata ("[1][2;Title,Content-Type]", "") %>
(rest of head)
</head>
<body>
(rest of web page document)
</body>
</html>
```

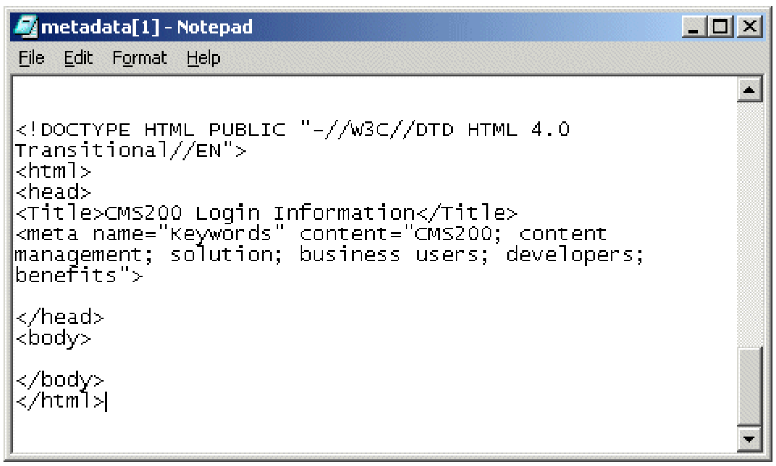
In the above example the ecmMetadata call is contained in the <head> of the HTML document (since all HTML metadata is required to exist there). Once the Web page is viewed the Web page source will contain the following information:

```
<html>
<head>
<Title>Welcome to Our Home Page</Title>
<meta name="Keywords" content= Home; page; company; Welcome; Announce;
product; widget">
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
(rest of head)
</head>
<body>
(rest of web page document)
</body>
</html>
```

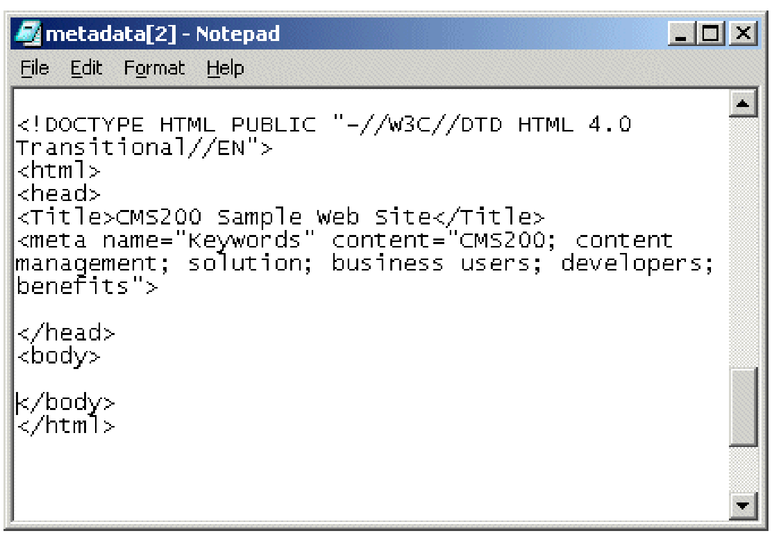
```
<%= ecmMetaData ("[1][2]","") %>
```




```
<%= ecmMetaData ("[1;title][2;keywords]","") %>
```




```
<%= ecmMetaData ("[1][2;title,keywords]","") %>
```



Search Function

The search function is used to display a text box with a search button on the template. When seen on the template on the Web page, a user can enter text and click the search button to search through all the content on the Web site.

Ektron has created two search functions:

- ecmSearch
- ecmSearchNoFormTag

Both functions have the same parameters and perform the same search. The only difference is ecmSearch automatically inserts form tags, ecmSearchNoFormTag does not.

The following is an example of form tags.

```
<form name="ecmsearch" method="post" action='search-display.asp'>
</form>
```

When using ecmSearch, form tags are added automatically. When using ecmSearchNoFormTag you need to add the tags manually

Here is the format for the search function. You can interchange ecmSearch and ecmSearchNoFormTag when using this function.

```
<%= ecmSearch(java.lang.String startingFolder, boolean recursive, java.lang.String target, int textBoxSize, int maxCharacters, java.lang.String buttonImageScr, java.lang.String buttonText, java.lang.String fontFace, java.lang.String fontColor, java.lang.String fontSize, boolean horizontal, java.lang.Object spare1) %>
```

This function is basically the same as the Search function in ASP. See "Search Functions (ASP)" on page 21-261 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

Search Function Example

```
<TR>
 <TD>
  <%= ecmSearch("\\",true,"search-
display.jsp",25,200,"","Search","Verdana","#808080","2",false,"") %>
 </TD>
</TR>
```

Search Display Function

The search display custom function creates the area where all the search results are shown after the search has been executed.

Here is the format of the ecmSearchDisplay function:

<%= ecmSearchDisplay(int maxNumber, String styleInfo, boolean ShowDate, boolean showSummary) %>

This function is basically the same as the Search Display function in ASP. See "Search Display Function" on page 21-270 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

Search Display Function Example

```
<tr>
   <td>
      <%= ecmSearchDisplay(0,"",true,true) %>
   </td>
</tr>
```

List Summary Function

The list summary function is used to display a list of content summaries on a Web page. Here is the format of the list summary function.

<%= ecmListSummary (String folder, boolean recursive, boolean showSummary, String styleInfo, String OrderBy, String showInfo, int maxNumber, String objType, String optionList, String summaryType) %>

This function is basically the same as the List Summary function in ASP. See "List Summary Function" on page 21-274 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

List Summary Example

```
<TR>
<TD>
<%= ecmListSummary ("\Marketing\News",false,true,"",
"Title,asc","DateModified",0,"","","") %>
</TD>
```

```
</TR>
```

XML List Summary Function

The XML List Summary function wraps XML around the properties of a list of content, created as a list summary in the Ektron CMS400.NET Workarea. Once created, you can use the XML to display the list summary information. The ecmListSummaryXML function allows you to easily define how the list summary data appears on the Web page.

<%= ecmListSummaryXML (String Folder, int Recursive, String OrderBy, int MaxNumber, String ObjType, String SummaryType) %>

This function is basically the same as the List Summary XML function in ASP. See "XML List Summary Function" on page 21-280 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

```
<%= ecmListSummaryXML("\\CMS400Developer\\",0,"Title,asc",0,"folder",""); ?>
```

RSS List Summary Function

The RSS summary function is used to create an XML list of content summaries for RSS Syndication. Shown here is the format of the RSS list summary function:

<%= ecmRssSummary (java.lang.String Folder, boolean Recursive, java.lang.String OrderBy, int MaxNumber) %>

This function is basically the same as the RSS Summary function in ASP. See "RSS Summary Function" on page 21-289 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

```
<%= ecmRssSummary("\\CMS400Developer\\", false, "Title,asc", 0) %>
```

Single Summary Function

The single summary function is used to display the summary of one content block in the Ektron CMS400.NET Web site, instead of a list of all the summaries in a content folder. Seen below is the single summary function:

<%= ecmRssSummary (int contentID, boolean showSummary, java.lang.String showInfo,

java.lang.String styleInfo, java.lang.String spare1) %>

This function is basically the same as the Single Summary function in ASP. See "Single Summary Function" on page 21-286 for details.

The only difference between the JSP function and the ASP one is the syntax for implementing it. The JSP example is below.

Single Summary Example

```
<TR>
   <TD>
       <%= ecmSingleSummary ("14",true,"","","") %>
   </TD>
</TR>
```

Creating Your Own Widgets

What's a Widget?

Widgets are .NET user controls that allow a site visitor to perform a function on a Web page. They are small portions of code that developers can write once and then be reused multiple times by content authors across a site.

For example, a widget can provide a simple calculator or a stock ticker. Or, it can display significant information from Ektron CMS400.NET, such as a content block or a List Summary.

Widgets at AcmeBooks.com

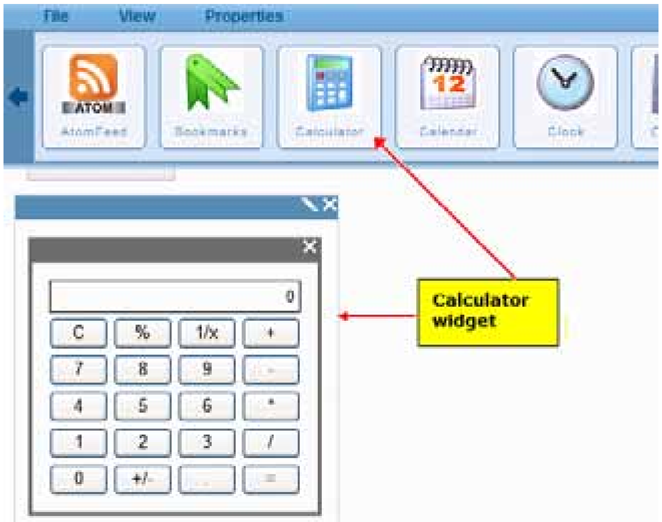
While this definition adds some clarity to what widgets are, the CIO and the Web team still have a lot of questions about how to use widgets, and how they are created.

So, let's get started with using and building widgets.

Using Widgets on a PageBuilder Page

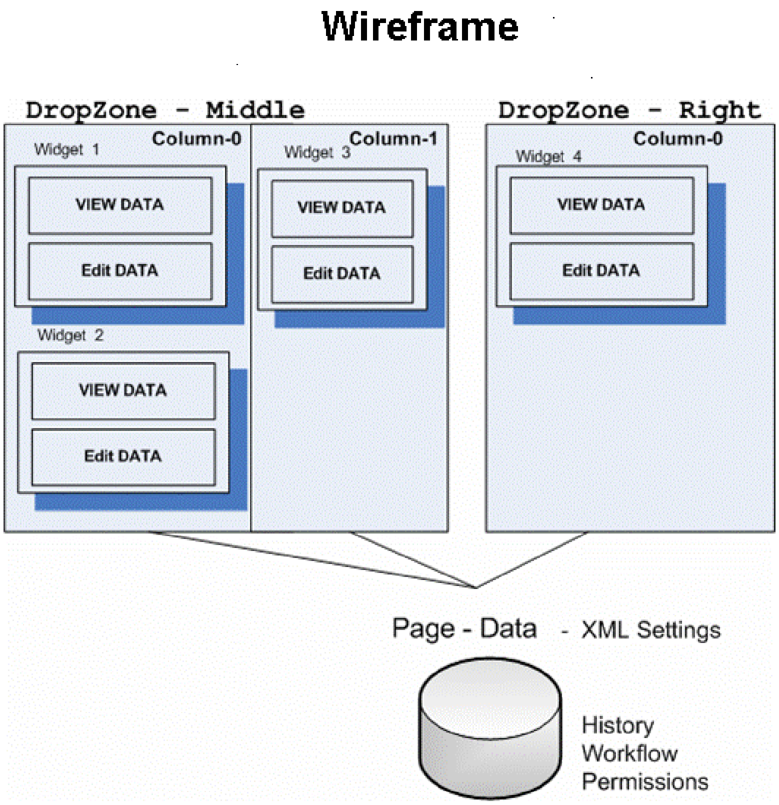
After widgets are integrated into CMS400.NET, users (like the Marketing team) can add them to a *Dashboard* in their profile page or a Community Group's page. They can also drag-and-drop these building blocks onto a PageBuilder page (as shown below).

Note: Over 30 standard widgets included in Ektron CMS400.NET. See "Standard Widgets" on page 21-404



Widgets, DropZones, and Pages

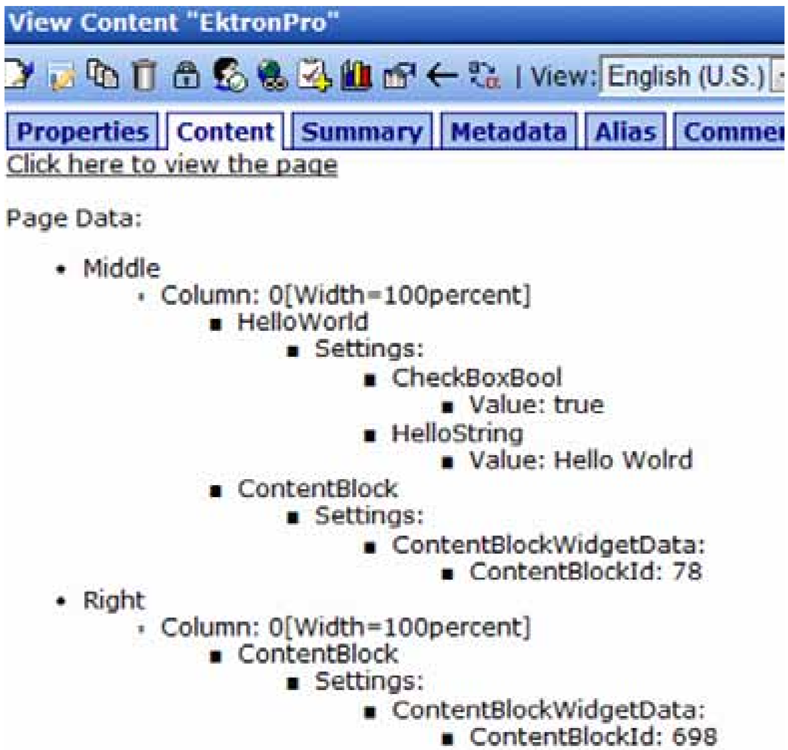
The relationship between a wireframe, dropzones, and widgets is shown below.



The above illustration of a wireframe depicts how:

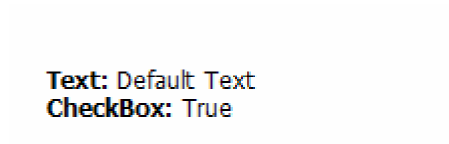
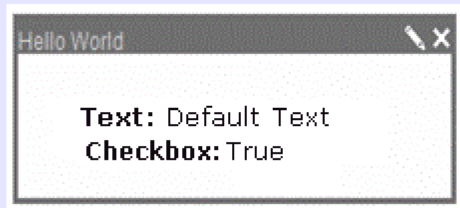
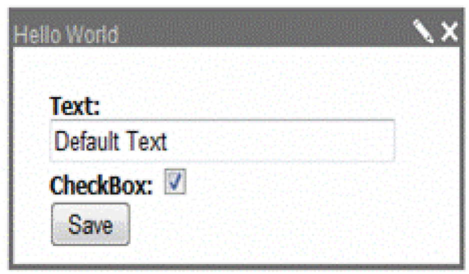
- A wireframe can have several dropzones
- Each dropzone can have several columns
- Each column can have several widgets

Ektron CMS400.NET stores each page's data (a serialized XML string) as a type of content within the Ektron CMS400.NET Workarea. The string is stored like other content types, such as HTML content and XML Smart Forms. The following illustration shows a widget's page data within the Workarea.



Widget States

Widgets placed on a PageBuilder page have three possible combinations of states.

Page mode	Widget mode	State	Illustration
View	View	Widget content appears on page	
Edit	View	Widget can be dragged/dropped, moved, deleted	
Edit	Edit	User defines widget information	

In a widget's user control file, you create an `asp:MultiView` element that determines available actions when a widget is in View mode and Edit mode. See sample below:

```
<%@ Control Language="C#" AutoEventWireup="true" CodeFile="HelloWorld.ascx.cs"
Inherits="widgets_HelloWorld" %>
<%@ Register Assembly="System.Web.Extensions, Version=1.0.61025.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
Namespace="System.Web.UI" TagPrefix="asp" %>
<asp:MultiView ID="ViewSet" runat="server" ActiveViewIndex="0">
<asp:View ID="View" runat="server">
<!-- You Need To Do .............................. -->
<asp:Label ID="HelloTextLabel" runat="server"></asp:Label><br />
<asp:Label ID="CheckBoxLabel" runat="server"></asp:Label>
<!-- End To Do .............................. -->
</asp:View>
<asp:View ID="Edit" runat="server">
<div id="<%=ClientID%>_edit">
<!-- You Need To Do .............................. -->
<asp:TextBox ID="HelloTextBox" runat="server" Style="width: 95%"> </asp:TextBox><br />
<asp:CheckBox ID="MyCheckBox" runat="server" Checked="false" /> <br /><br />
<!-- End To Do .............................. -->
<asp:Button ID="CancelButton" runat="server" Text="Cancel" OnClick="CancelButton_Click"
/>   
<asp:Button ID="SaveButton" runat="server" Text="Save" OnClick="SaveButton_Click" />
</div>
</asp:View>
</asp:MultiView>
```

Creating a Widget

A widget consists of three file types.

- .ascx - contains a widget's source code
- .ascx.cs or .vb - contains widget's codebehind
- .ascx.jpg - image that represents a widget in the widget selection tool

Note: Your widget might use additional files, such as .css or .js files. Ektron recommends placing these files in a folder within
`site root`/widgets, and giving the folder the same name as the custom widget.

When creating a widget, you save files to the `site root/widgets` folder. This folder path is defined in the site root/web.config file, so if Pete needs to change the folder name or path, he must update the following web.config `ek_widgetPath` element:

```
<add key="ek_widgetPath" value="Widgets/" /> .
```

The "Hello World" Widget

To get a basic understanding of how to create a widget, Pete will create a simple widget, which will reside in the `site root/widgets` folder. This widget is based on the Hello World widget that is installed with the Developer Sample site. It uses the following files:

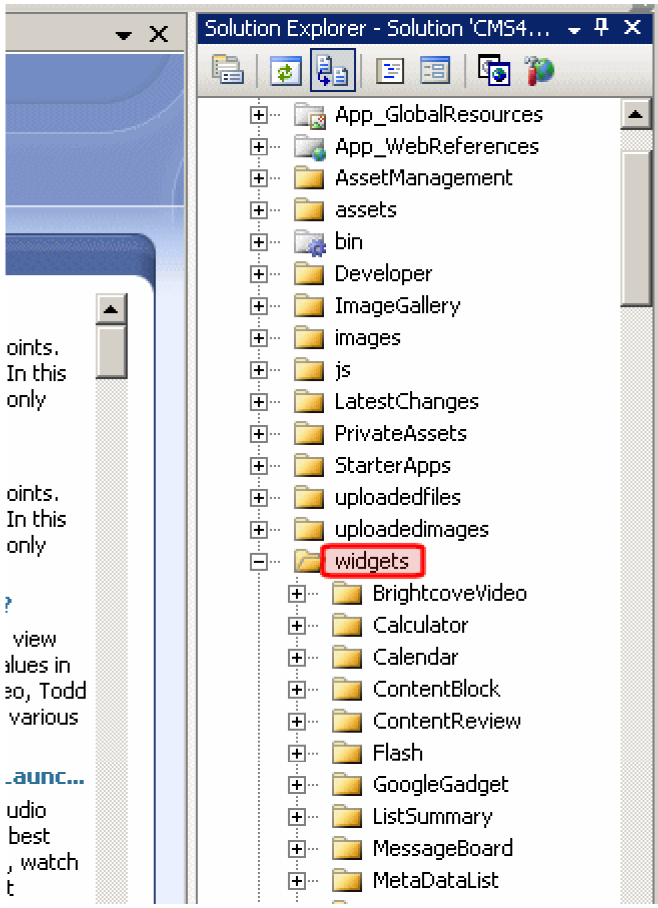
- HelloWorld.ascx - user control file
- HelloWorld.ascx.cs - user control codebehind file
- HelloWorld.ascx.jpg - image that represents this control on the widget menu

Pete will complete these tasks to create a widget.

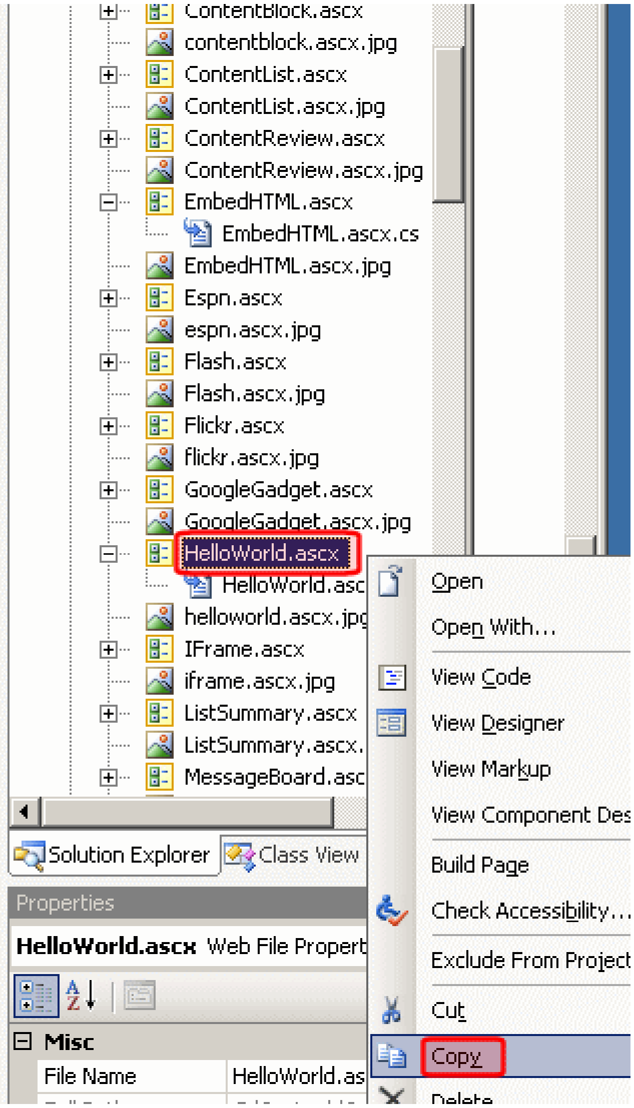
- "Copy, Paste and Rename HelloWorld.ascx and HelloWorld.ascx.jpg" on page 21-390
- "Update the Class Names in the New Files" on page 21-395
- "Add Widget in Ektron CMS400.NET Workarea " on page 21-395

Copy, Paste and Rename HelloWorld.ascx and HelloWorld.ascx.jpg

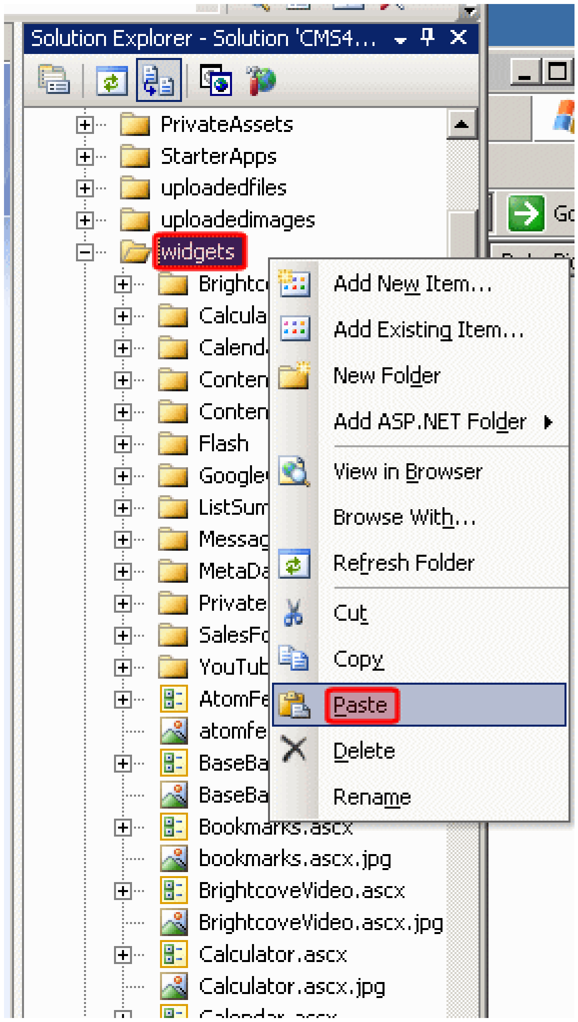
1. Open your Web site in Visual Studio.
2. In the Visual Studio Solution Explorer, open the `widgets` folder.



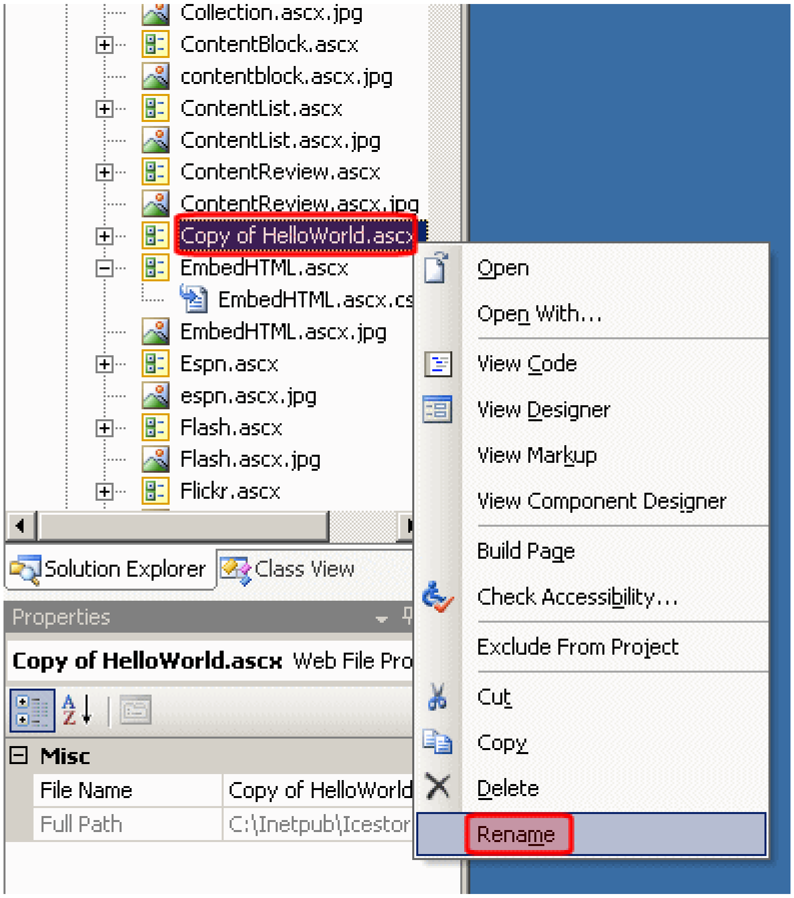
3. Within that folder, scroll down to and select HelloWorld.ascx.



4. Right click the mouse and select Copy.
5. Scroll up to the `widgets` folder.
6. Right click the mouse and select Paste.



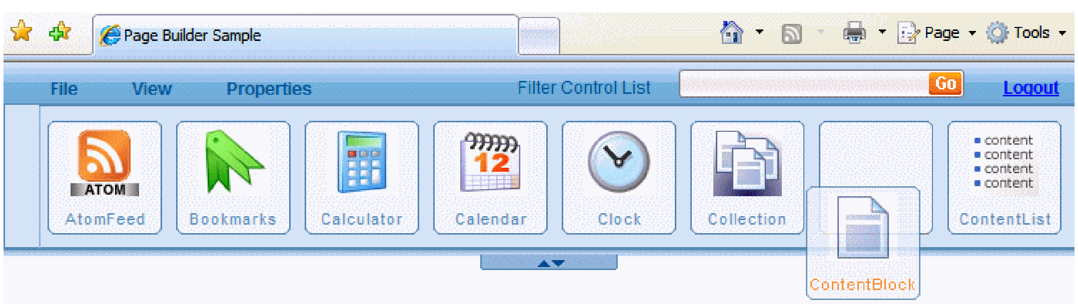
7. Scroll down until you see `Copy of HelloWorld.ascx`.
8. Right click the mouse and select Rename.



9. Rename the file `new_widget.ascx`. Notice that Visual Studio also renames the codebehind file to `new_widget.ascx.cs`.

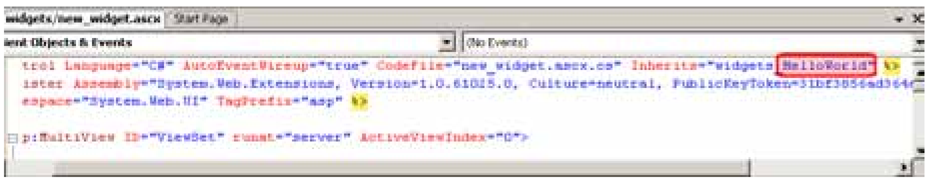
Note: The image file is 48 x 48 pixels and 72 dpi

10. Copy, paste, then rename the `helloworld.ascx.jpg` file to `new_widget.ascx.jpg`. Ektron CMS400.NET administrators (like Grace) and content authors (like the Marketing team) use a widget's image to select it, as shown below.

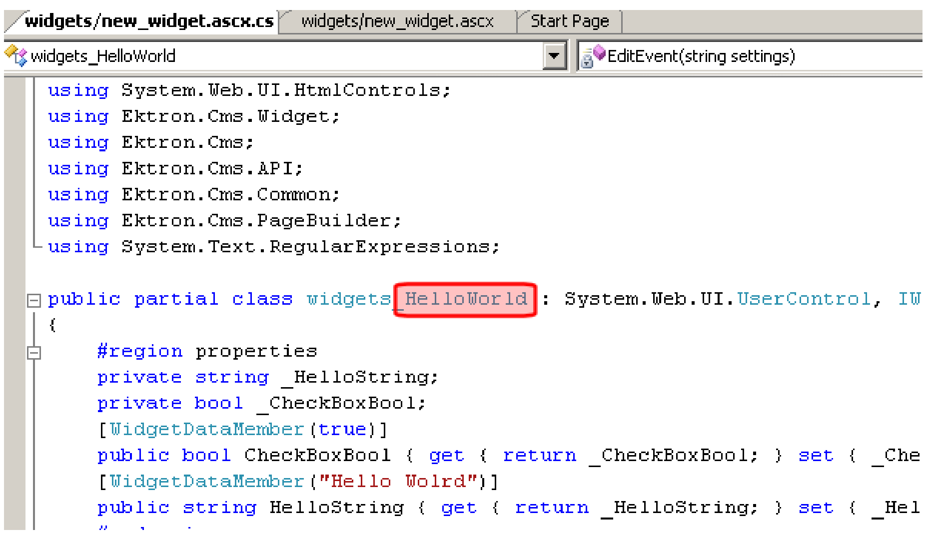


Update the Class Names in the New Files

1. Open new_widget.ascx.
2. On the first line of that file, replace the reference to `HelloWorld` (circled below) with `new_widget`.



3. Open the codebehind file, `new_widget.ascx.cs`.
4. Again, replace the class `HelloWorld` with `new_widget`.



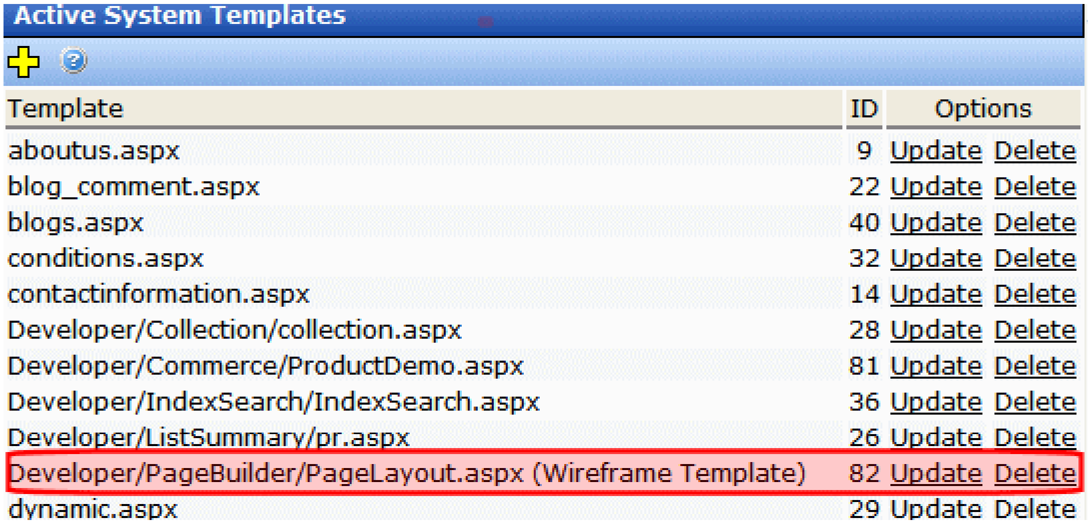
5. Save `new_widget.ascx` and `new_widget.ascx.cs`.
6. Check both files for errors by clicking Build > Build Page. Correct any errors before proceeding.

Add Widget in Ektron CMS400.NET Workarea

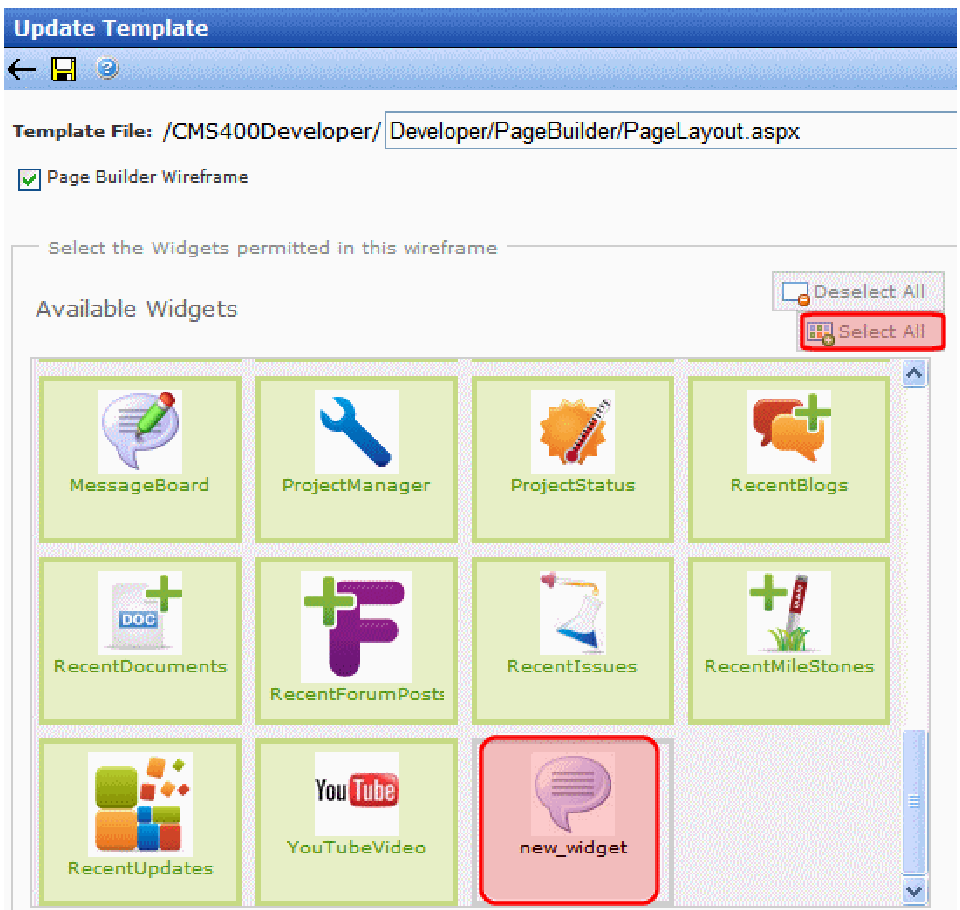
1. Open the Ektron CMS400.NET Workarea.
2. Open Settings > Configuration > Personalizations > Widgets.
3. Click the Synchronize button ( ).
4. You see the new user control file, `new_widget.ascx`, at the bottom of the screen.

```
RSSFeed.ascx
SalesForceChart.ascx
StockTicker.ascx
TextBox.ascx
Weather.ascx
YouTube.ascx
ZipCode.ascx
MetaDataList.ascx
Flash.ascx
BaseBallEspnMlb.ascx
BrightcoveVideo.ascx
ContentReview.ascx
EmbedHTML.ascx
Espn.ascx
GoogleGadget.ascx
MessageBoard.ascx
ProjectManager.ascx
ProjectStatus.ascx
RecentBlogs.ascx
RecentDocuments.ascx
RecentForumPosts.ascx
RecentIssues.ascx
RecentMileStones.ascx
RecentUpdates.ascx
YouTubeVideo.ascx
new_widget.ascx
```

5. Open Settings > Configuration > Template Configuration.
6. Find the template that you created in "Building Pages" on page 6-5, PageLayout.aspx. Or, any Wireframe template that you are using to create a PageBuilder page.



7. Click Update.
8. On the Update Template screen, scroll down until you see the new widget.



9. Click the Select All button (circled above).
10. Click Save ( ).

Note: For directions on creating a PageBuilder page, see "Steps to Creating a "PageBuilder" Page" on page 6-7

11. Go to Content and select a folder that has a PageBuilder page.
12. Edit the PageBuilder page.
13. Open the widget menu.
14. Make sure your new widget appears on the menu.

Now that you have created a new widget and enabled it in the Ektron CMS400.NET Workarea, you can begin to customize it.

The next sections explain details about the files you copied and renamed above.

- "Understanding the User Control (.ascx) File" on page 21-398
- "Understanding the Codebehind (.ascx.cs) File" on page 21-399
- "Creating the Codebehind (.ascx.cs) File"See "Copy, paste, then rename the helloworld.ascx.jpg file to new_widget.ascx.jpg. Ektron CMS400.NET administrators (like Grace) and content authors (like the Marketing team) use a widget's image to select it, as shown below." on page 21-394"Copy, paste, then rename the helloworld.ascx.jpg file to new_widget.ascx.jpg. Ektron CMS400.NET administrators (like Grace) and content authors (like the Marketing team) use a widget's image to select it, as shown below." on page 21-394

Understanding the User Control (.ascx) File

Here is the new_widget.ascx file that Pete uses as the basis of his widget.

```
<%@ Control Language="C#" AutoEventWireup="true" CodeFile="new_widget.ascx.cs"
Inherits="widgets_new_widget" %>
<%@ Register Assembly="System.Web.Extensions, Version=1.0.61025.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
Namespace="System.Web.UI" TagPrefix="asp" %>

<asp:MultiView ID="ViewSet" runat="server" ActiveViewIndex="0">

<asp:View ID="View" runat="server">
<!-- You Need To Do .............................. -->
<asp:Label ID="TextLabel" runat="server"></asp:Label><br />
<asp:Label ID="CheckBoxLabel" runat="server"></asp:Label>
<!-- End To Do .............................. -->
</asp:View>

<asp:View ID="Edit" runat="server">
<div id="<%=ClientID%>_edit">
<!-- You Need To Do .............................. -->
```

```
<asp:TextBox ID="TextTextBox" runat="server" Style="width: 95%"> </asp:TextBox><br />
<asp:CheckBox ID="MyCheckBox" runat="server" Checked="false" /> <br />
<!-- End You Need To Do ............................. -->
<asp:Button ID="CancelButton" runat="server" Text="Cancel" OnClick="CancelButton_Click"
/>
<asp:Button ID="SaveButton" runat="server" Text="Save" OnClick="SaveButton_Click" />
</div>
</asp:View>
</asp:MultiView>
```

Pete notices the following elements of the file.

- The `asp:MultiView` element declares that the control has two possible modes: View and Edit.

  ```
  <asp:MultiView ID="ViewSet" runat="server" ActiveViewIndex="0">
  ```

  - in *view* mode, Pierre and the marketing team can see the control but not change it.
  - in *edit* mode, Pete's developers can change the control's content and properties.
- Between the `multiview` tags is information about the control in view mode. It has two fields: one is a text field, and the other is a check box.

```
<asp:View ID="View" runat="server">
 <asp:Label ID="HelloTextLabel" runat="server"></asp:Label><br />
 <asp:Label ID="CheckBoxLabel" runat="server"></asp:Label>
</asp:View>
```

- Also between the `multiview` tags is information about the control in edit mode. In edit mode, a text box, a check box, and a Save button appear. The text box and check box collect end-user input, and the Save button saves that input to the database.

```
<asp:View ID="Edit" runat="server">
<div id="<%=ClientID%>_edit">
 <!-- You Need To Do ............................. -->
 <asp:TextBox ID="HelloTextBox" runat="server" Style="width: 95%"> </asp:TextBox><br />
 <asp:CheckBox ID="MyCheckBox" runat="server" Checked="false" /> <br />
<!-- End You Need To Do ............................. -->
 <asp:Button ID="CancelButton" runat="server" Text="Cancel" OnClick="CancelButton_Click"
/>
 <asp:Button ID="SaveButton" runat="server" Text="Save" OnClick="SaveButton_Click" />
```

Understanding the Codebehind (.ascx.cs) File

Next, Pete reviews the codebehind file, `new_widget.ascx.cs`.

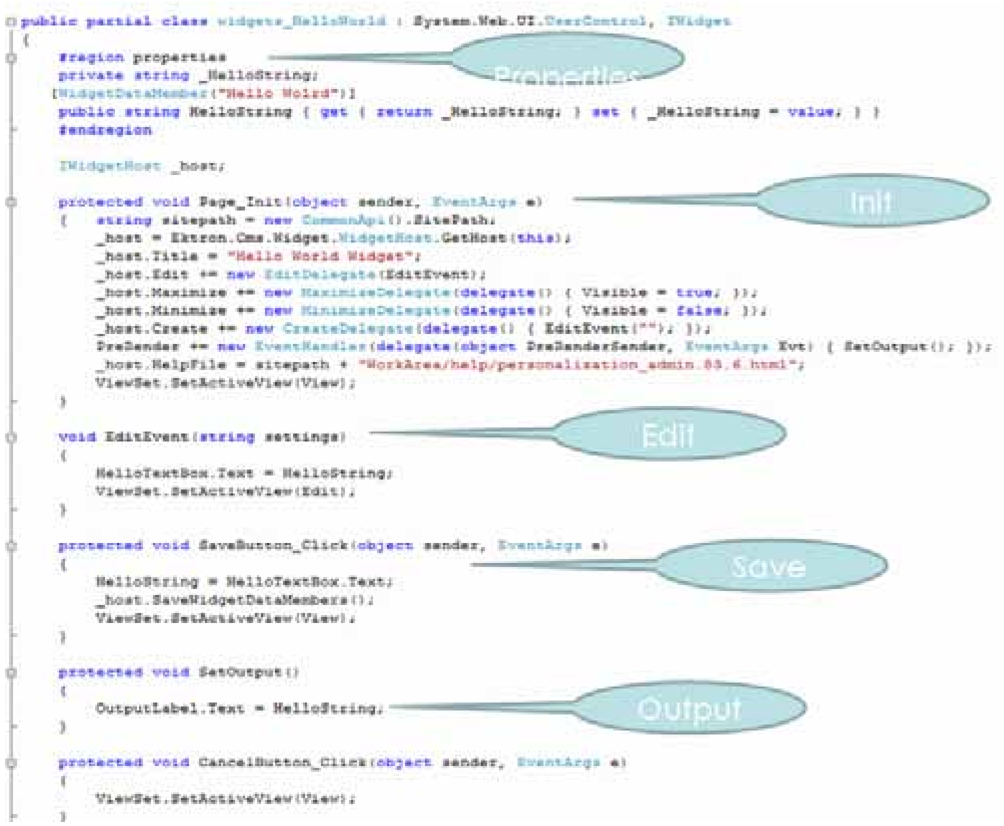
- He see a series of `using` statements at the top of the file, noticing the Ektron ones in particular:

```
using Ektron.Cms.Widget;
using Ektron.Cms;Marketing team
using Ektron.Cms.API;
using Ektron.Cms.Common;
using Ektron.Cms.PageBuilder;
using System.Text.RegularExpressions;
```

- Pete then notes a widget host class, which inherits the `system.Web.UI.UserControl` and IWidget classes. *****

```
public partial class widgets_new_widget : System.Web.UI.UserControl, IWidget
```

The following image summarizes the remaining elements of the codebehind file.



- In the next line, he sees the widget's properties: a string for the text field, and a boolean for the check box. Here you define the variables and their type. Possible types are string, integer, long and date.

```
#region properties
private string _HelloString;
private bool _CheckBoxBool;
[WidgetDataMember(true)]
public bool CheckBoxBool { get { return _CheckBoxBool; } set { _CheckBoxBool = value; }
}
[WidgetDataMember("Hello Wolrd")]
public string HelloString { get { return _HelloString; } set { _HelloString = value; } }
#endregion
```

- He sees a widget host declaration.

```
private IWidgetHost _host;
```

- And the widget's `page_init` events.

```
protected void Page_Init(object sender, EventArgs e)
{
_host = Ektron.Cms.Widget.WidgetHost.GetHost(this);
_host.Title = "Hello World Widget";
_host.Edit += new EditDelegate(EditEvent);
_host.Maximize += new MaximizeDelegate(delegate() { Visible = true; });
_host.Minimize += new MinimizeDelegate(delegate() { Visible = false; });
```

```
_host.Create += new CreateDelegate(delegate() { EditEvent(""); });
PreRender += new EventHandler(delegate(object PreRenderSender, EventArgs Evt) {
SetOutput(); });
ViewSet.SetActiveView(View);
}
```

Comments on the above code

- The `gethost` method returns a reference to the container widgethost for this widget. This is the case in both Personalization and PageBuilder.
- The `Title` property is the title of this widget. By setting it in `page_init` for the widget, we inform the host what text to put in the title bar above the widget. This works in both PageBuilder and Personalization.
- The events below `host.Title` are raised by the widgethost. It's up to the widget to subscribe to them. In all cases, if we don't subscribe to them, the icons don't show up. This is a method of attaching widget code to button clicks and other events that occur outside the widget.
- For `PreRender`: Ektron CMS400.NET renders the contents of this widget on pre-render, thus ensuring a single render event. Another option is to call `SetOutput` on the Load event, but you can only do that if the widget is not in edit mode currently.
- The final line sets the view to display mode.

- He notices the declaration of the widget's `edit` events.

```
void EditEvent(string settings)
{
string sitepath = new CommonApi().SitePath;
ScriptManager.RegisterClientScriptInclude(this, this.GetType(), "widgetjavascript",
sitepath + "widgets/widgets.js");
ScriptManager.RegisterOnSubmitStatement(this.Page, this.GetType(), "gadgetescapehtml",
"GadgetEscapeHTML('" + HelloTextBox.ClientID + "');");
HelloTextBox.Text = HelloString;
MyCheckBox.Checked = CheckBoxBool;
ViewSet.SetActiveView(Edit);
}
```

Comments on the above code:

Warning! You must register JavaScript and cascading style sheet (css) instructions in an external file. See "Working with JavaScript and Cascading Style Sheets" on page 6-39

- The Edit event is triggered by the widgethost, and since Pete subscribed to it already, it calls the delegate here.
- `sitepath` is used to ensure that the correct path for included files is used across installations.
- By calling the `scriptmanager` to include the script, Pete ensures it works inside update panels. Alternatively, he can use `Ektron.Cms.Api.Js.RegisterJSInclude`
  `ScriptManager.RegisterOnSubmitStatement(this.Page, this.GetType(), "gadgetescapehtml", "GadgetEscapeHTML('" + HelloTextBox.ClientID + "');");`
- The `onsubmitstatement` is JavaScript that is run when the widget is submitted. It calls escape html, which cleans the submitted text to avoid any XSS.

- Pete notices the editing fields, so users can see the existing data.

```
HelloTextBox.Text = HelloString;

MyCheckBox.Checked = CheckBoxBool;

ViewSet.SetActiveView(Edit);
```

- He sees the widget's `save` events.

```
protected void SaveButton_Click(object sender, EventArgs e)
{
HelloString = ReplaceEncodeBrackets(HelloTextBox.Text);
CheckBoxBool = MyCheckBox.Checked;
_host.SaveWidgetDataMembers();
ViewSet.SetActiveView(View);
}
```

- He notes the widget's `SetOutput` events.

```
protected void SetOutput()
{
HelloTextLabel.Text = HelloString; // client javascript remove brackets, server side
adds back
CheckBoxLabel.Text = CheckBoxBool.ToString();
}
```

- He notes the widget's `Cancel` events.

```
protected void CancelButton_Click(object sender, EventArgs e)
{
ViewSet.SetActiveView(View);
}
```

- Finally, he reviews the encoding of the greater and less than signs.

```
protected string ReplaceEncodeBrackets(string encodetext)
{
encodetext = Regex.Replace(encodetext, "&lt;", "<");
encodetext = Regex.Replace(encodetext, "&gt;", ">");
return encodetext;
}
```

Removing a Widget from the Workarea

At some point, the AcmeBooks.com Web team will need to remove a widget from use. To do this, Grace deletes the widget's files from the `site root/widgets` folder. Next, she navigates to Settings > Configuration > Personalizations > Widgets and clicks Synchronize ( ).

The widget is removed from the list of widgets, as well as from the Dashboard of any users and community groups.

Final Assessment from the CIO

Now, the CIO of AcmeBooks.com has a clear understanding of how PageBuilder works, and how widgets are created and placed on pages.

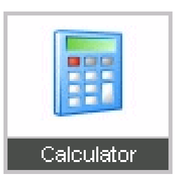
It's clear to her that Ektron CMS400.NET's PageBuilder will greatly enhance the company's Web presence, and allow the Marketing team to respond to changing market conditions and quickly launch and communicate promotions on the AcmeBooks.com Web site.

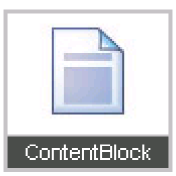
She is also pleased that PageBuilder will satisfy the company's Web site developers. No longer will they have to deal with numerous daily requests for content changes from Marketing. And Grace is happy because administering PageBuilder and widgets within the CMS is a simple, straight-forward process.

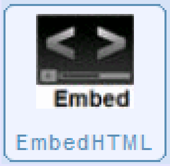
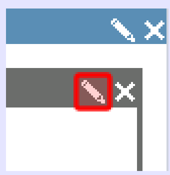
The future looks bright at AcmeBooks.com thanks to Ektron CMS400.NET and PageBuilder.

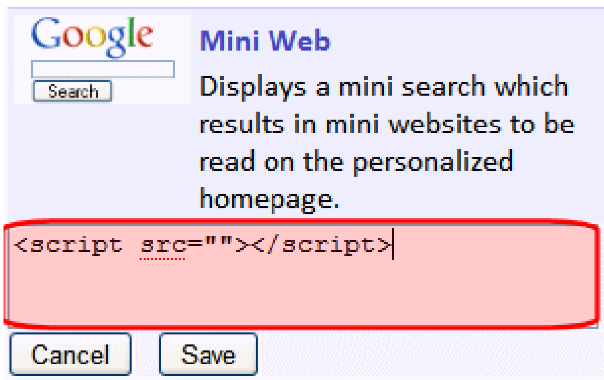
Standard Widgets

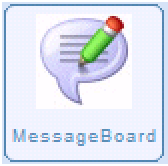
Ektron CMS400.NET installs several standard widgets to the <webroot>/<siteroot>/Widgets/ folder. Information about them is below.

Widget	Description	Files
Atom Feed 	Lets user enter path to an Atom Publishing Protocol feed. Also lets user limit the number of feed results.	AtomFeed.ascx AtomFeed.ascx.cs atomfeed.ascx.jpg and Files in widgets/Calendar
BaseBall ESPN 	Displays latest news about the baseball team selected by editing the widget. Provided by ESPN.	BaseBallEspnMlb.ascx BaseBallEspnMlb.ascx.cs BaseBallEspnMlb.acx.jpg
Bookmarks 	Lets user create a list of URLs by entering each one's web address and title.	Bookmarks.ascx Bookmarks.ascx.cs bookmarks.ascx.jpg
BrightCove Video 	Plays any BrightCove video	BrightCoveVideo.ascx BrightCoveVideo.ascx.cs BrightCoveVideo.ascx.jpg and Files in widgets/BrightCoveVideo
Calculator 	Provides a calculator	Calculator.ascx Calculator.ascx.cs Calculator.ascx.jpg and Files in widgets/Calculator
Calendar	Displays a calendar. A user can add events to any day and time.	Calendar.ascx Calendar.ascx.cs

Widget	Description	Files
		Calendar.ascx.jpg and Files in widgets/Calendar
Clock 	Provides a clock that displays time in the current time zone.	Clock.ascx Clock.ascx.cs clock.ascx.jpg
Collection 	Displays a collection. The user selects a Collection ID. The user can also define - the number entries per page - if paging is enabled - if teaser information appears - if icons are included	Collection.ascx Collection.ascx.cs Collection.ascx.jpg
ContentBlock 	Lets user enter a content ID and display that content in the Widget. Alternatively, user can create new HTML content from the widget.	ContentBlock.ascx ContentBlock.ascx.cs contentblock.ascx.jpg and Files in widgets/ContentBlock
Content List 	Displays a list of content blocks. In contrast to a List Summary, where content must be in a specified folder, the ContentList control displays content from any Ektron CMS400.NET folder. The user can also define - if teaser information appears - if icons are included - the content's sort criterion (such as title, last modified date) - Sort direction	ContentList.ascx ContentList.ascx.cs ContentList.ascx.jpg
Content Review 	Places a ContentReview server control on the page. This control allows site visitors to rate and review the current page. For more information, see .	ContentReview.ascx ContentReview.ascx.cs ContentReview.ascx.jpg and Files in widgets/ContentReview

Widget	Description	Files
EmbedHTML 	Inserts a browser plugin into your page. The `<embed>` tag also lets you determine information about the plugin, such as: - source of plugin to be played - width - height - allow full screen (boolean) - allow script access (boolean) Examples of sites that provide `embed` code are YouTube.com, BrightCove, and hulu.com. See example from hulu.com below.	EmbedHTML.ascx EmbedHTML.ascx.cs EmbedHTML.ascx.jpg
		
ESPN 	Displays selected ESPN news feed. To select a feed, click Edit button (circled below) and click a feed. 	espn.ascx espn.ascx.cs espn.ascx.jpg
Flash 	Displays a selected flash file which resides in Ektron CMS400.NET. You can also set the display's height and width. See Also:	Flash.ascx Flash.ascx.cs Flash.ascx.jpg and Files in widgets/Flash
Flickr 	Display Flickr's Most Recent or Most Interesting photos. The user also can select the number of rows and columns for the image display. See Also:	Flickr.ascx Flickr.ascx.cs flickr.ascx.jpg and Files in widgets/Flickr

Widget	Description	Files
GoogleGadget 	Gadgets designed for an IGoogle page. By default, Ektron supplies 5 Google gadgets. To insert another Google gadget, follow these steps. 1. Drop a Google gadget widget. 2. Click the pencil to enter edit mode. 3. Open a new tab. 4. Go to http://www.google.com/ig/directory?synd=open&hl=en-US&gl=US&cat=all. 5. Find the gadget you want to insert. 6. Click Add to your Web page. 7. Click Get the code. 8. Copy the code. 9. Return to the PageBuilder page. 10. Paste the code into the bottom of the Google widget you dropped in Step 1.  11. Click Save.	GoogleGadget.ascx GoogleGadget.ascx.cs GoogleGadget.ascx.jpg and Files in widgets/GoogleGadget
HelloWorld 	Very simple widget. Created by Ektron to help developers understand how to create their own widgets.	HelloWorld.ascx HelloWorld.ascx.cs HelloWorld.ascx.jpg
iFrame 	Lets user enter a path to a Web page or an item on the Web page.	IFrame.ascx IFrame.ascx.cs iframe.ascx.jpg

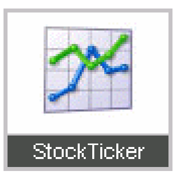
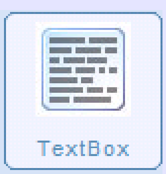
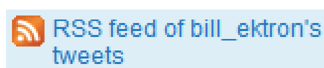
Widget	Description	Files
List Summary 	Displays an Ektron List Summary, a list of certain types of content in a selected folder. Optionally, the display can include - number of items to display on the page - if the number of items in a folder exceeds the number to display, should you display the rest on additional pages? - if icons are included - the content's sort criterion (such as title, last modified date) - sort direction - an override of the Add Content menu item's default text. For example, for a news site, you could change Add Content to Add News. - displays in the widget content identified by the current query string parameter. A List Summary widget displays the following types of content. - HTML content - PageBuilder page - XML Smart Form - Blog This widget does *not* display the following content types. - Catalog entries (part of the eCommerce feature) - Forums - HTML Forms - Assets	ListSummary.ascx ListSummary.ascx.cs ListSummary.ascx.jpg and Files in widgets/ListSummary
MessageBoard 	Allows user to leave comments on the page. For a description of the widget's properties, see .	MessageBoard.ascx MessageBoard.ascx.cs MessageBoard.ascx.jpg and Files in widgets/MessageBoard

Widget	Description	Files

Metadata List

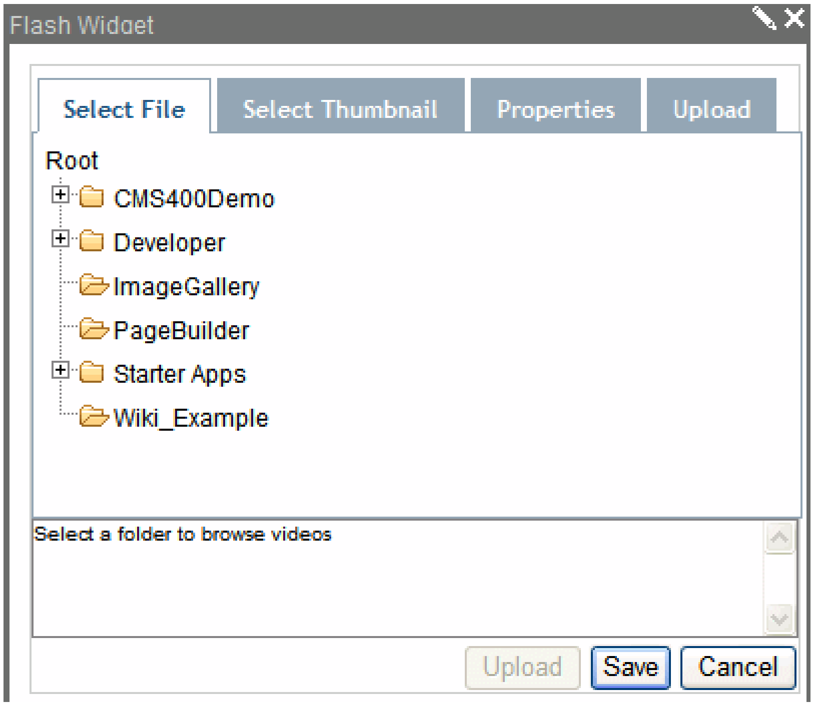
 	
	Displays content whose metadata fits a selected folder location and keywords.
	You can also set these display options:
	- number of items to display on the page
	- if the number of items in the folder exceeds number to display, should remaining items appear on additional pages?
	- Navigation/Teaser: Determines display of content
	  – ecmNavigation - lists title of every content item
	  – ecmTeaser - lists title and summary
	  – ecmUnOrderedList - lists title and summary; unsorted list
	- if icons are included
	- the content's sort criterion (such as title, last modified date)
	- sort direction
		MetaDataList.ascx
		MetaDataList.ascx.cs
		MetaDataList.ascx.jpg
		and
		Files in
		widgets/MetaDataList

News  	Lets user select a news feed from a group of major news providers. Note: A developer can change the list of news feeds by editing the `siteroot/widgets/news.ascx.cs` file.	IFrame.ascx IFrame.ascx.cs iframe.ascx.jpg
Recent blog posts  	Displays a selected number of the most recent blog posts.	RecentBlogs.ascx RecentBlogs.ascx.cs RecentBlogs.ascx.jpg
Recent documents  	Displays a selected number of the most recently published documents.	RecentDocuments.ascx RecentDocuments.ascx.cs RecentDocuments.jpg

Widget	Description	Files
Recent forum posts 	Displays a selected number of the most recent forum posts.	RecentForumPosts.ascx RecentForumPosts.ascx.cs RecentForumPosts.ascx.jpg
RSS Feed 	Allows a user to enter the path of a feed that uses Really Simple Syndication (RSS).	RSSFeed.ascx RSSFeed.ascx.cs rssfeed.ascx.jpg
Sales Force Chart 	Allows users to enter username, password and information about a Sales Force chart to display that chart.	SalesForceChart.ascx SalesForceChart.ascx.cs SalesForceChart.ascx.jpg and Files in widgets/SalesForceChart
Stock Ticker 	Allows users to define a list of stock ticker symbols and display the price for each symbol.	StockTicker.ascx StockTicker.ascx.cs StockTicker.ascx.jpg StockTicker.css
Text Box 	Displays a single field to capture text. The text is stored in the database.	TextBox.ascx TextBox.ascx.cs TextBox.ascx.jpg
Twitter Feed 	Displays RSS feed from Twitter. You can configure one or more feeds. Note: Use the RSS feed URL for the accounts you wish to display. 	TwitterFeed.ascx TwitterFeed.ascx.cs TwitterFeed.jpg and Files in widgets/TwitterFeed

Widget	Description	Files
YouTube 	Allows users to select from a list of YouTube feeds. When the page appears, videos in the category appear. Note: A developer can change the list of youtube feeds by editing the `siteroot/widgets/youtube.ascx.cs` file.	YouTube.ascx YouTube.ascx.cs YouTube.ascx.jpg
You Tube Video 	Allows user to embed code for any YouTube video.	YouTubeVideo.ascx YouTubeVideo.ascx.cs YouTubeVideo.ascx.jpg Files in widgets\YouTubeVideo
Weather 	Allows the user who is dropping the widget to enter a Zip Code, then displays its weather information.	Weather.ascx Weather.ascx.cs Weather.ascx.jpg
WebCalendar 	Provides full calendar functionality including adding events. See Also:	WebCalendar.ascx WebCalendar.ascx.cs WebCalendar.jpg Files in widgets\WebCalendar
Zip Code 	Allows users to find the information shown below about a location by entering one of the items. ▪ Zip Code ▪ Area Code ▪ State ▪ City	ZipCode.ascx ZipCode.ascx.cs ZipCode.ascx.jpg

Working with the Flash Widget



- This widget supports both .flv and .swf file types.

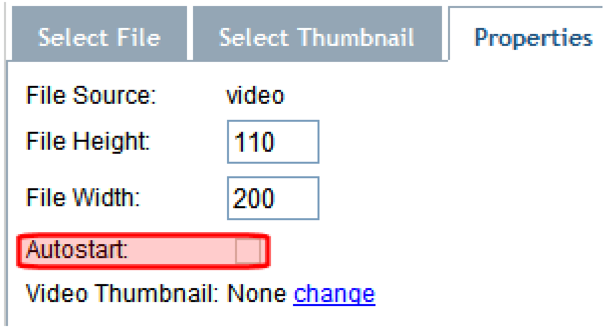
If you will use .flv files, make sure it is added as a file type.See Also:

- If the Flash file you want to display *has* already been added to Ektron CMS400.NET, use the Select File tab to it.

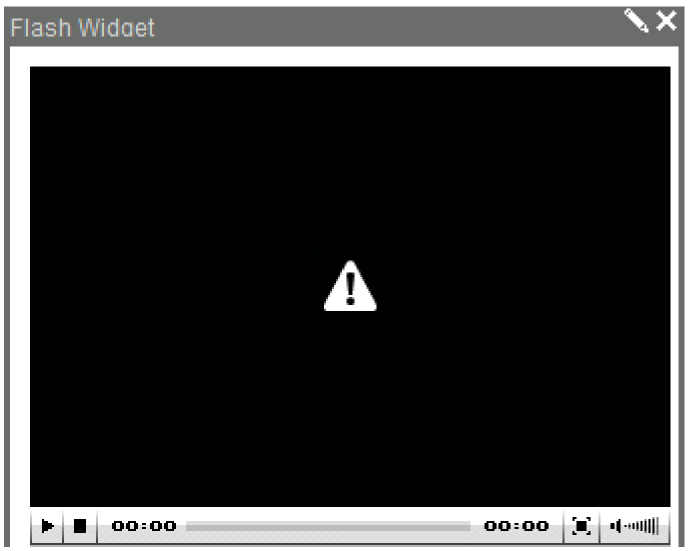
If the file has *not* been added to Ektron CMS400.NET, first use the Select File tab to select a folder for the Flash file. Then, use the Upload tab to navigate your computer's file system, and upload the file to the selected folder.

- The thumbnail feature only works with .flv file types. If you select a Thumbnail, it appears within the Flash player when the page loads. See example below.

- The thumbnail is only applied to this instance of the widget - not the Flash file. If you apply this video to a different widget on this page, you must reapply a thumbnail.
- The thumbnail is an image file that was dropped into Ektron CMS400.NET as an asset. It cannot be a library image.
- The autostart feature only works with .flv files.



- If you log in then upload a flash file, and certain requirements are not met for that file, you see the following image where the widget appears.



The following conditions cause this image to appear.

- The flash file’s folder properties require certain metadata and/or a taxonomy category to be applied, and they have not.
- The folder has an approval chain, and this content has not been approved.

Ektron Markup Language

Introduction to EKML

The Ektron Markup Language (EkML) makes it easy for web developers to manage the output presentation of server controls. EkML uses a simple markup that resembles HTML in syntax. The EkML is cached and .NET watches for file changes.

The `MarkupLanguage` property in the Ektron server controls and Ektron Dreamweaver functions is used to select the template file that contains the Ektron Markup Language. This language is made up of tags and variables that assign formatting information to a control or function when displayed on a Web page.

Warning! If the markup template file is located in the same folder as the form that contains the server control, just type the file's name in the server control's `MarkupLanguage` property. For example, `mycollectionmarkup.ekml`. If the file is in another folder, enter the path relative to site root. For example, `\CMS400Developer\workarea\customfiles\markup\mycollectionmarkup.ekml`.

This chapter contains the following topics.

EkML Templates

Ektron, Inc. has provided an .ekml basic template for each control. These templates are located in [webroot]/Workarea/Templates. At the top of each template is a list of variables that can be used with that control.

Warning! Ektron strongly recommends that you save the template under another name and use that template. This prevents your file from being overwritten when upgrades occur.

Note: If you install the CMS400Developer site, .ekml template files reside in various project folders. These files exemplify using the .ekml with a specific server control.

The following server controls and Dreamweaver functions currently use the Ektron Markup Language:

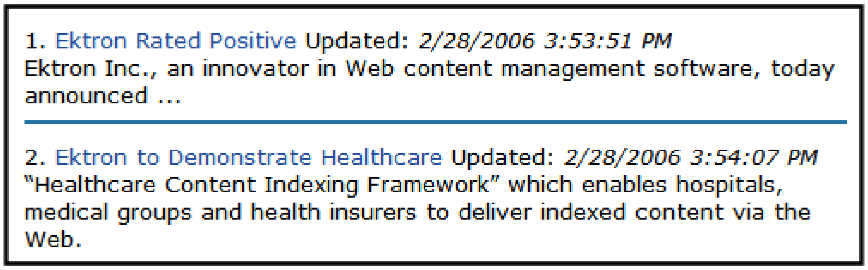
- **Collection** - "collection.ekml" on page 21-441
- **ContentList** - "contentlist.ekml" on page 21-444
- **ListSummary** - "listsummary.ekml" on page 21-447
- **Map** - "map.ekml" on page 21-451
- **MessageBoard** - "messageboard.ekml" on page 21-453
- **MetadataList** - "metadatalist.ekml" on page 21-465
- **Taxonomy/Directory** - "taxonomy.ekml" on page 21-467
- **WebSearch** - "websearch.ekml" on page 21-474

EkML Example

By customizing the provided EkML templates, you can create a custom layout for the content you are displaying. For example, if you have a Collection and you want to display it as a numbered list containing a content's hyperlink, the date it was last updated and its summary, you would create the following .ekml file and assign that file to a Collection server control's `MarkupLanguage` property.

```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] Updated:<i>[$DateModified]</i><br/>[$Teaser] <hr/>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

Once the Collection is displayed, it is formatted as follows:

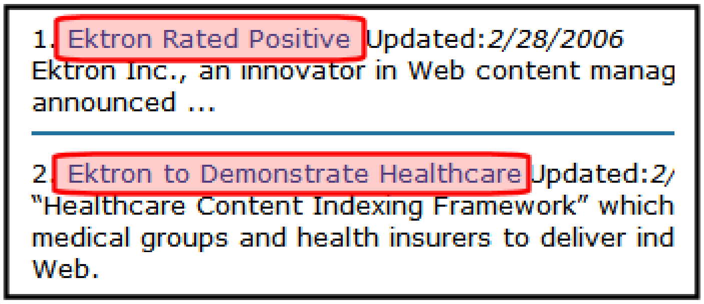


Because you can use HTML in the Ektron Markup Language, you can format the variables using common HTML tags.

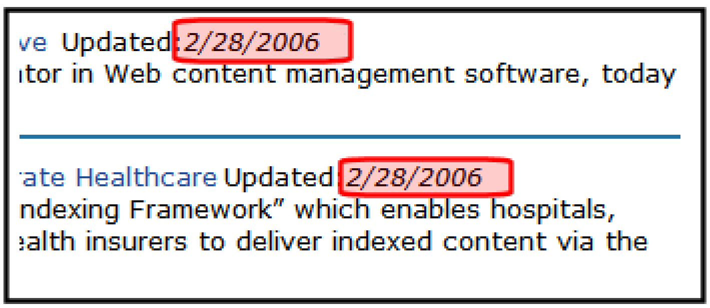
Let's breakdown the example collection.ekml code found above.

- The `<ekmarkup>` tags open and close the markup language. Everything to do with the EkML needs to be between these tags.
- The specific information you want displayed and any HTML formatting are added between the `<ekoutput>` tags.
- `<table width="100%" border="0"></table>` sets up a table. This is HTML formatting.
- The `<ekrepeat>` tags contain formatting information and variables for items in the Collection. It repeats this information for each item in the list.
- The `[$Index]` variable creates a numbered list for each content item in the Collection. Note, you can add a period (.) or other separator depending on how you want the list to look.

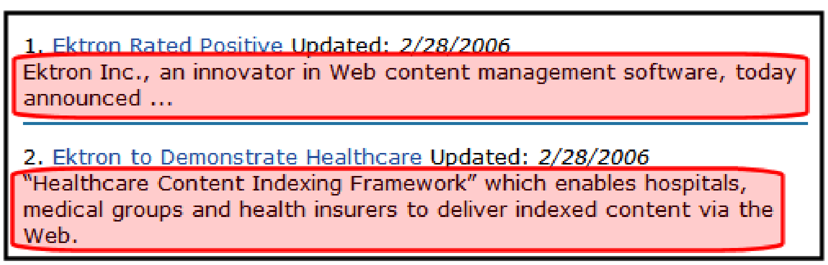
- The `[$HyperLink]` variable adds a hyperlink for each content item in the Collection. The hyperlink use the content's title as the text for the link. There is no need for anchor tags, the variable creates them for you. If you want to use anchor tags for formatting you own links, you can use the `[$QuickLink]` variable.



- `Updated:` is plain text.
- The `<i></i>` tags are HTML that cause the `[$DateModified]` variable to appear in italics.
- The `[$DateModified]` variable displays the date and time each content item in the Collection was last modified.



- `<br/>` is HTML. It adds a line break.
- The `[$Teaser]` variable displays the summary for each content item in the Collection.



- `<hr/>` is HTML. It adds a horizontal rule line.

EkML Tags

The EkML tags define functions that occur when using the language to display content. The Ektron Markup Language includes the following tags.

EkML Tag	Description
<ekmarkup>	Use these tags to open and close the Ektron Markup Language.
<ekoutput>	Define what information is output from the server control between these tags.
<ekrepeat>	These tags cause what ever formatting information that appears between them to be applied to each item in the list. They always appear between the `<ekoutput>` tags.
<ekbubbleinfo>	Creates a pop-up bubble. This tag is invoked when you use the `[$ShowBubble]` or `[$ShowBubble(width)]` variables. By adding different variables between the `<ekbubbleinfo>` tags, you define what information appears in the bubble. These tags are placed outside the `<ekoutput>` tags but within the `<ekmarkup>` tags.
<ekcontentinfo>	Places the information defined between the tags in the specified HTML tag ID. This tag is invoked when you use the `[$ShowContent('htmltagid')]` variable.

EkML Variables

The Ektron Markup Language uses variables that appear between the tags in a template file to define the information that appears in a control's display. Some variable are used in more than one template. These are known as common EkML variables.

Another type of variable is a server control specific variable, these variables can only be used with a specific server control. For example, [$SearchSummary] can only be used in WebSearch.

EkML Variables

Below is a list of EkML variables with a short description, a link to additional information and whether the variable is common or specific.

Variable	Description	Common or Control Specific
[$AddCommentBox]	Displays the Add Comment text box and button for a message board. More information:"[$AddCommentBox]" on page 21-455	MessageBoard
[$AddArticle]	Adds a link that allows a logged in user to add HTML content to CMS400.NET. More information: "[$AddArticle]" on page 21-472	Directory
[$AddAsset]	Adds a link that allows a logged in user to add assets to CMS400.NET. More information:"[$AddAsset]" on page 21-473	Directory
[$ApproveMessageLink]	Display an Approve link to approve comments when message board moderation is active. More information: "[$ApproveMessageLink]" on page 21-456	MessageBoard
[$Avatar]	Display the profile image of the member who entered comments on a message board. More information: "[$Avatar]" on page 21-457	MessageBoard
[$CollectionDescription]	Display the collection's description. More information: "[$CollectionDescription]" on page 21-443	Collection
[$CollectionTitle]	Display the collection's title. More information: "[$CollectionTitle]" on page 21-444	Collection
[$Comment]	The content's comment information is displayed. More information: "[$Comment]" on	Common Except: Map, WebSearch

Variable	Description	Common or Control Specific
	page 21-47	and Taxonomy
[$ContentByteSize]	Displays the content item's size in KB. Works only with taxonomy search. `<ekoutput mode="article_search">` "[$ContentByteSize]" on page 21-477	Directory WebSearch
[$ContentId]	Displays the content item's ID. More information: "[$ContentId]" on page 21-48	Common Except: Map
[$DateCreated]	Display the date the content was created. More information: "[$DateCreated]" on page 21-48	Common Except: Map and WebSearch
[$DateModified]	Display the date and time he content was last modified. More information: "[$DateModified]" on page 21-49	Common Except: Map
[$DeleteMessageLink]	Displays the Delete link for the comment on a message board. More information: "[$DeleteMessageLink]" on page 21-457	MessageBoard
[$DisplayName]	Display the display name of the member who left the message on the board. More information: "[$DisplayName]" on page 21-458	MessageBoard
[$EditorFirstName]	Display the last editor's first name for a content item. More information: "[$EditorFirstName]" on page 21-50	Common Except: Map
[$EditorLastName]	Display the last editor's last name for a content item. More information: "[$EditorLastName]" on page 21-51	Common Except: Map

Variable	Description	Common or Control Specific
[$EmailAddress]	Displays the email address of the member. More information: "[$EmailAddress]" on page 21-459	MessageBoard
[$FirstName]	Display the first name of the person who left the comment on a message board. More information: "[$FirstName]" on page 21-460	MessageBoard
[$FolderDescription]	Displays the folder's description. More information: "[$FolderDescription]" on page 21-449	ListSummary
[$FolderId]	Display the folder ID of a content item. More information: "[$FolderId]" on page 21-52	Common Except: Map and WebSearch
[$FolderName]	Displays the folder's name. More information: "[$FolderName]" on page 21-450	ListSummary
[$Html]	Display the HTML contained in the content item. More information: "[$Html]" on page 21-52	Common Except: Map and WebSearch
[$HyperLink]	Adds a hyperlink using the title of the content block as the text. More information: "[$HyperLink]" on page 21-53	Common Except: Map and WebSearch
[$Image]	Displays the path for the image defined in a content item's Metadata. When wrapped in `<img src=""/>` tag, the image is displayed. For example: `<img src="[$Image]"/>` More information: "[$Image]" on page 21-54	Common Except: Map

Variable	Description	Common or Control Specific
[$ImageIcon]	Displays an image icon for the content item. For example, if the content item is HTML, the ( ) icon is displayed. More information: "[$ImageIcon]" on page 21-54	Common Except: Map
[$ImageThumbnail]	Displays the path for the image's thumbnail defined in a content item's Metadata. When wrapped in tag, a thumbnail version of the image is displayed. For example: More information: "[$ImageThumbnail]" on page 21-55	Common Except: Map
[$Index]	Serialize the content items in a numbered list. More information: "[$Index]" on page 21-56	Common Except: Map and WebSearch
[$ItemCount]	The total number of items in a list. More information: "[$ItemCount]" on page 21-56	Common Except: Map
[$Language]	Display the language ID for the content item. More information: "[$Language]" on page 21-57	Common Except: Map and WebSearch
[$LastName]	Display the last name of the person who left the comment on a message board. More information: See "[$LastName]" on page 21-461]	MessageBoard
[$LinkTarget]	When added to an <a href=""> tag's target="" attribute, this variable reads the server control's LinkTarget property and uses its setting. More information: See "[$LinkTarget]" on page 21-432	Common Except: Map

Variable	Description	Common or Control Specific
[$MessageText]	Displays the text of a message on a message board. More information: "[$MessageText]" on page 21-462	MessageBoard
[$NumberComments]	Displays the number of comments posted to a message board. More information: "[$NumberComments]" on page 21-463	MessageBoard
[$PagingCurrentEndIndex]	The end count number of the items on the page. For example, if you are displaying items 11 - 20 on a page, this variable represents the number 20. Works only with taxonomy search. `<ekoutput mode="article_search">` More information: "[$PagingCurrentEndIndex]" on page 21-478	Directory and WebSearch
[$PagingCurrentStartIndex]	The numerical record of the first item on a page. For example, if you are displaying items 1 through 10 out of 50 total items on a page, this variable represents the number 1. Works only with taxonomy search. `<ekoutput mode="article_search">` More information: "[$PagingCurrentStartIndex]" on page 21-479	Directory and WebSearch
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an `<a href="">` tag, you can create a Hyperlink. More information:"[$QuickLink]" on page 21-57	Common Except: Map
[$SearchDuration]	Displays the amount of time, in seconds, it has taken to execute the search. Works only with taxonomy search. `<ekoutput mode="article_search">`	Directory and WebSearch

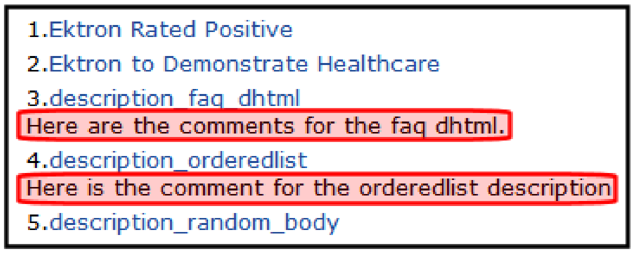
Variable	Description	Common or Control Specific
	More information:"[$SearchDuration]" on page 21-480	
[$SearchSummary]	Creates a summary from information stored in the indexing service for each item in the search results. Works only with taxonomy search. `<ekoutput mode="article_search">` More information:"[$SearchSummary]" on page 21-477	Directory and WebSearch
[$SearchText]	Displays the text for which a user is searching. This information is same as what a user entered in the search text box. Works only with taxonomy search. `<ekoutput mode="article_search">` More information: "[$SearchText]" on page 21-479	Directory and WebSearch
[$SERVER_NAME]	Displays the server name. For example, If this variable is applied to `http://www.example.com/demo.aspx` , the return is `www.example.com`. More information: "[$SERVER_NAME]" on page 21-59	Common Except: Map and WebSearch
[$ShortDateModified]	Displays the date the content was modified. To display the date and time a content item was updated, use [$DateModified] More information: "[$ShortDateModified]" on page 21-59	WebSearch

Variable	Description	Common or Control Specific
[$ShowAllcategory]	Adds to the Taxonomy search screen a checkbox that lets the user decide if he wants to display categories that have no items. More information: "[$ShowAllcategory]" on page 21-60	Directory
[$ShowBubble(width)]	This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and allows you to set the width and height of the bubble. For example, [$ShowBubble(300,400)]. The first number represents the width. The second number represents the height. More information: "[$ShowBubble(width,height)]" on page 21-62	Common Except: Map and WebSearch
[$ShowBubble]	Calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble. "[$ShowBubble]" on page 21-61	Common Except: Map and WebSearch
[$ShowContent('htmltagid')]	Calls the `<ekcontentinfo>` tags an places the information in those tags within the specified HTML tag ID. Replace the htmltagid with the ID of the tag. "[$ShowContent('htmltagid')]" on page 21-63	Common Except: Map and WebSearch
[$Status]	Displays the status of a content item. "[$Status]" on page 21-64	Common Except: Map and WebSearch
[$Teaser]	Display the content item's summary information. Note: If the item is an HTML form, this variable is *not* supported with this ekml file. "[$Teaser]" on page 21-65	Common Except: Map and WebSearch

Variable	Description	Common or Control Specific
[$TemplateQuickLink]	This property displays the Template Quicklink information assigned to the taxonomy item in the Workarea. When wrapped in an `<a href="">` tag, you can create a Hyperlink. See Also: "Applying a Template to a Taxonomy or Category" on page 9-207 More information : "[$TemplateQuickLink]" on page 21-473	Directory
[$Title]	Displays the content item's title. "[$Title]" on page 21-66	Common Except: Map
[$UrlEncode('str')]	Encodes the string information. Replace **str** with the string you want to encode. This variable can be used to encode another EkML variable and place it in an email. "[$UrlEncode('str')]" on page 21-69	Common Except: Map and WebSearch
[$UrlParam('paramname')]	Displays the value of a query string's given parameter. For example, if the query string is `?id=27` and the variable is `[$UrlParam('id')]`, 27 is displayed. "[$UrlParam('paramname')]" on page 21-67	Common Except: Map and WebSearch
[$UserName]	Display the Username of user who left a comment on a message board. "[$UserName]" on page 21-464	MessageBoard

[$Comment]

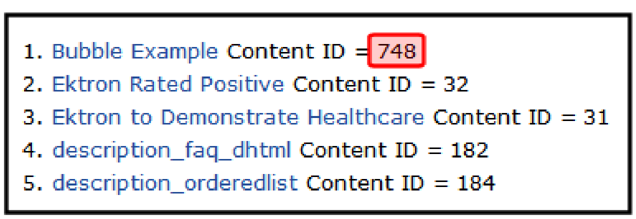
The content's comment information is displayed. Comment information can be added in the Workarea via the content item's Comment tab.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] <br/> [$Comment]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$ContentId]

Displays the content item's ID.

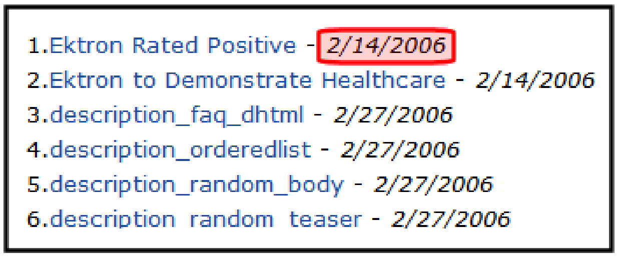



```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] Content ID = [$ContentId]
</td>
</tr>
</ekrepeat>
```

```
</table>
</ekoutput>
</ekmarkup>
```

[$DateCreated]

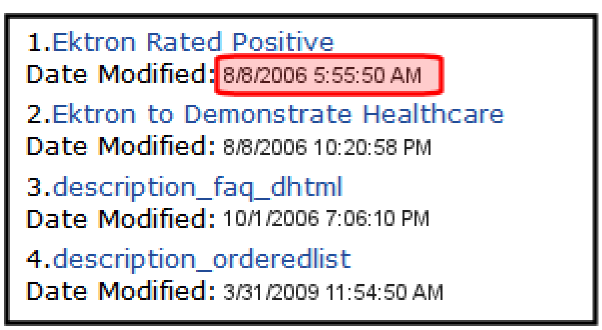
Display the date the content was created.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] - <i>[$DateCreated]</i>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$DateModified]

Display the date and time the content was last modified. To display the date only, use [$ShortDateModified].




```
<ekmarkup>
```

```
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] <br/>Date Modified: <b>[$DateModified]</b>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

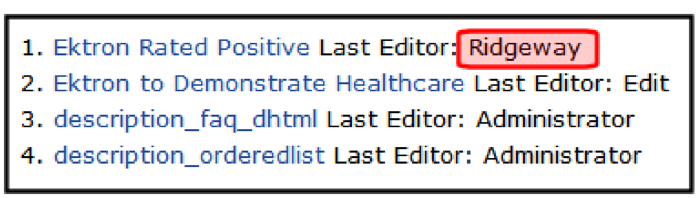
[$EditorFirstName]

Display the last editor’s first name for a content item.


```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] Last Editor: [$EditorFirstName]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$EditorLastName]

Display the last editor’s last name for a content item.




```
<ekmarkup>
```

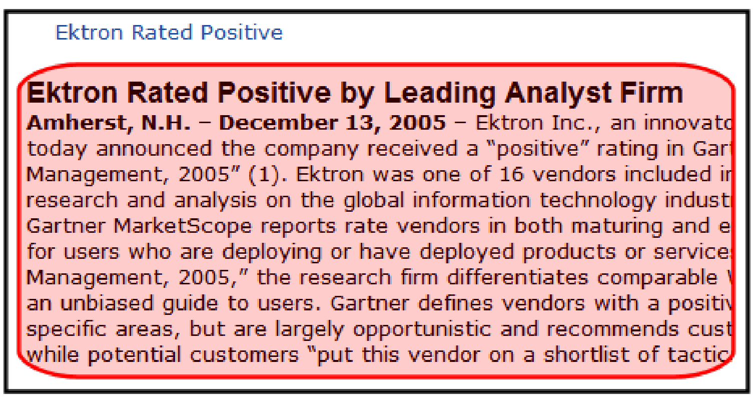
```
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] Last Editor: [$EditorLastName]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$FolderId]

Display the folder ID of a content item.

[$Html]

Display the HTML contained in the content item. In the server control, the control's `GetHTML` property must be set to **True**; otherwise nothing is displayed. The exception to this is when the `[$Html]` appears between the `<ekbubbleinfo>` tags. In that case, the `GetHTML` property can be set to **True** or **False**.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$HyperLink]<br/>[$Html]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$HyperLink]

Adds a hyperlink using the title of the content block as the text. You do not add an <a href=""> tag when using this variable. That functionality is built into the EkML. Use this variable when you do not want to create a custom hyperlink. If you want to create a custom hyperlink, use the [$QuickLink] variable. See Also: "[$QuickLink]" on page 21-433


```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$Image]

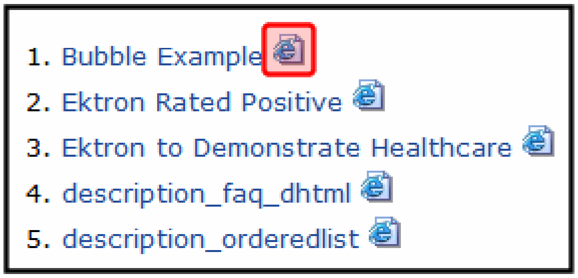
Displays the path for the image defined in a content item's Metadata. When wrapped in tag, the image is displayed. For example, .

An example of using this variable is on the developer sample page > List Summary > Flash news. That sample (flashnews.aspx) refers to flashnews.ekml, which illustrates using this variable.

[$ImageIcon]

Displays an image icon for the content item. Except for HTML content, these icons are the same icons used in the Workarea to show the content type. HTML content uses the Internet Explorer icon ( ). For example, Forms use the Form icon ( ).

When using this variable with the server control, the `IncludeIcons` property is automatically set to **True**.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] [$ImageIcon]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

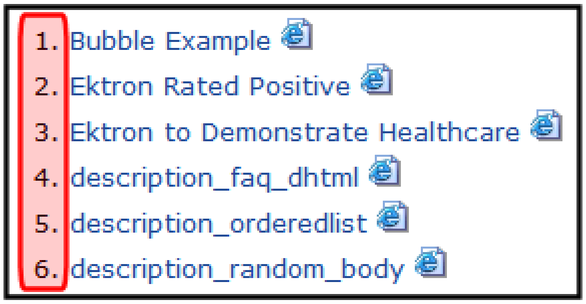
[$ImageThumbnail]

Displays the path for the image's thumbnail defined in a content item's Metadata. When wrapped in `<img src=""/>` tag, the image thumbnail is displayed. For example, `<img src="[$ImageThumbnail]"/>`.

An example of using this variable is on the developer sample page > List Summary > Flash news. That sample (flashnews.aspx) refers to flashnews.ekml, which illustrates using this variable.

[$Index]

Serialize the content items in a numbered list.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] [$ImageIcon]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$ItemCount]

The total number of items in a list. In the server control, the `EnablePaging` property must be set to **True**; otherwise nothing is displayed

[$Language]

Display the language ID for the content item.

[$LinkTarget]

When added to an `<a href=””>` tag’s `target=””` attribute, this variable reads the server control’s `LinkTarget` property and uses its setting. For example, If you want to create a custom hyperlink that opens in a new window, you set the server control’s `LinkTarget` property to `_Blank`. Then, in the Ektron Markup Language file, add the `[$LinkTarget]` variable to the `<a href=””>` tag’s `Taget=””` attribute. A code example appears below.

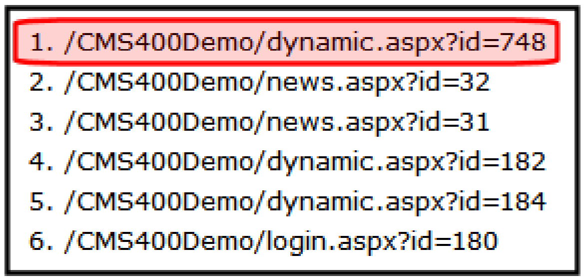
```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
<a href=”[$QuickLink]” target=”[$LinkTarget]”>[$Title]</a>
</td>
</tr>
```

```
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$QuickLink]

This property displays the Quicklink information for the content item. When wrapped in an <a href=””> tag, you can create a Hyperlink. Use this property instead of the [$HyperLink] if you want to customize your hyperlinks. See Also: "[$HyperLink]" on page 21-430

The first image shows the variable displaying the Quicklink information. The second image shows the Quicklink as a Hyperlink with a custom text.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$QuickLink]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```


```
<ekmarkup>
```

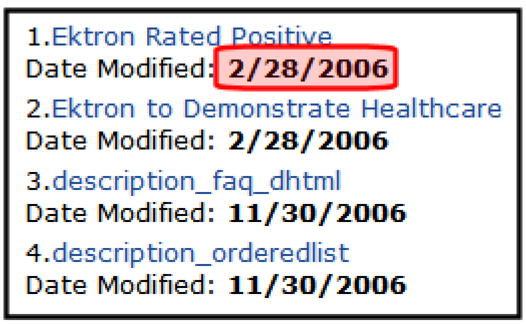
```
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. <a href="[$QuickLink]">Click Here For Item #[$Index]</a>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$SERVER_NAME]

Displays the server name for the page on which this variable appears. For example, If this variable is applied to
`http://www.example.com/demo.aspx`, the return is `www.example.com`.

[$ShortDateModified]

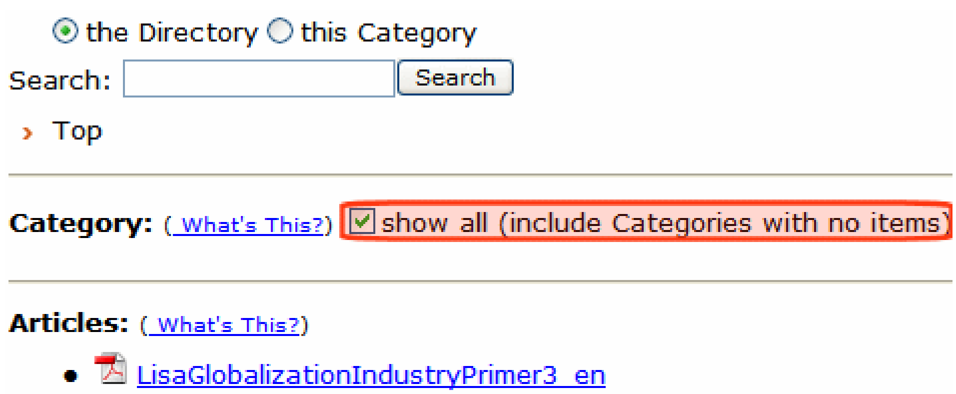
Display the date the content was last modified. The variable show the date only. To show the Date and Time, use the [$DateModified] variable.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] <br/>Date Modified: <b>[$ShortDateModified]</b>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$ShowAllcategory]

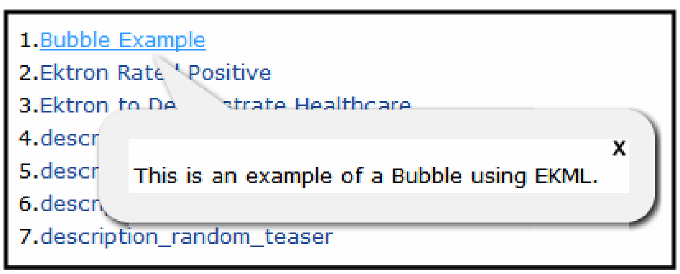
If a Directory server control's `EnableSearch` property is set to `true`, this variable adds the checkbox circled below to the right of the search field.



By default, the Directory server control only shows categories to which at least one content block is assigned. If you check this box, all categories appear, even those with no content assigned.

[$ShowBubble]

Calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble. This bubble is typically assigned to the `onclick` or `onmouseover` attribute in an `<a href="">` tag. See the example EkML code below.




```
<ekmarkup>
<ekbubbleinfo>
<table border="0">
<tr>
```

```
<td>[$Html]</td>
</tr>
</table>
</ekbubbleinfo>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index].<a href="#" onmouseover="[$ShowBubble]">[$Title]</a>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$ShowBubble(width,height)]

This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble. This variable allows you to set the width and height of the bubble. For example, `[$ShowBubble(300,400)`. In this example, the first number represents the width. The second number represents the height.

If you enter a single number, it sets the width. The height of the bubble is then limited to the length of the content. For example, if you had a video that was formatted at 200 pixels wide and you wanted to launch it in a bubble, you would add the function as `[$ShowBubble(200)]`.

The minimum width for a bubble is 287. The minimum height is 101.

```
<ekmarkup>
<ekbubbleinfo>
<table border="0">
<tr>
<td>[$Html]</td>
</tr>
</table>
</ekbubbleinfo>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index].<a href="#" onmouseover="[$ShowBubble(200)]">[$Title]</a>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

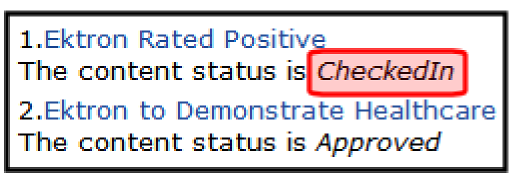
[$ShowContent('htmltagid')]

Calls the <ekcontentinfo> tags and places the information contained within those tags in the specified HTML tag ID. Replace the htmltagid with the ID of the tag. This tag is typically assigned to the onclick or onmouseover attribute in an <a href=””> tag. See the example EkML code below.

```
<ekmarkup>
<ekcontentinfo>
<table border="0">
<tr>
<td>[$Html]</td>
</tr>
</table>
</ekcontentinfo>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index].<a href="#" onmouseover="[$ShowContent('contarea')]">[$Title]</a>
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$Status]

Displays the status of a content item. For example, Approved, Checked in, or Submitted for Approval. For additional information, see "Content Statuses" on page 7-133.

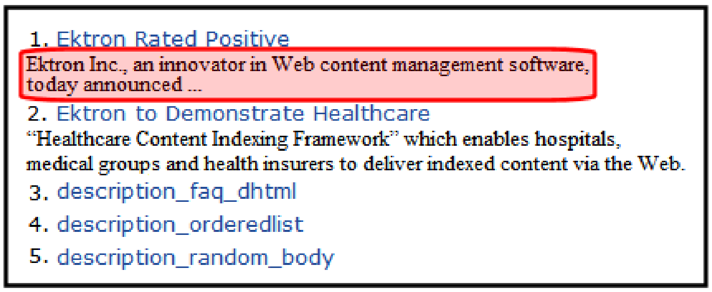



```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$Hyperlink]
The content status is <i>[$Status]</i>
</td>
</tr>
</ekrepeat>
```

```
</table>
</ekoutput>
</ekmarkup>
```

[$Teaser]

Display the content item's summary information. Summary information is added to content in the Workarea via the Summary tab. A code example appears below.




```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink] <br/> [$Teaser]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$Title]

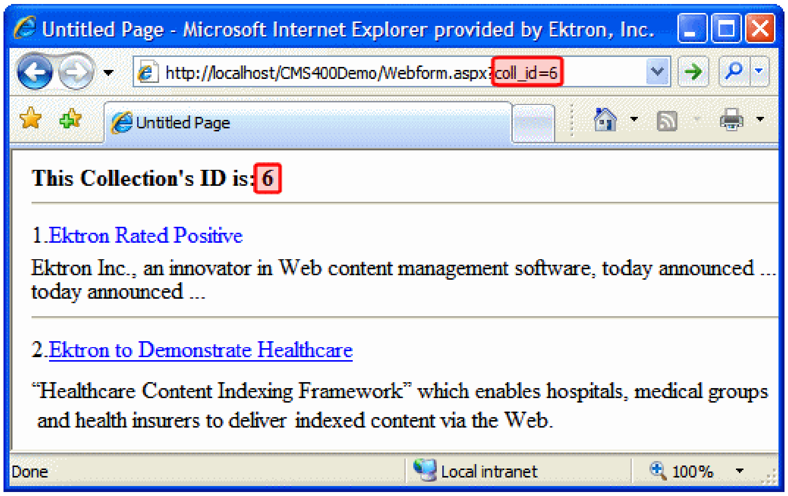
Displays the content item's title. Use this variable if you want to display the title as normal text. If you want to display the title as a hyperlink, use `[$HyperLink]`.See Also: "[$HyperLink]" on page 21-430. If you want to create a custom hyperlink with the title as the text of the hyperlink, use this property in conjunction with the `<a href="">` tag and the `[$QuickLink]` variable. See Also: "[$QuickLink]" on page 21-433.

```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. <a href="[$QuickLink]">[$Title]</a>
</td>
```

```
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$UrlParam('paramname')]

Displays the value of a query string's parameter. For example, if you have a collection and want to display its ID, add the [$UrlParam('coll_id')] where you want the collection's ID to appear.

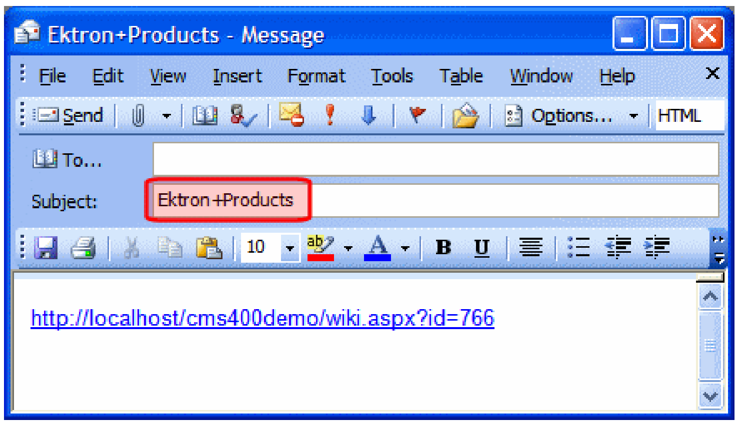



```
<ekmarkup>
<ekbubbleinfo>
<table border="0">
<tr>
<td>[$Html]</td>
</tr>
</table>
</ekbubbleinfo>
<ekoutput>
<table width="100%" border="0">
<tr>
<td>
<b>This Collection's ID is: [$UrlParam('coll_id')]</b>
<br/><hr/>
</td>
</tr>
<ekrepeat>
<tr>
<td>
[$Index].<a href="#" onclick="[$ShowBubble]">[$Title]</a>[$Teaser]<hr/>
</td>
</tr>
</ekrepeat>
```

```
</table>
</ekoutput>
</ekmarkup>
```

[$UrlEncode('str')]

Encodes the string information in the variable. This variable can be used to encode another EkML variable and place it in an email. For example, You want the title of the content block to appear as the subject of an email. A code example appears below.




```
<ekcontentinfo>
<table border="0">
<tr>
<td>
<strong>Title: </strong>
<span style="color:red;">[$Title]</span>
<a href="mailto:?subject=[$UrlEncode('[$Title]')]&body=http://[$SERVER_
NAME]/CMS400Developer/wiki.aspx?id=[$ContentId]"> <img
src="WorkArea/images/application/icon_email.gif" align="absmiddle" alt="[$Title]"
border="0"/></a>
<hr />
</td>
</tr>
<tr>
<td>[$Html]</td>
</tr>
</table>
</ekcontentinfo>
```

EkML Template Examples

collection.ekml

This file defines which items and information are included when displaying content item information in a collection using the Collection server control. For an example of using this file with a Collection server control, see the CMS400 demo example: `http://`*`your site/siteroot`*`/Developer/Collection/TemplateMarkup.aspx`.

collection.ekml Variables

Below is a list of variables that are used with the collection.ekml file.

Variable	Description	More Information
[$CollectionDescription]	Display the collection's description.	"[$CollectionDescription]" on page 21-443
[$CollectionTitle]	Display the collection's title.	"[$CollectionTitle]" on page 21-444
[$Comment]	The content's comment information is displayed.	"[$Comment]" on page 21-425
[$ContentId]	Displays the content item's ID.	"[$ContentId]" on page 21-426
[$DateCreated]	Display the date the content was created.	"[$DateCreated]" on page 21-427
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427
[$EditorFirstName]	Display the last editor's first name for a content item.	"[$EditorFirstName]" on page 21-428
[$EditorLastName]	Display the last editor's last name for a content item.	"[$EditorLastName]" on page 21-428
[$FolderId]	Display the folder ID of a content item.	"[$FolderId]" on page 21-429
[$Html]	Display the HTML contained in the content item.	"[$Html]" on page 21-429

Variable	Description	More Information
[$HyperLink]	Adds a hyperlink using the title of the content block as the text.	"[$HyperLink]" on page 21-430
[$Image]	Displays the path for the image defined in a content item’s Metadata. When wrapped in `<img src=””/>` tag, the image is displayed. For example: `<img src=”`[$Image]`”/>`	"[$Image]" on page 21-430
[$ImageIcon]	Displays an image icon for the content item. For example, if the content item is HTML, the () icon is displayed.	"[$ImageIcon]" on page 21-430
[$ImageThumbnail]	Displays the path for the image’s thumbnail defined in a content item’s Metadata. When wrapped in `<img src=””/>` tag, a thumbnail version of the image is displayed. For example: `<img src=”`[$ImageThumbnail]`”/>`	"[$ImageThumbnail]" on page 21-431
[$Index]	Serialize the content items in a numbered list.	"[$Index]" on page 21-431
[$ItemCount]	The total number of items in a list.	"[$ItemCount]" on page 21-432
[$Language]	Display the language ID for the content item.	"[$Language]" on page 21-432
[$LinkTarget]	When added to an `<a href=””>` tag’s `target=””` attribute, this variable reads the server control’s `LinkTarget` property and uses its setting.	"[$LinkTarget]" on page 21-432
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an `<a href=””>` tag, you can create a Hyperlink.	"[$QuickLink]" on page 21-433
[$SERVER_NAME]	Displays the server name. For example, If this variable is applied to `http://www.example.com/demo.aspx`, the return is `www.example.com`.	"[$SERVER_NAME]" on page 21-434
[$ShowBubble(width)]	This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and allows you to set the width of the bubble.	"[$ShowBubble(width,height)]" on page 21-436

Variable	Description	More Information
[$ShowBubble]	Calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble.	"[$ShowBubble]" on page 21-435
[$ShowContent('htmltagid')]	Calls the <ekcontentinfo> tags an places the information in those tags within the specified HTML tag ID. Replace the 'htmltagid' with the ID of the tag.	"[$ShowContent('htmltagid')]" on page 21-437
[$Status]	Displays the status of a content item.	"[$Status]" on page 21-437
[$Teaser]	Display the content item's summary information. Note: If the item is an HTML form, this variable is *not* supported with this ekml file.	"[$Teaser]" on page 21-438
[$Title]	Displays the content item's title.	"[$Title]" on page 21-438
[$UrlEncode('str')]	Encodes the string information. This variable can be used to encode another EkML variable and place it in an email.	"[$UrlEncode('str')]" on page 21-440
[$UrlParam('paramname')]	Displays the value of a query string's parameter. For example, if the query string is `?id=27` and the variable is `[$UrlParam('id')]`, 27 is displayed.	"[$UrlParam('paramname')]" on page 21-439

[$CollectionDescription]

Display the collection's description.


```
<ekmarkup>
<ekoutput>
<h3><b>[$CollectionTitle]</b></h3><p/>[$CollectionDescription]<br/>
```

```
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$CollectionTitle]

Display the collection's title.


```
<ekmarkup>
<ekoutput>
<h3><b>[$CollectionTitle]</b></h3>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

contentlist.ekml

This file defines which items and information are included when displaying content item information in a content list using the ContentList server control.

contentlist.ekml Variables

Below is a list of variables that are used with the contentlist.ekml file.

Variable	Description	More Information
[$Comment]	The content's comment information is displayed.	"[$Comment]" on page 21-425
[$ContentId]	Displays the content item's ID.	"[$ContentId]" on page 21-426
[$DateCreated]	Display the date the content was created.	"[$DateCreated]" on page 21-427
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427
[$EditorFirstName]	Display the last editor's first name for a content item.	"[$EditorFirstName]" on page 21-428
[$EditorLastName]	Display the last editor's last name for a content item.	"[$EditorLastName]" on page 21-428
[$FolderId]	Display the folder ID of a content item.	"[$FolderId]" on page 21-429
[$Html]	Display the HTML contained in the content item.	"[$Html]" on page 21-429
[$HyperLink]	Adds a hyperlink using the title of the content block as the text.	"[$HyperLink]" on page 21-430
[$Image]	Displays the path for the image defined in a content item's Metadata. When wrapped in tag, the image is displayed. For example: 	"[$Image]" on page 21-430
[$ImageIcon]	Displays an image icon for the content item. For example, if the content item is HTML, the ( ) icon is displayed.	"[$ImageIcon]" on page 21-430
[$ImageThumbnail]	Displays the path for the image's thumbnail defined in a content item's Metadata. When wrapped in tag, a thumbnail version of the image is displayed. For	"[$ImageThumbnail]" on page 21-431

Variable	Description	More Information
	example: `<img src="[$ImageThumbnail]"/>`	
[$Index]	Serialize the content items in a numbered list.	"[$Index]" on page 21-431
[$ItemCount]	The total number of items in a list.	"[$ItemCount]" on page 21-432
[$Language]	Display the language ID for the content item.	"[$Language]" on page 21-432
[$LinkTarget]	When added to an `<a href="">` tag's `target=""` attribute, this variable reads the server control's `LinkTarget` property and uses its setting.	"[$LinkTarget]" on page 21-432
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an `<a href="">` tag, you can create a Hyperlink.	"[$QuickLink]" on page 21-433
[$SERVER_NAME]	Displays the server name. For example, If this variable is applied to `http://www.example.com/demo.aspx`, the return is `www.example.com`.	"[$SERVER_NAME]" on page 21-434
[$ShowBubble(width)]	This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and allows you to set the width of the bubble.	"[$ShowBubble(width,height)]" on page 21-436
[$ShowBubble]	Calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble.	"[$ShowBubble]" on page 21-435
[$ShowContent('htmltagid')]	Calls the <ekcontentinfo> tags an places the information in those tags within the specified HTML tag ID. Replace the 'htmltagid' with the ID of the tag.	"[$ShowContent('htmltagid')]" on page 21-437
[$Status]	Displays the status of a content item.	"[$Status]" on page 21-437

Variable	Description	More Information
[$Teaser]	Display the content item's summary information. Note: If the item is an HTML form, this variable is *not* supported with this ekml file.	"[$Teaser]" on page 21-438
[$Title]	Displays the content item's title.	"[$Title]" on page 21-438
[$UrlEncode('str')]	Encodes the string information. This variable can be used to encode another EkML variable and place it in an email.	"[$UrlEncode('str')]" on page 21-440
[$UrlParam('paramname')]	Displays the value of a QueryString's parameter. For example, if the QueryString is `?id=27` and the variable is `[$UrlParam('id')]`, 27 is displayed.	"[$UrlParam('paramname')]" on page 21-439

listsummary.ekml

This file defines which items and information are included when displaying content item information in a list summary using the ListSummary server control. For an example of using this file with a ListSummary server control, see the CMS400 demo example: `http://<your site>/CMS400Developer/Developer/ListSummary/TemplateMarkup.aspx`.

ListSummary.ekml Variables

Below is a list of variables that are used with the listsummary.ekml file.

Variable	Description	More Information
[$Comment]	The content's comment information is displayed.	"[$Comment]" on page 21-425
[$ContentId]	Displays the content item's ID.	"[$ContentId]" on page 21-426
[$DateCreated]	Display the date the content was created.	"[$DateCreated]" on page 21-427
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427

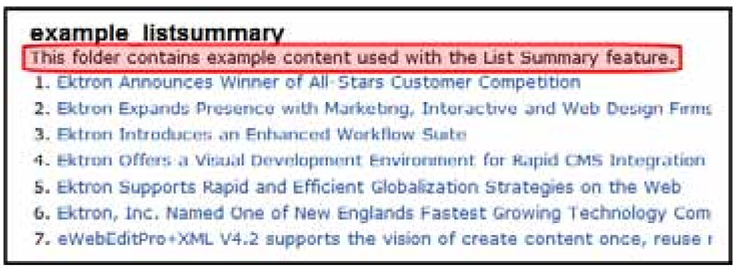
Variable	Description	More Information
[$EditorFirstName]	Display the last editor's first name for a content item.	"[$EditorFirstName]" on page 21-428
[$EditorLastName]	Display the last editor's last name for a content item.	"[$EditorLastName]" on page 21-428
[$FolderDescription]	Displays the folder's description.	"[$FolderDescription]" on page 21-449
[$FolderId]	Display the folder ID of a content item.	"[$FolderId]" on page 21-429
[$FolderName]	Displays the folder's name.	"[$FolderName]" on page 21-450
[$Html]	Display the HTML contained in the content item.	"[$Html]" on page 21-429
[$HyperLink]	Adds a hyperlink using the title of the content block as the text.	"[$HyperLink]" on page 21-430
[$Image]	Displays the path for the image defined in a content item's Metadata. When wrapped in `<img src=""/>` tag, the image is displayed For example: `<img src="[$Image]"/>`	"[$Image]" on page 21-430
[$ImageIcon]	Displays an image icon for the content item. For example, if the content item is HTML, the ( ) icon is displayed.	"[$ImageIcon]" on page 21-430
[$ImageThumbnail]	Displays the path for the image's thumbnail defined in a content item's Metadata. When wrapped in `<img src=""/>` tag, a thumbnail version of the image is displayed. For example: `<img src="[$ImageThumbnail]"/>`	"[$ImageThumbnail]" on page 21-431
[$Index]	Serialize the content items in a numbered list.	"[$Index]" on page 21-431
[$ItemCount]	The total number of items in a list.	"[$ItemCount]" on page 21-432

Variable	Description	More Information
[$Language]	Display the language ID for the content item.	"[$Language]" on page 21-432
[$LinkTarget]	When added to an `<a href="">` tag's `target=""` attribute, this variable reads the server control's `LinkTarget` property and uses its setting.	"[$LinkTarget]" on page 21-432
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an `<a href="">` tag, you can create a Hyperlink.	"[$QuickLink]" on page 21-433
[$SERVER_NAME]	Displays the server name. For example, If this variable is applied to `http://www.example.com/demo.aspx`, the return is `www.example.com`.	"[$SERVER_NAME]" on page 21-434
[$ShowBubble(width)]	This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and allows you to set the width of the bubble.	"[$ShowBubble(width,height)]" on page 21-436
[$ShowBubble]	Calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble.	"[$ShowBubble]" on page 21-435
[$ShowContent('htmltagid')]	Calls the <ekcontentinfo> tags an places the information in those tags within the specified HTML tag ID. Replace the 'htmltagid' with the ID of the tag.	"[$ShowContent('htmltagid')]" on page 21-437
[$Status]	Displays the status of a content item.	"[$Status]" on page 21-437
[$Teaser]	Displays the content item's summary information. Note: If the item is an HTML form, this variable is *not* supported with this ekml file.	"[$Teaser]" on page 21-438
[$Title]	Displays the content item's title.	"[$Title]" on page 21-438

Variable	Description	More Information
[$UrlEncode('str')]	Encodes the string information. This variable can be used to encode another EkML variable and place it in an email.	"[$UrlEncode('str')]" on page 21-440
[$UrlParam('paramname')]	Displays the value of a QueryString's parameter. For example, if the QueryString is `?id=27` and the variable is `[$UrlParam('id')]`, 27 is displayed.	"[$UrlParam('paramname')]" on page 21-439

[$FolderDescription]

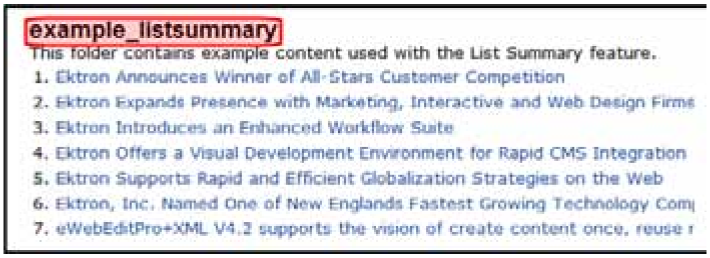
Displays the folder's description.




```
<ekmarkup>
<ekoutput>
<h3><b>[$FolderName]</b></h3><p/>[$FolderDescription]<br/>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$FolderName]

Displays the folder's name.

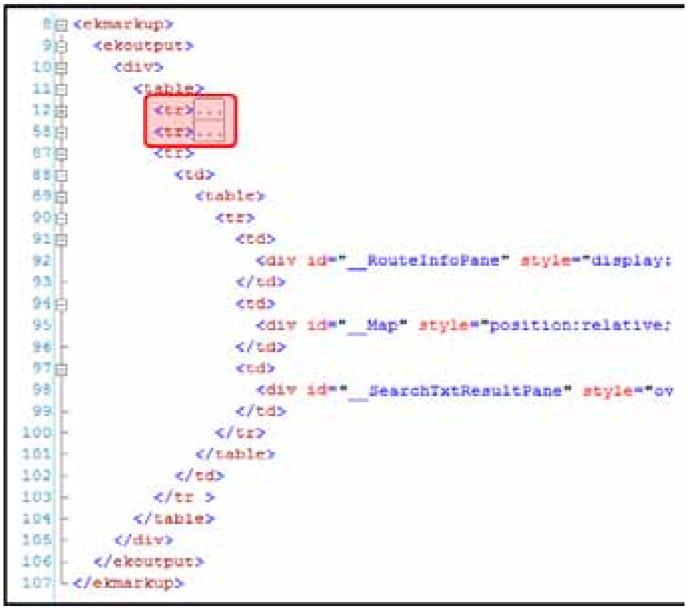



```
<ekmarkup>
<ekoutput>
<h3><b>[$FolderName]</b></h3><p/>[$FolderDescription]<br/>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
[$Index]. [$HyperLink]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

map.ekml

The map.ekml file defines which items and information are included when using the Map server control. Unlike most other .ekml files, the map.emkl has some variables that cannot be changed or moved around.

The file’s variables appear in three <tr></tr> table rows. These rows are located below the main table. In the first two table rows, you can modify a tag’s style information only. In the third, you can change the style information and the order of the variables to create different layouts for your page. It is recommended you hide the first two table rows if you are not changing their style information. For example:



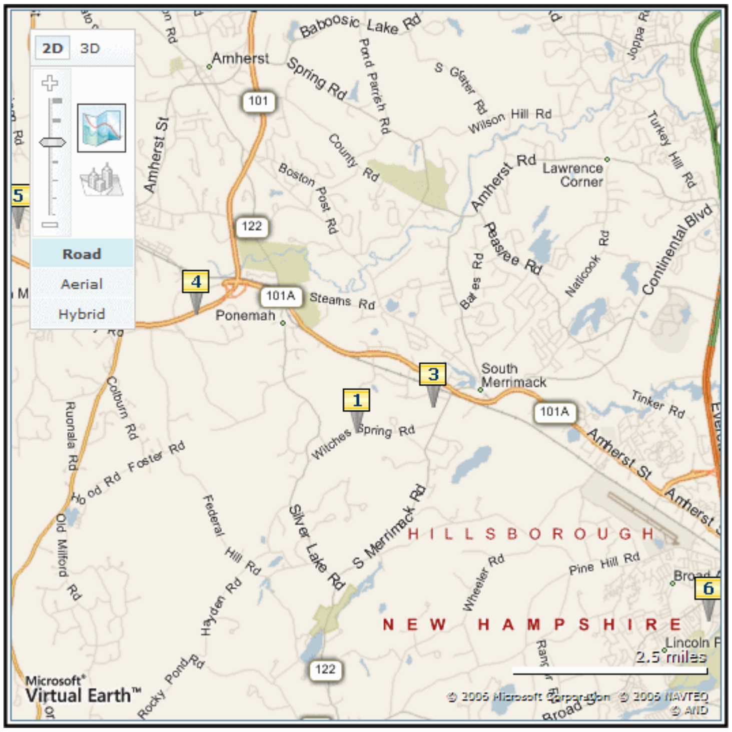
When using the map.ekml file remember these three rules.

1. Do not change any of the IDs.
2. You can change any tag's style information.
3. You can move the variables in the third table row around to create different layouts. For example, you can display these sections horizontally or vertically.

Variable	Description	More Information
__Map	Displays the map section of the Map server control.	"__Map" on page 21-452
__SearchTxtResultPane	Displays the results pane from the search.	"Search Txt Result Pane" on page 21-452
__RouteInfoPane	Displays the direction information pane.	"__RouteInfoPane" on page 21-453

__Map

Displays the map section of the Map server control.



Search Txt Result Pane

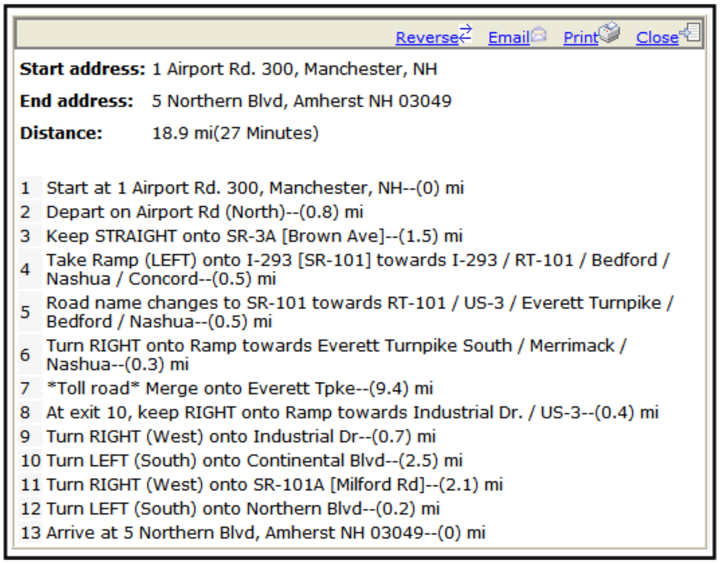
Displays the results pane from the search.

Results 1 - 6 of 6

No.	Title	Distance	Map	Direction
1.	Ektron Corporation 5 Northern Blvd, Amherst NH 03049 Ektron, Content Management Software	0.82		
2.	Amherst House of Pizza 131 State Route 101A # 6, Amherst, NH 603) 886-5543	1.45		
3.	Big a Pizza LLC 131 State Route 101A # 6, Amherst, NH	1.45		
4.	Domino's Pizza 556 Nashua St, Milford, NH (603) 673-2700	3.83		
5.	Pizza Top 183 Elm St, Milford, NH (603) 673-0037	7.89		
6.	You You Japanese Bistro 150 Broad St #4, Nashua, NH 03063 Japanese, Korean, EurAsian Bistro	8.5		

__RouteInfoPane

The panel that displays driving directions from the starting address to the arrival address.



messageboard.ekml

This file defines which items and information are included when displaying message information for a message board using the MessageBoard server control.

messageboard.ekml Variables

Below is a list of variables that are used with the metadatalist.ekml file.

Variable	Description	More Information
[$AddCommentBox]	Displays the Add Comment text box and button for a message board.	"[$AddCommentBox]" on page 21-455
[$ApproveMessageLink]	Display an Approve link to approve comments when message board moderation is active.	"[$ApproveMessageLink]" on page 21-456
[$Avatar]	Display the profile image of the member who entered the comments on the message board.	"[$Avatar]" on page 21-457

Variable	Description	More Information
[$DateCreated]	Display the date the content was created.	"[$DateCreated]" on page 21-427
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427
[$DeleteMessageLink]	Displays the Delete link for a comment on the message board. Only Administrators, the person who left the message or the person who owns the board.	"[$DeleteMessageLink]" on page 21-457
[$DisplayName]	Displays the display name of the member who left the message.	"[$DisplayName]" on page 21-458
[$EmailAddress]	Displays the email address of the member who left the message on the board.	"[$EmailAddress]" on page 21-459
[$FirstName]	Display the first name of the person who left the comment on the message board.	"[$FirstName]" on page 21-460
[$LastName]	Display the last name of the person who left the comment on the message board.	"[$LastName]" on page 21-461
[$MessageText]	Displays the message on a message board.	"[$MessageText]" on page 21-462
[$NumberComments]	Displays the number of comments posted to a message board.	"[$NumberComments]" on page 21-463
[$UserName]	Display the Username of a user who left a comment on a message board.	"[$UserName]" on page 21-464

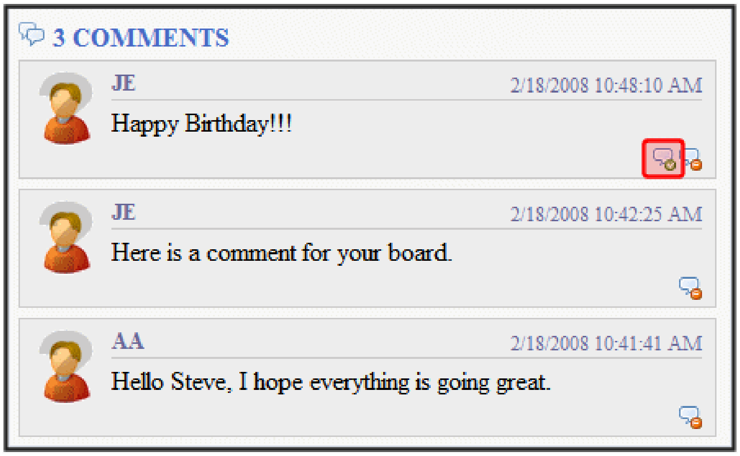
[$AddCommentBox]

Displays the Add Comment text box and button for a message board.


```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$ApproveMessageLink]

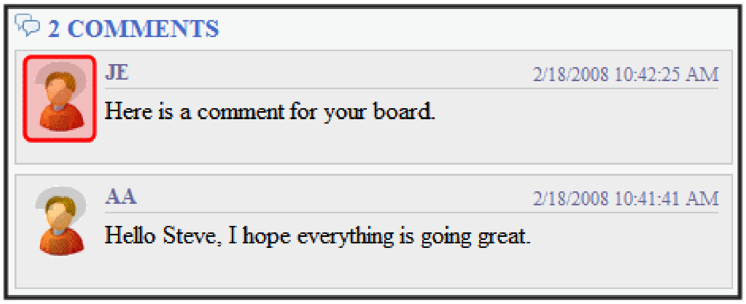
Displays the Approve link for the message. This link is used to approve the message for display when the `Moderate` property is set to true. Only Administrators, the person who left the message, or the person who owns the board can see this link.




```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$Avatar]

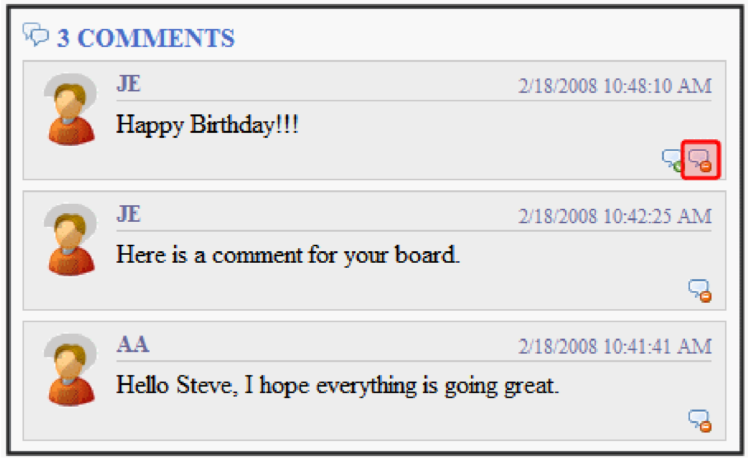
Display the profile image of the member who entered the comments on the message board.




```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$DeleteMessageLink]

Displays the Delete link for a comment on the message board. Only Administrators, the person who left the message or the person who owns the board.




```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$DisplayName]

Displays the display name of the member who left the message.


```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$DisplayName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$EmailAddress]

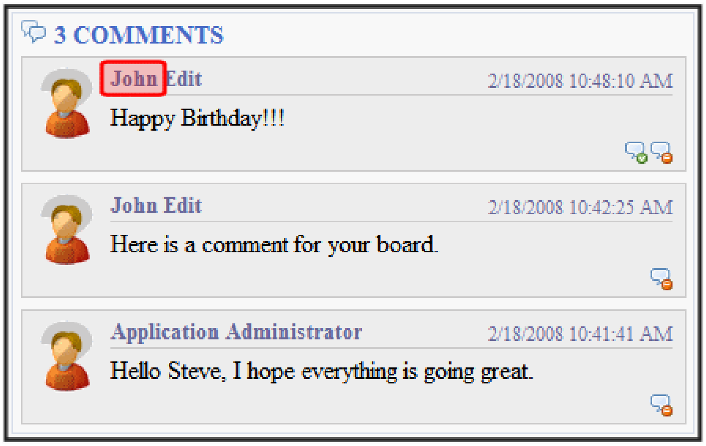
Displays the email address of the member who left the message on the board. To create a hyperlinked email, wrap the [$EmailAddress] variable in a <a> tag with the mailto: variable. For example:

```
<a href="Mailto:[$EmailAddress]">[$EmailAddress]</a>
```


```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]  <a
href="Mailto:[$EmailAddress]">[$EmailAddress]</a>
</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$FirstName]

Displays the first name of the user who left a comment on a message board.




```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$FirstName] [$LastName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$LastName]

Displays the last name of the user who left a comment on a message board.


```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$FirstName] [$LastName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

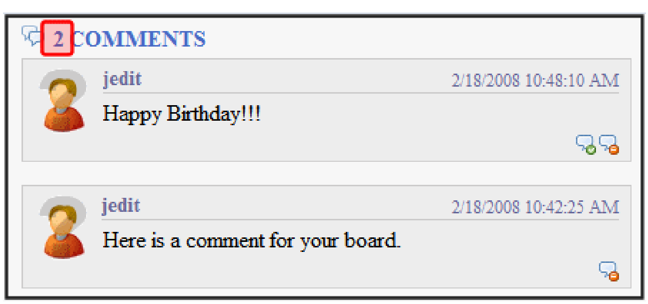
[$MessageText]

Displays the text of a message on a message board.


```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$NumberComments]

Displays the number of comments posted on the message board.



```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

[$UserName]

Display the Username of a user who left a comment on a message board.


```
<ekoutput>
<div class="ContributionForm">
<h4>[$NumberComments] Comments</h4>
<ul>
<ekrepeat>
<li class="ekMessagePost">
<div class="avatar">[$Avatar]</div>
<div class="message">
<div class="metaData">
<span class="username">[$UserName]</span>
<span class="time">[$DateCreated]</span>
</div>
<p class="body">[$MessageText]</p>
```

```
<ul class="commands">
<li class="ekDeleteMessage">[$DeleteMessageLink]</li>
<li class="ekApproveMessage">[$ApproveMessageLink]</li>
</ul>
</div>
</li>
</ekrepeat>
</ul>
[$AddCommentBox]
</div>
</ekoutput>
```

metadatalist.ekml

This file defines which items and information are included when displaying content item information for a metadata list using the MetadataList server control.

metadatlist.ekml Variables

Below is a list of variables that are used with the metadatalist.ekml file.

Variable	Description	More Information
[$Comment]	The content's comment information is displayed.	"[$Comment]" on page 21-425
[$ContentId]	Displays the content item's ID.	"[$ContentId]" on page 21-426
[$DateCreated]	Display the date the content was created.	"[$DateCreated]" on page 21-427
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427
[$EditorFirstName]	Display the last editor's first name for a content item.	"[$EditorFirstName]" on page 21-428
[$EditorLastName]	Display the last editor's last name for a content item.	"[$EditorLastName]" on page 21-428
[$FolderId]	Display the folder ID of a content item.	"[$FolderId]" on page 21-429
[$Html]	Display the HTML contained in the content item.	"[$Html]" on page 21-429
[$HyperLink]	Adds a hyperlink using the title of the content block as the text.	"[$HyperLink]" on page 21-430

Variable	Description	More Information
[$Image]	Displays the path for the image defined in a content item's Metadata. When wrapped in tag, the image is displayed.	"[$Image]" on page 21-430
[$ImageIcon]	Displays an image icon for the content item. For example, if the content item is HTML, the ( ) icon is displayed.	"[$ImageIcon]" on page 21-430
[$ImageThumbnail]	Displays the path for the image's thumbnail defined in a content item's Metadata.	"[$ImageThumbnail]" on page 21-431
[$Index]	Serialize the content items in a numbered list.	"[$Index]" on page 21-431
[$ItemCount]	The total number of items in a list.	"[$ItemCount]" on page 21-432
[$Language]	Display the language ID for the content item.	"[$Language]" on page 21-432
[$LinkTarget]	When added to an <a href=””> tag's target=”” attribute, this variable reads the server control's LinkTarget property and uses its setting.	"[$LinkTarget]" on page 21-432
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an <a href=””> tag, you can create a Hyperlink.	"[$QuickLink]" on page 21-433
[$SERVER_NAME]	Displays the server name. For example, If this variable is applied to http://www.example.com/demo.aspx, the return is www.example.com.	"[$SERVER_NAME]" on page 21-434
[$ShowBubble(width)]	This is similar to [$ShowBubble]. It calls the <ekbubbleinfo> tags and allows you to set the width of the bubble.	"[$ShowBubble(width,height)]" on page 21-436
[$ShowBubble]	Calls the <ekbubbleinfo> tags and places the information contained within those tags in a pop-up bubble.	"[$ShowBubble]" on page 21-435
[$ShowContent('htmltagid')]	Calls the <ekcontentinfo> tags an places the information in those tags within the specified HTML tag ID. Replace the 'htmltagid' with the ID of the tag.	"[$ShowContent('htmltagid')]" on page 21-437

Variable	Description	More Information
[$Status]	Displays the status of a content item.	"[$Status]" on page 21-437
[$Teaser]	Display the content item's summary information. Note: If the item is an HTML form, this variable is *not* supported with this ekml file.	"[$Teaser]" on page 21-438
[$Title]	Displays the content item's title.	"[$Title]" on page 21-438
[$UrlEncode('str')]	Encodes the string information. This variable can be used to encode another EkML variable and place it in an email.	"[$UrlEncode('str')]" on page 21-440
[$UrlParam('paramname')]	Displays the value of a QueryString's parameter. For example, if the QueryString is `?id=27` and the variable is `[$UrlParam('id')]`, 27 is displayed.	"[$UrlParam('paramname')]" on page 21-439

taxonomy.ekml

This file defines which items and information are included when displaying taxonomy item information using the Directory server control. Similar to maps.ekml, the taxonomy.ekml works differently than other .ekml files.

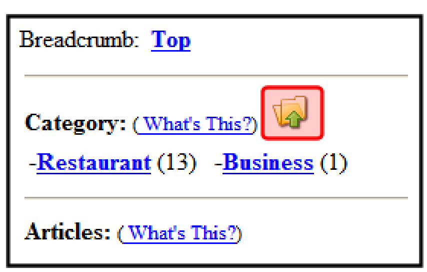
The Directory server control produces multiple areas where content or functionality is defined. To specify these areas in a template, you would call the `<ekoutput>` tag with the mode attribute equaling the area you want to define. For example, in the Directory server control, you can define information in the breadcrumb area of the server control by using `<ekoutput mode="breadcrumb">`.

Additional descriptions and commenting in the taxonomy.ekml file will assist you with learning about EkML with taxonomy. This file is located in `<web root>/CMS400Developer/Workarea/template/taxonomy/taxonomy.ekml`.

Taxonomy <ekoutput> modes

The following <ekoutput modes=""> are used with the taxonomy.ekml template.

EkML Tag	Description
`<ekoutput mode=”breadcrumb”>`	Defines the display of the breadcrumb portion of the taxonomy. Within these tags you can define: - `<bctitle>` - title for the breadcrumbs - `<bcrootlink>` - root link text - `<bcseparator>` - separator used to between bread-crumbs in the breadcrumb trail - `<bchyperlink>` - hyperlinks in the breadcrumb trail - `<bcactivelink>` - the current active breadcrumb item
`<ekoutput mode=”category”>`	Defines how the category information is displayed. Within these tags you can define: `<ekcolrepeat>` takes the category links and spreads them over the amount of columns that are defined in the Directory server control's `TaxonomyCol` property. This tag must appear within `<ekrepeat>` tags.
`<ekoutput mode=”categorybacklink”>`	Defines information about the link that moves the category up one level. This can be a text link or an image link. In this mode, you need to define the following tags: - <ekactivebacklink> </ekactivebacklink> - between these tags, define what appears when a user is in a sub category. Add the [$categorybacklink] variable between these tags and an clickable image appears that allows a user to navigate one level up. - <ekdisablebacklink> </ekdisablebacklink> - between these tags, define what happens when a user is at the top level category. Add the [$categorybacklink] variable between these tags with an <a> tag have users navigate to another location. For example: `<a href="http://www.example.com" target="_ blank">[$categorybacklink]</a>`



EkML Tag	Description
	See Also: "[$categorybacklink]" on page 21-473
<ekoutput mode="article_ search">	Defines how the search results from the taxonomy are displayed.
<ekoutput mode="article">	Defines the display of an individual content item in your taxonomy.
<ekoutput mode="view">	This section defines the overall output view of the Taxonomy. It denotes the locations of the Search box, Breadcrumb, Category and Articles.

taxonomy.ekml Variables

Below is a list of variables that are used with the taxonomy.ekml file.

Variable	Description	More Information
[$AddArticle]	Adds a link that allows a logged in user to add HTML content to CMS400.NET.	"[$AddArticle]" on page 21-472
[$AddAsset]	Adds a link that allows a logged in user to add assets to CMS400.NET.	"[$AddAsset]" on page 21-473
[$categorybacklink]	When place between <ekactivebacklink> tags, this variable adds a clickable image that allows a user to navigate up one category level. When placed between <ekdisablebacklink> tags and in the text area of an <a> tag, this variable adds a clickable image that allows a user to navigate to another URL once they reach the top level category.	categorybacklink and "[$categorybacklink]" on page 21-473
[$CategoryID]	The ID of a taxonomy's category.	
[$ContentByteSize]	Displays the content item's size in KB. Works only with taxonomy search. <ekoutput mode="article_search">	"[$ContentByteSize]" on page 21-477

Variable	Description	More Information
[$ContentId]	Displays the content item's ID.	"[$ContentId]" on page 21-426
[$DateCreated]	Display the date the content was created.	"[$DateCreated]" on page 21-427
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427
[$EditorFirstName]	Display the last editor's first name for a content item.	"[$EditorFirstName]" on page 21-428
[$EditorLastName]	Display the last editor's last name for a content item.	"[$EditorLastName]" on page 21-428
[$FolderId]	Display the folder ID of a content item.	"[$FolderId]" on page 21-429
[$Html]	Display the HTML contained in the content item.	"[$Html]" on page 21-429
[$HyperLink]	Adds a hyperlink using the title of the content block as the text.	"[$HyperLink]" on page 21-430
[$ImageIcon]	Displays an image icon for the content item type. For example, if the content item is HTML, the ( ) icon is displayed.	"[$ImageIcon]" on page 21-430
[$Index]	Serialize the content items in a numbered list.	"[$Index]" on page 21-431
[$ItemCount]	The total number of items in a list.	"[$ItemCount]" on page 21-432
[$Language]	Display the language ID for the content item.	"[$Language]" on page 21-432
[$LinkTarget]	When added to an <a href=""> tag's target="" attribute, this variable reads the server control's LinkTarget property and uses its setting.	"[$LinkTarget]" on page 21-432

Variable	Description	More Information
[$PagingCurrentEndIndex]	The end count number of the items on the page. For example, if you are displaying items 11 - 20 on a page, this variable represents the number 20. Works only with taxonomy search. `<ekoutput mode="article_search">`	"[$PagingCurrentEndIndex]" on page 21-478
[$PagingCurrentStartIndex]	The numerical record of the first item on a page. For example, if you are displaying items 1 through 10 out of 50 total items on a page, this variable represents the number 1. Works only with taxonomy search. `<ekoutput mode="article_search">`	"[$PagingCurrentStartIndex]" on page 21-479
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an `<a href="">` tag, you can create a Hyperlink.	"[$QuickLink]" on page 21-433
[$SearchDuration]	Displays the amount of time, in seconds, it has taken to execute the search. Works only with taxonomy search. `<ekoutput mode="article_search">`	"[$SearchDuration]" on page 21-480
[$SearchSummary]	Creates a summary from information stored in the indexing service for each item in the search results. Works only with taxonomy search. `<ekoutput mode="article_search">`	"[$SearchSummary]" on page 21-477
[$SearchText]	Displays the text for which a user is searching. This information is same as what a user entered in the search text box. Works only with taxonomy search. `<ekoutput mode="article_search">`	"[$SearchText]" on page 21-479
[$SERVER_NAME]	Displays the server name. For example, If this variable is applied to `http://www.example.com/demo.aspx`, the return is `www.example.com`.	"[$SERVER_NAME]" on page 21-434
[$ShowAllcategory]	Adds to the Taxonomy search screen a checkbox that lets the user decide if he wants to display categories that have no items.	"[$ShowAllcategory]" on page 21-435

Variable	Description	More Information
[$ShowBubble]	Calls the `<ekbubbleinfo>` tags and places the information contained within those tags in a pop-up bubble.	"[$ShowBubble]" on page 21-435
[$ShowBubble(width)]	This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and allows you to set the width of the bubble.	"[$ShowBubble(width,height)]" on page 21-436
[$ShowBubble(width,height)]	This is similar to `[$ShowBubble]`. It calls the `<ekbubbleinfo>` tags and allows you to set the width and height of the bubble.	"[$ShowBubble(width,height)]" on page 21-436
[$ShowContent('htmltagid')]	Calls the <ekcontentinfo> tags an places the information in those tags within the specified HTML tag ID. Replace the 'htmltagid' with the ID of the tag.	"[$ShowContent('htmltagid')]" on page 21-437
[$Status]	Displays the status of a content item.	"[$Status]" on page 21-437
[$Teaser]	Display the content item's summary information. Note: If the item is an HTML form, this variable is *not* supported with this ekml file.	"[$Teaser]" on page 21-438
[$TemplateQuickLink]	This property displays the Template Quicklink information assigned to the taxonomy item in the Workarea. When wrapped in an `<a href="">` tag, you can create a Hyperlink. See Also: "Applying a Template to a Taxonomy or Category" on page 9-207	"[$TemplateQuickLink]" on page 21-473
[$Title]	Displays the content item's title.	"[$Title]" on page 21-438
[$UrlEncode('str')]	Encodes the string information. This variable can be used to encode another EkML variable and place it in an email.	"[$UrlEncode('str')]" on page 21-440
[$UrlParam('paramname')]	Displays the value of a QueryString's parameter. For example, if the QueryString is `?id=27` and the variable is `[$UrlParam('id')]`, 27 is displayed.	"[$UrlParam('paramname')]" on page 21-439

[$AddArticle]

This variable adds a link that allows a user to add HTML content to CMS400.NET. Clicking the link opens an editor. When the content is added, it's automatically added to the taxonomy category associated with the Directory server control. When you allow users to add content using this variable, you should set the `AddItemFolderID` property in the Directory server control to the folder ID where the content will be stored. This variable should not be added between the <ekrepeat></ekrepeat> tags. See Also: "AddItemFolderID" on page 9-242

```
<tr>
<td>
[$AddArticle]
</td>
</tr>
```

[$AddAsset]

This variable adds a link that allows a user to add assets to CMS400.NET via a drag and drop box. When the asset is added, it's automatically added to the taxonomy category associated with the Directory server control. When you allow users to add assets using this variable, you should set the `AddItemFolderID` property in the Directory server control to the folder ID where the asset will be stored. This variable should not be added between the <ekrepeat></ekrepeat> tags.See Also: "AddItemFolderID" on page 9-242

```
<tr>
<td>
[$AddAsset]
</td>
</tr>
```

[$TemplateQuickLink]

This variable displays the Template Quicklink information assigned to the taxonomy item in the Workarea. When wrapped in an `<a href="">` tag, you can create a Hyperlink.

```
<ekmarkup>
<ekoutput>
<table width="100%" border="0">
<ekrepeat>
<tr>
<td>
<a href="[$TemplateQuickLink]">[Title]</a><br/>[$Teaser]
</td>
</tr>
</ekrepeat>
</table>
</ekoutput>
</ekmarkup>
```

[$categorybacklink]

When place between <ekactivebacklink> tags, this variable adds a clickable image that allows a user to navigate up one category level.

When placed between <ekdisablebacklink> tags and in the text area of an <a> tag, this variable adds a clickable image that allows a user to navigate to another URL once they reach the top level category. See Also: categorybacklink

```
<ekoutput mode="categorybacklink">
<ekactivebacklink>
[$categorybacklink]
</ekactivebacklink>
<ekdisablebacklink>
<a href="http://www.example.com" target="_blank">[$categorybacklink]</a>
</ekdisablebacklink>
</ekoutput>
```

websearch.ekml

This file defines which items and information are included when displaying search results with the WebSearch server control.

The websearch.ekml template needs two `<ekoutput>` nodes.

- The first `<ekoutput>` node formats the results of non-image searches
- The second `<ekoutput>` node formats results that include images

websearch.ekml Variables

Below is a list of variables that are used with the websearch.ekml file.

Variable	Description	More Information
[$ContentByteSize]	Displays the size of the content item.	"[$ContentByteSize]" on page 21-477
[$ContentId]	Display the content ID number assigned to the content.	"[$ContentId]" on page 21-426
[$DateModified]	Display the date the content was last modified.	"[$DateModified]" on page 21-427
[$EditorFirstName]	Display the last editor's first name for a content item.	"[$EditorFirstName]" on page 21-428
[$EditorLastName]	Display the last editor's last name for a content item.	"[$EditorLastName]" on page 21-428
[$Image]	Displays the path for the image defined in a content item's Metadata. When wrapped in `<img src=""/>` tag, the image is displayed.	"[$Image]" on page 21-430
[$ImageIcon]	Used in non-image searches to display an image icon for the content item. For example, if the content item is HTML, the ( ) icon is displayed.	"[$ImageIcon]" on page 21-430
[$ImageThumbnail]	Displays the path for the image's thumbnail defined in a content item's Metadata.	"[$ImageThumbnail]" on page 21-431
[$ItemCount]	Displays the total number of results produced by the search.	"[$ItemCount]" on page 21-478
[$LinkTarget]	When added to an `<a href="">` tag's `target=""` attribute, this variable reads the server control's `LinkTarget` property and uses its setting.	"[$LinkTarget]" on page 21-432

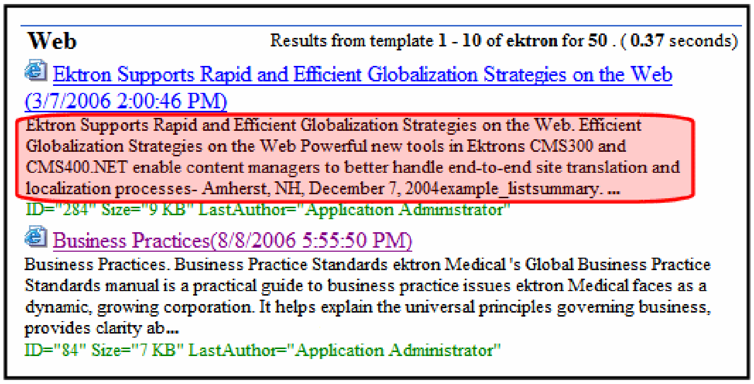
Variable	Description	More Information
[$PagingCurrentEndIndex]	The end count number of the items on the page. For example, if you are displaying items 11 - 20 on a page, this variable represents the number 20.	"[$PagingCurrentEndIndex]" on page 21-478
[$PagingCurrentStartIndex]	The numerical record of the first item on a page. For example, if you are displaying items 1 through 10 out of 50 total items on a page, this variable represents the number 1.	"[$PagingCurrentStartIndex]" on page 21-479
[$QuickLink]	This property displays the Quicklink information for the content item. When wrapped in an `<a href="">` tag, you can create a Hyperlink.	"[$QuickLink]" on page 21-433
[$SearchDuration]	Displays the amount of time, in seconds, it has taken to execute the search.	"[$SearchDuration]" on page 21-480

Variable	Description	More Information
[$SearchSummary]	Creates an abstract from information stored in the indexing service for each item in the search results. Note: The Adobe IFilter, which is used to generate the abstract, is only supported in Tier 1 languages (English, French, German, and Japanese). If your Web site uses other languages, the abstract may not be legible. In such a case, Ektron recommends suppressing the abstract from the search results.	"[$SearchSummary]" on page 21-477
[$SearchText]	Displays the text for which a user is searching. This information is same as what a user entered in the search text box.	"[$SearchText]" on page 21-479
[$ShortDateModified]	Displays the date the content was modified. To display the date and time a content item was modified, use [$DateModified]	"[$ShortDateModified]" on page 21-434
[$Title]	Displays the content item's title.	"[$Title]" on page 21-438

[$SearchSummary]

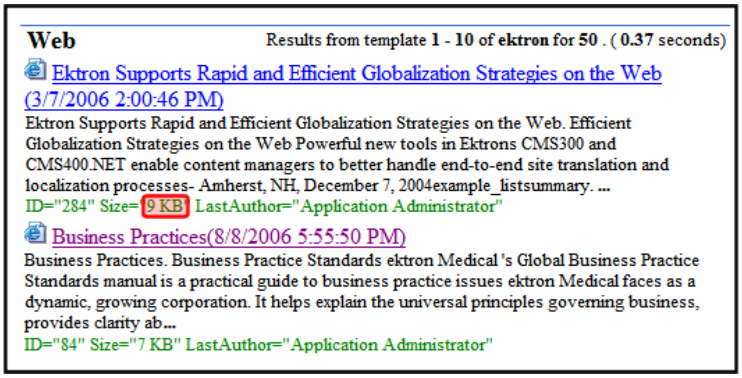
Gets the first 300 characters from the body content and creates an abstract.

For content items that do not get indexed, such as images, the SearchSummary uses the image's title, summary, and metadata information.



[$ContentByteSize]

Display the size of the content item in the results list.

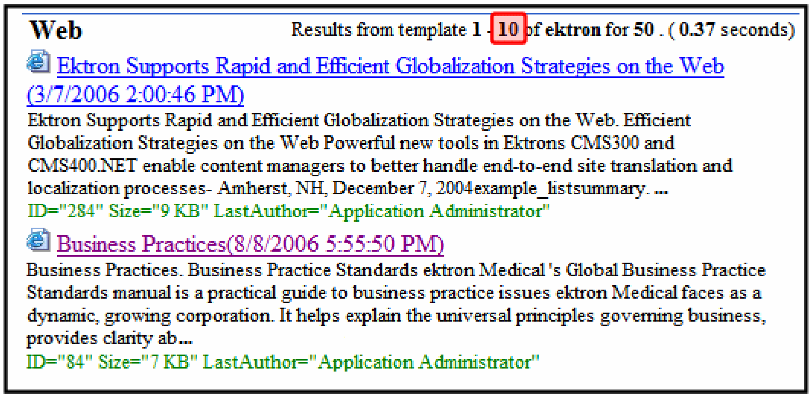


[$PagingCurrentEndIndex]

The numerical record of the last item on a page. For example, if you are displaying items 1 through 10 out of 50 total items on a page, this variable represents the number 10.

This variable is typically used in the following context:

Results `[$PagingCurrentStartIndex]` - **`[$PagingCurrentEndIndex]`** of `[$ItemCount]` for item `[$SearchText] ([$SearchDuration])`.



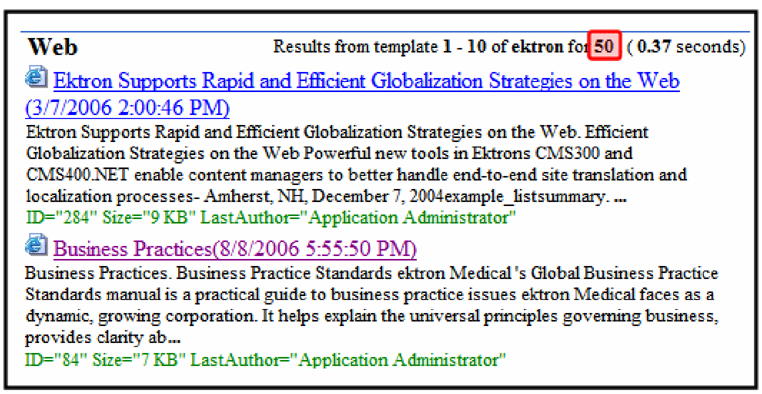
[$ItemCount]

Displays the total number of results produced by the search.

This variable is typically used in the following context:

Results `[$PagingCurrentStartIndex]` - `[$PagingCurrentEndIndex]` of **`[$ItemCount]`** for item `[$SearchText]` `([$SearchDuration])`

.

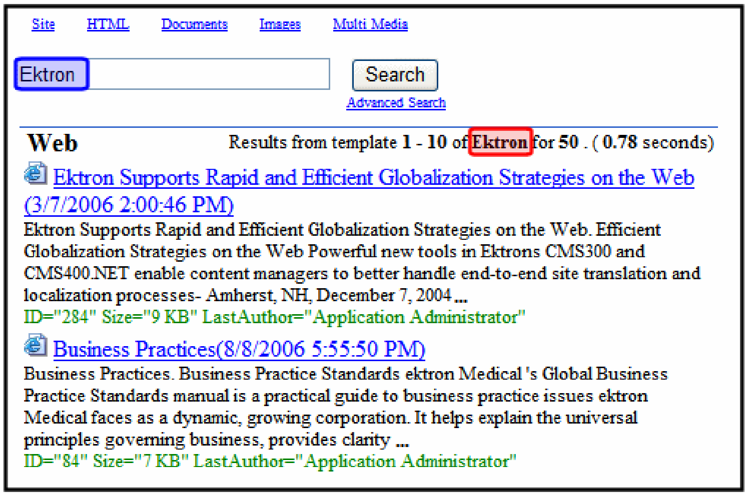


[$SearchText]

Displays the text for which a user is searching. This information is same as what a user entered in the search text box.

This variable is typically used in the following context:

Results `[$PagingCurrentStartIndex]` - `[$PagingCurrentEndIndex]` of `[$ItemCount]` for item **`[$SearchText]`** `([$SearchDuration])`.

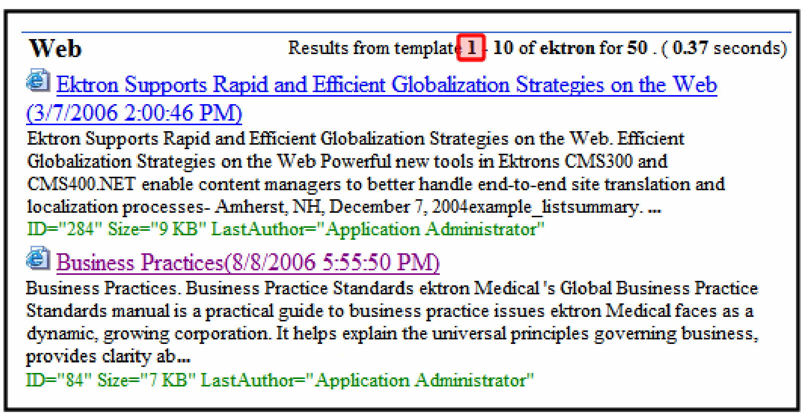


[$PagingCurrentStartIndex]

The numerical record of the first item on a page. For example, if you are displaying items 1 through 10 out of 50 total items on a page, this variable represents the number 1.

This variable is typically used in the following context:

Results **`[$PagingCurrentStartIndex]`** - `[$PagingCurrentEndIndex]` of `[$ItemCount]` for item `[$SearchText] ([$SearchDuration])`.

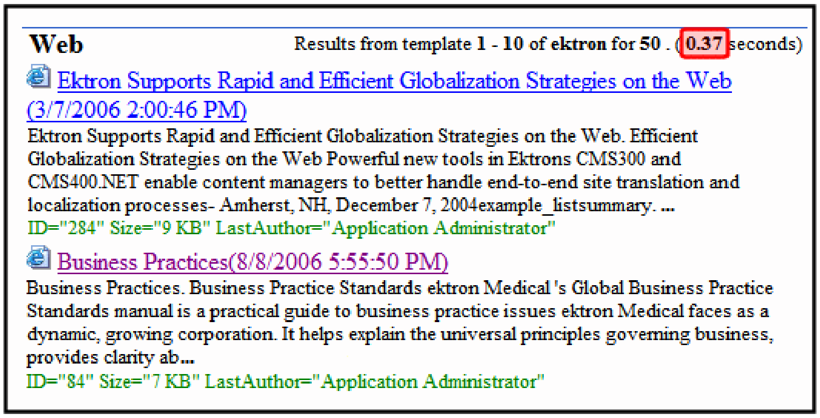


[$SearchDuration]

Displays the amount of time, in seconds, it has taken to perform the search.

This variable is typically used in the following context:

Results `[$PagingCurrentStartIndex]` - `[$PagingCurrentEndIndex]` of `[$ItemCount]` for item `[$SearchText]` (**`[$SearchDuration]`**).



Ektron's Developer SDK

The Developer SDK for Ektron CMS400.NET contains the following components to help you extend and customize your CMS400.NET site.

- **The Developer API which includes:**
  - **Server Control API**: An interface for calling the methods and properties of the Ektron CMS400.NET Server Controls. For additional information on the server controls, see "Introduction to Ektron CMS400.NET Server Controls" on page 2 and the Developer API Documentation.
  - **Web Services API**: Exposes a method's functionality for use with SOAP over HTTP. For additional information on the Web Services, see "Web Services" on page 46 and the Developer API Documentation.
  - **.NET Assembly API**: Similar to the Business API provided in previous version, the .NET Assembly API provides an interface for calling the methods and properties that are exposed in Ektron CMS400.NET. See Also: the Developer API Documentation.
  - **Plug-in Extension API**: The Plug-in Extension exposes event hooks in Ektron CMS400.NET. As a developer, you can utilize these event hooks in Visual Studio C# or VB.NET to create customized events for your site. See Also: Plug-in Extension and the Developer API Documentation.
- **The Developer API Documentation**

The API Documentation contains a detailed description of the functions included in each of the APIs.

To access the Developer's API documentation in Visual Studio, click **Help** >> **Contents**. Next, choose Ektron CMS400.NET API Documentation from the list of contents. You can also filter the documentation so you see only Ektron's API documentation. Click **Ektron API Documentation** in the filter drop down box. You can also access the API documentation online by clicking here and selecting **CMS400.NET API Reference manual (HTML)** from the Ektron CMS400.NET SDK section.

- **Plug-in Extension Wizard**

The Plug-in Extension exposes event hooks in Ektron CMS400.NET. As a developer, you can utilize these event hooks in Visual Studio C# or VB.NET to create customized events for your site. The Plug-in Extension Wizard creates the framework code in Visual Studio to make an extension. All you need to do is add your custom code to make your events happen. See Also: Plug-in Extension

- **Ektron CMS400.NET Server Controls Toolbox**

The Ektron CMS400.NET's are now install for you when the Developer SDK is installed. Server controls let you insert, via drag and drop or programmatically, many standard methods and properties within the Visual Studio environment. This means that you can see the effect of your changes in real time -- you don't have to modify a page then compile a sample project to see the results. See Also: "Introduction to Ektron CMS400.NET Server Controls" on page 2

- **Ektron Site Setup Wizard**

The Ektron Site Setup Wizard allows you to create a site in Visual Studio. This allows you to easily create additional CMS400.NET sites on your server. The site wizard copies the site file needed for a working CMS400.NET Min site. In addition, it adds all the necessary permissions, sets up the database, creates the indexing catalog and creates the asset storage location. See Also: Using the Ektron Site Setup Wizard

(continued in Installing the Developer SDK)

Installing the Developer SDK

To install the Developer SDK on your Ektron CMS400.NET Server, run the `CMS400SDK_Setup.exe` file located in `C:\Program Files\Ektron\CMS400v8x\Utilities`.

Note: If you installed the CMS400.NET SDK on your server during the initial install, you do not have to install it again.

If you are installing to a separate client system, copy the `CMS400SDK_Setup.exe` to that system and then run it.

Use the steps below to guide you through the install procedure.

1. Run `CMS400SDK_Setup.exe`.
2. The software is installed and configured.
3. When the SDK setup is complete, click **Finish**.

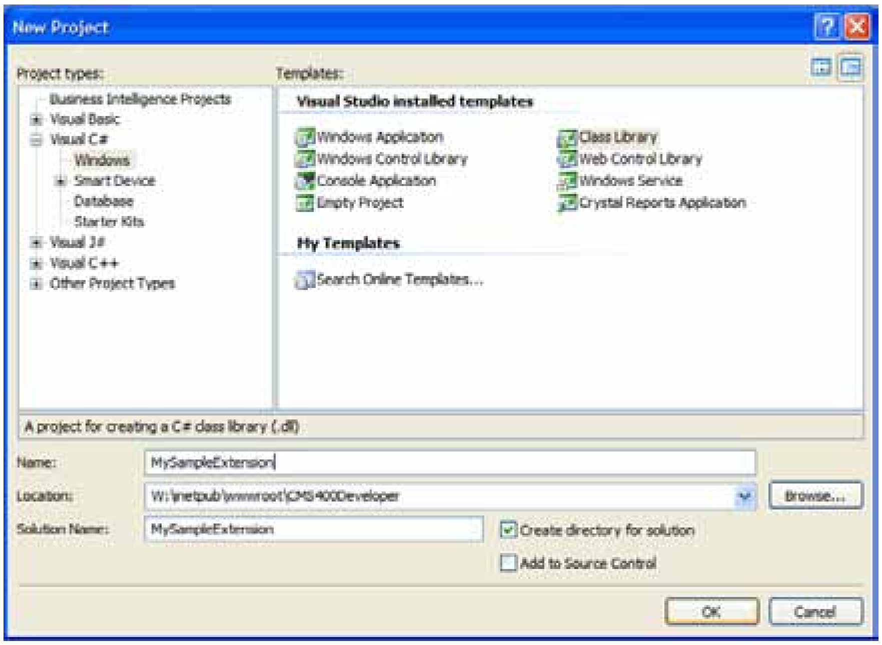
(continued in Creating a New Plug-in Extension in Visual Studio)

Creating a New CMS Extension

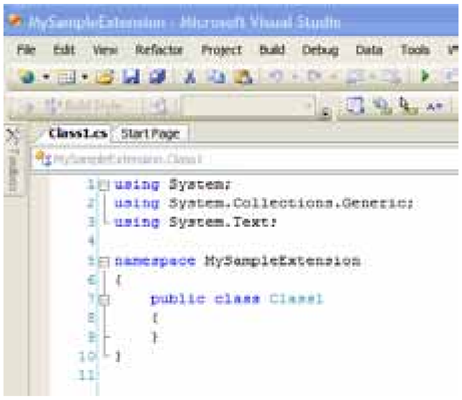
Note: In versions previous to CMS400.NET version 8.0, developers could use the Plug-in Extension Wizard to extend the system. With version 8.0, using CMS Extensions is preferred over the previous Plug-in system.

The following steps explain how to create a new CMS Extension in Visual Studio.

1. In Visual Studio, click **File** > **New** > **Project...**
2. The New Project screen appears.



3. Under **Project Type**, choose either **Visual Basic** or **Visual C#**. (In this example we use Visual C#.)
4. Under **Templates**, click **Class Library**.
5. Fill out the **Name**, **Location** and **Solution Name** text boxes.
6. Click **OK**.
7. The Class1.cs code page appears in the editor.



8. Add references to the following assemblies.

```
Ektron.CMS.Common
Ektron.CMS.ObjectFactory
```

9. Add the following using statements to the top of the class.

```
using Ektron.Cms;
using Ektron.Cms.Common;
using Ektron.Cms.Extensibility;
using Ektron.Cms.Extensibility.Content;
```

10. Update the class to extend Ektron.Cms.Extensibility.ContentStrategy.

```
namespace Cms.Extensions.Samples
{

       public class ContentExtensionsSample : ContentStrategy

       {

       }

}
```

Note: The namespace in the code above is Cms.Extensions.Samples. This information is needed for steps 12 below.

11. Override the method for the event you wish to catch. In this example, override OnBeforeAddContent(). The code to modify the Title looks like this.

```
public override void OnBeforeAddContent(ContentData contentData,
CmsEventArgs eventArgs)
{

       contentData.Title += " modified";

}
```

12. This is what the final code looks like.

```
using System;
using System.Collections.Generic;
using System.Text;
using Ektron.Cms;
using Ektron.Cms.Common;
```

```
using Ektron.Cms.Extensibility;
using Ektron.Cms.Extensibility.Content;
namespace Cms.Extensions.Samples
{
public class ContentExtensionsSample : ContentStrategy
{
public override void OnBeforeAddContent(ContentData contentData, CmsEventArgs eventArgs)
{
contentData.Title += " modifed";
}
}
}
```

13. Compile this assembly.
14. Copy the resulting dll into the `<webroot>\bin` directory

Register the New Extension in the ObjectFactory

After creating the extension in the steps above, register it in the `<webroot>/-ObjectFactory.config` file to look like this code.

```
<objectStrategies>

       <add name="Content">

              <strategies>

                     <add name="MyFirstExample"
                     type="Cms.Extensions.Samples.ContentExtensionsSample,
                      MySampleExtension"/>

              </strategies>

       </add>

</objectStrategies>
```

More information about ObjectFactory objectStrategies

In order for the CMS to execute the CMS Extension properly, it must be registered in the objectStrategies section of the ObjectFactory.config file found in the website root.

The node <add name="Content"> tells the CMS that we are defining "Content" extensions. This is required.

In the <strategies> section, one or more extensions can be added for content.

To add a strategy, two properties must be defined - Name and Type.

1. Name is any unique name which identifies the extension.
2. Type is a fully qualified name of the type you register as the extension. It contains type name - the NameSpace + type and the assembly name of the type.

Test the New Extension

The new CMS extension created in the examples above modifies the title of a new content item by adding the word "modified" to the end of the title.

To test this, create a new content in the workarea of the Website. You will see the new content title with the word "modifed" appended to the end of it.

More Examples of CMS Extensions

More examples of CMS Extensions are found in the SDK folder of the CMS. The default location for this folder is : `Program Files\Ektron\CMS400SDK\CMS Extensions`. Also, samples for eCommerce specific extensions are found at `Program Files\Ektron\CMS400SDK\Commerce\Events`.

Plug-in Samples

Ektron provides the following sample code plug-in projects. These projects are located in the `C:\Program Files\Ektron\CMS400SDK\Samples` folder. Use the `Samples.sln` file to launch these samples in Visual Studio.

- PublishSendAlert
- PublishContentChange
- InstantMessageOnPublish

The **PublishSendAlert** sample sends an email when new content is published. For example, you want to be notified if any content is publish on the Web site. See "PublishSendAlert Code Sample" on page 21-487

The **PublishContentChange** sample appends content when it is published. For example, you want to add a signature or copyright information to content when it is published. See "PublishContentChange Sample" on page 21-488

The **InstantMessageOnPublish** sample sends an instant message when new content is published. For example, you want to be notified if any content is publish on the Web site. See "InstantMessageOnPublish Sample" on page 21-489

The code for each sample appears below.

PublishSendAlert Code Sample

The following code sample sends an email when new content is publish.

```
using System;
using System.Collections.Generic;
using System.Text;
using System.Net.Mail;
using System.Net;
using Ektron.Cms.Extensibility;

namespace Ektron.Cms.Extensibility.Samples
{
public class PublishSendAlert : ExtensionEvent
{
public override bool OnAfterPublish()
{
// Declare variables.
bool bReturn = false;
SmtpClient sendClient = null;
MailMessage message = null;
MailAddress from = null;

try
{
// Create connection to mail server and create a new message.
sendClient = new SmtpClient("mail.sample.com", 25);
message = new MailMessage();

// Populate information in the new message.
// TODO: Add from address below
from = new MailAddress("sample_sender@sample.com");

message.From = from;

// TODO: Add all recipients below.
message.To.Add("email@sample.com");
message.To.Add("email2@sample.com");
message.Subject = "Content has been published";
message.Body = "Content published contained the following:\r\n" + Content.Html;

// Send the message.
sendClient.Send(message);

// Set return to success.
bReturn = true;
}
catch (Exception exThrown)
{

// If there was an error, catch it and record the last error message. This is displayed
in the CMS to the end user based upon the method return value and the setup in the
configuration utility. Typically SmtpClient throws an exception if the message could not
be sent.
Content.ErrorMessage = exThrown.Message + exThrown.StackTrace;
bReturn = false;
}
finally
{
// Cleanup
if (message != null)
```

```
{
message.Dispose();
message = null;
}
if (sendClient != null)
{
sendClient = null;
}
}

return bReturn;
}
}
}
```

PublishContentChange Sample

The following code sample appends HTML content when it is published.

Warning! Only HTML content can be appended using the OnBeforePublish event. Assets can not appended and there is no error message.

```
using System;
using System.Collections.Generic;
using System.Collections;
using System.Text;
using Ektron.Cms.Extensibility;

namespace Ektron.Cms.Extensibility.Samples
{
public class PublishContentChange : ExtensionEvent
{
private const string S_APPEND = " ****added by PublishContentChange****";

public override bool OnBeforePublish()
{
// Declare variables
bool bReturn = false;
string sLastError = "";
string sTemp = Content.Html;

try
{
//Check content for the last closing paragraph tag. If one exists put additional text
within it. Otherwise just append to end of content.
if (sTemp.Contains("</p>"))
sTemp = sTemp.Insert(Content.Html.LastIndexOf("</p>"), S_APPEND);
else
sTemp += S_APPEND;

// Set content html to our new updated string. This will set it on the CMS side.
Content.Html = sTemp;

// Set return to success.
bReturn = true;
}
catch (Exception exThrown)
{
// If there was an error, catch it and record the last error message. This is displayed
in the CMS to the end user based upon the method return value and the setup in the
configuration utility.
```

```
Content.ErrorMessage = exThrown.Message + exThrown.StackTrace;
bReturn = false;
}
            return bReturn;
}

}
}
```

InstantMessageOnPublish Sample

This sample plug-in sends an instant message (IM) to any designated AIM user. This sample is made up of various files. To view these files, navigate to the `C:\Program Files\Ektron\CMS400SDK\Samples\InstantMessageOnPublish` folder.

Use the following steps when working with this sample.

1. Open the `config_info.reg` file located in the `C:\Program Files\Ektron\CMS400SDK\Samples\InstantMessageOnPublish` folder and edit the following lines:
   - change the SendToUserName
   - change the SendFromUserName
   - change the SendFromUserPassword
2. Save the file.
3. Double click the `config_info.reg` to add the information to the registry.
4. In Visual Studio, open the `Sample.sln` located at: `C:\Program Files\Ektron\CMS400SDK\Samples`
5. Save and build the project.
6. Navigate to the location of your InstantMessageOnPublish plug-in project.
7. From the Bin folder of the plug-in project, copy the newly created DLL to the following folder on your Ektron CMS400.NET server.
   `C:\Program Files\Ektron\Plugins\Extensions`

Once you have created a plug-in, you can use the Extensibility Configuration Editor to configure how the plug-in will interact with See Also: "Configuring a Plug-in Extension" on page 21-490

Manually Creating Plug-in Framework

If you would like to create a plug-in without using the Plug-in Extension Wizard or you cannot use the wizard, the following steps explain how to convert a standard DLL to an Ektron

Plug-in DLL.

1. Create a DLL project skeleton via the VS Class Library wizard.
2. Add a reference to ExtensibilityBase.dll from your current project.
   The default install location is: `C:\Program Files\Ektron\CMS400SDK`
3. Add a using statement for C# or an Imports statement for VB to incorporate the plug-in namespace.
   C#: `using Ektron.Cms.Extensibility;`
   VB: `Imports Ektron.Cms.Extensibility`
4. Add inheritance to your existing class from ExtensionEvent base class.
   C#: `public class MyStandardDllClass : ExtensionEvent`
   VB: `Inherits ExtensionEvent`
5. Hook the events you want to implement by using intellisense to choose the event. Type:
   C#: `public override`
   VB: `Public Overrides`
6. If the plug-in is to return a status other then True, remove the return line generated by visual studio and return your own status:
   C#: `return base.<Overrided_Method_Name>();`
   VB: `Return MyBase.<Overrided_Method_Name>()`

Once you have created a plug-in, you can use the Extensibility Configuration Editor to configure how the plug-in will interact with CMS400.NET. See Also: "Configuring a Plug-in Extension" on page 21-490

Configuring a Plug-in Extension

Once you have created a Plug-in Extension, the Extensibility Configuration Editor allows you to:

- prioritize plug-ins and events
- enable or disable them
- assign them to a specific site when using multiple sites with CMS400.NET
- see a description of the plug-in or event
- see who created a plug-in or event

By prioritizing the plug-ins and events you can set the order of execution for events of the same type that appear in multiple plug-ins. See Also: "Setting the Plug-in Order of Execution by Event" on page 21-501

Enabling and disabling plug-ins allows you to temporarily disable a plug-in or event without disabling the rest of the plug-ins and events. See Also: "Enabling and Disabling Plug-ins and Events" on page 21-500

If you are using the Multi-site support in CMS400.NET, you can assign a plug-in or event to a specific site. This allows you to build a Plug-in that might be used in multiple sites, but contain an event that you only want applied to a single site. See Also: "Applying Plug-ins and Events to Specific Sites" on page 21-497

The Extensibility Configuration Editor exists on your CMS400.NET server. For the editor to work with an Extension Plug-in, the plug-in needs to be in the watch folder `C:\Program Files\Ektron\Plugins\Extensions` located on the Ektron CMS400.NET server.

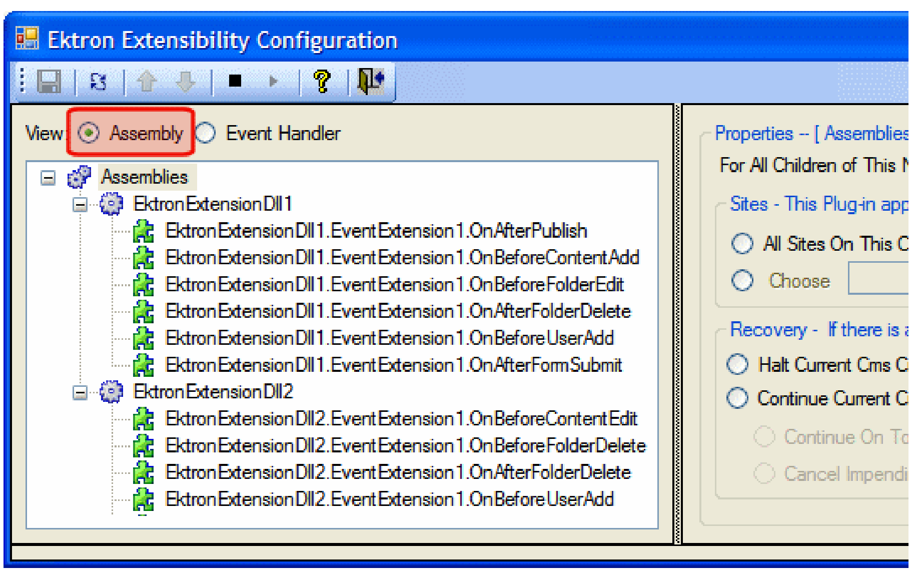
Opening the Extensibility Configuration Editor

To view Plug-in Extensions in the Extensibility Configuration Editor, click **Start** > **Programs** > **CMS400** > **Utilities** > **Plug-in Configuration** on your CMS400.NET server. You can also access the editor using the `ConfigurationUtility.exe` file located in: `C:\Program Files\Ektron\CMS400SDK`.

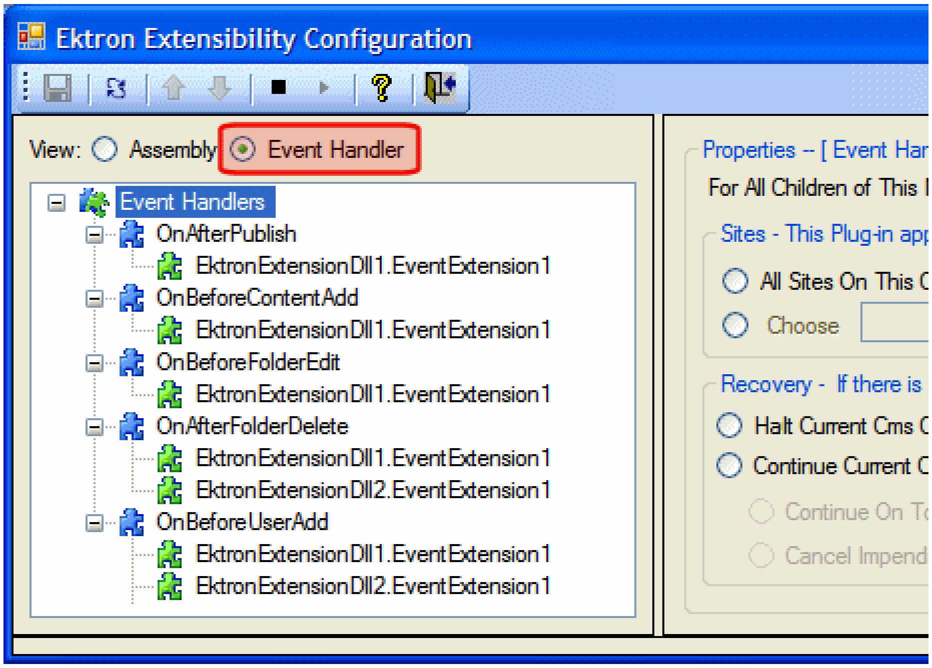
Viewing Plug-in Extensions in the Extensibility Configuration Editor

The Extension Plug-ins in the Extensibility Configuration Editor are displayed in a Tree format that enables you to show or hide each branch of the tree.

You can view the plug-in Extensions by Assembly or by Event Handler. When viewing by Assembly, you see each Plug-in Extension with all of the events for that extension nested below it.



When viewing by Event Handler, you see each event with all of the Plug-in Extensions it belongs to nested below it.



The Extensibility Configuration Editor's Toolbar

The plug-in toolbar allows you to Save settings, Refresh, Start and Stop, and Reorder plug-ins and events.

The table below shows each toolbar button and its description.

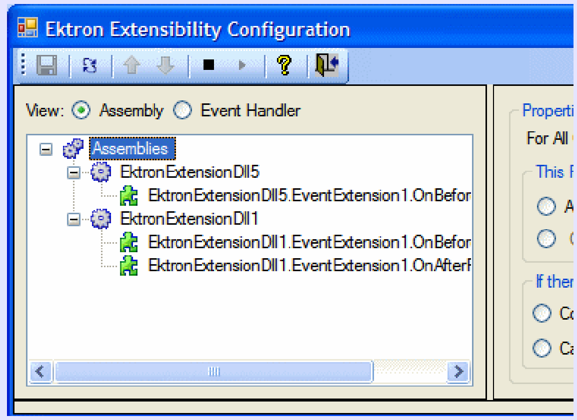
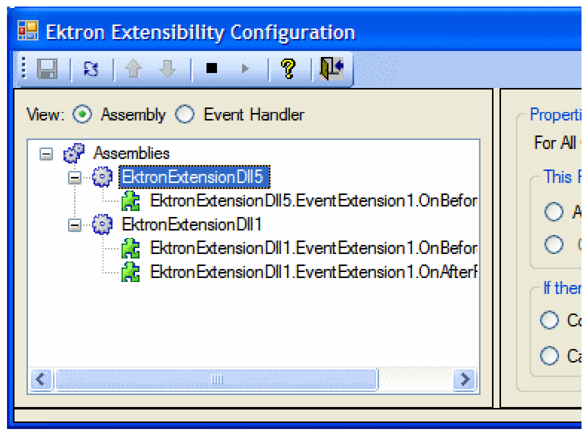
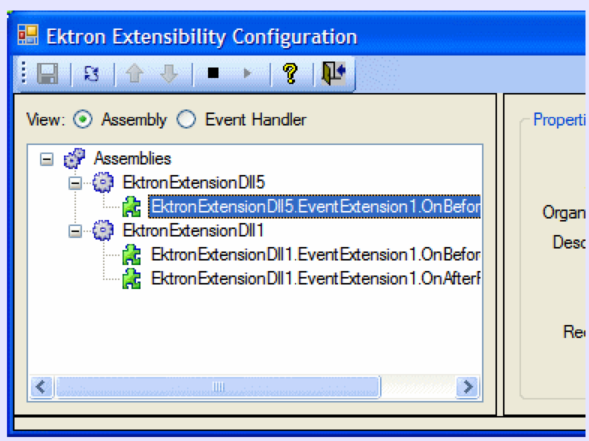
Command	Button	Description	See Also
Save		Saves the changes made in the editor.	
Refresh		Refreshes the editor and displays any new plug-ins that are added to the Extensions folder.	
Move Event Up		Moves an event to a higher priority when multiple events of the same type are used.	"Setting the Plug-in Order of Execution by Event" on page 21-501

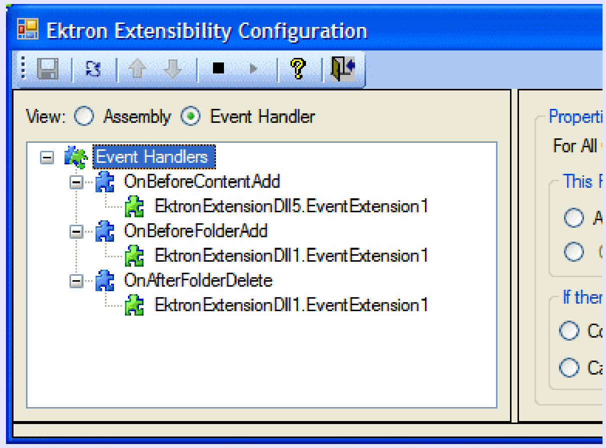
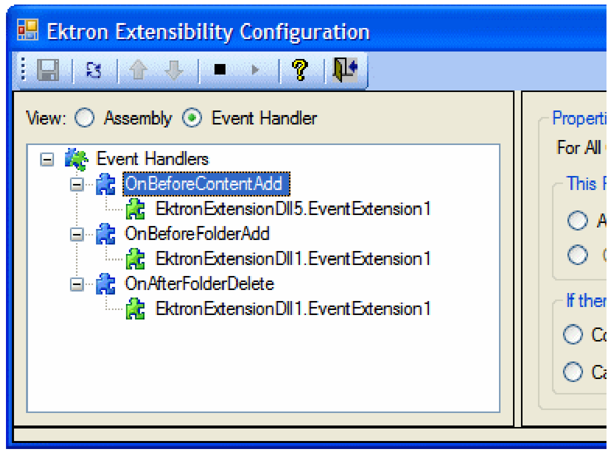
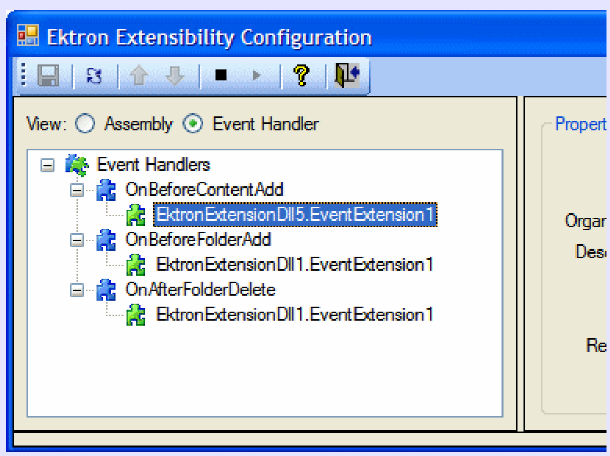
Command	Button	Description	See Also
Move Event Down		Moves an event to a lower priority when multiple events of the same type are used.	"Setting the Plug-in Order of Execution by Event" on page 21-501
Disable Selected Event		Stops the event or plug-in from running.	"Enabling and Disabling Plug-ins and Events" on page 21-500
Enable Selected Event		Starts the event or plug-in.	"Enabling and Disabling Plug-ins and Events" on page 21-500
Help		Launches help information.	
Close Editor		Exits the editor.	

Setting Plug-in Extension and Event Properties

When using the Assembly view, you can set properties at the Assemblies level, the Plug-in Extension level or at the event level. When using the Event Handler view, you can set properties at the Event Handler level, the Event level or the Plug-in Extension level. The table below explains the different levels.

Level	Where the Level Appears in the Editor
Assembly View	

Level	Where the Level Appears in the Editor
Assemblies - All plug-ins and events below this level use the properties applied to this level.	
Plug-in Extension - The plug-in you choose and all the events associated with that plug-in use the same properties.	
Event - Properties are assigned to each individual event.	
Event Handler View	

<table>
<tr><th>Level</th><th>Where the Level Appears in the Editor</th></tr>
<tr><td>Event Handler - All events and plug-ins below this level use the properties applied to this level.</td><td>
</td></tr>
<tr><td>Event - The event you choose and all the plug-ins associated with that event use the same properties.</td><td>
</td></tr>
<tr><td>Plug-in Extension - Properties are assigned to each plug-in.</td><td>
</td></tr>
</table>

Property List

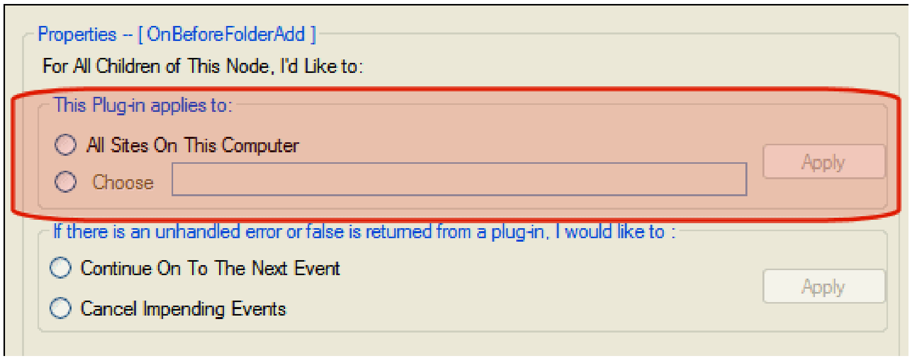
The following table lists the properties contained in the Extensibility Configuration Editor.

Property	Description	See Also
Sites This Plug-in Applies to:	Choose the sites to which this plug-in or event applies. You need only choose a site if you are using Multi-site support.	"Applying Plug-ins and Events to Specific Sites" on page 21-497 and "Multi-Site Support" on page 2774
Recovery If there is an unhandled error or false is returned from a plug-in, I would like to:	Choose what happens when there is an unhandled error.	"Determining What Happens After an Error Occurs" on page 21-499
Name	The name of the plug-in or event is displayed. This property is set in the plug-in's code.	"Setting the Information Properties in the Plug-in Code" on page 21-499
Author	The author of the plug-in or event. This property is set in the plug-in's code.	"Setting the Information Properties in the Plug-in Code" on page 21-499
Organization	The organization or company that created the plug-in or event. This property is set in the Plug-in's code.	"Setting the Information Properties in the Plug-in Code" on page 21-499

Property	Description	See Also
Status	Decide whether plug-ins and events are enabled or disable.	"Enabling and Disabling Plug-ins and Events" on page 21-500
Order	Decide the order of execution for events of the same type that appear in multiple plug-ins. For example, if the OnBeforeContentAdd event appears in EktronExtDLL5.EventExt1 and EktronExtDLL2.EventExt1, you can choose which plug-in's event is executed first.	"Setting the Plug-in Order of Execution by Event" on page 21-501

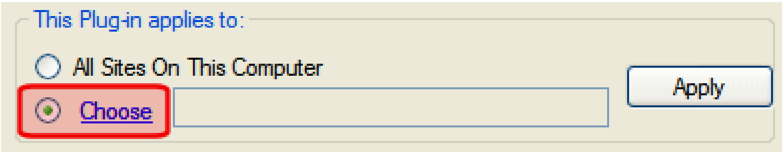
Applying Plug-ins and Events to Specific Sites

If you are using the Multi-site Support feature in CMS400.NET, you may find it necessary to apply a plug-in or event to one site and not another. To accomplish this, use the **Sites** property. It allows you to assign events and plug-ins to all the sites on a server or to select sites on the server. For example, you are appending HTML content by applying a company's copyright information to a site and you are supporting multiple sites with CMS400.NET.

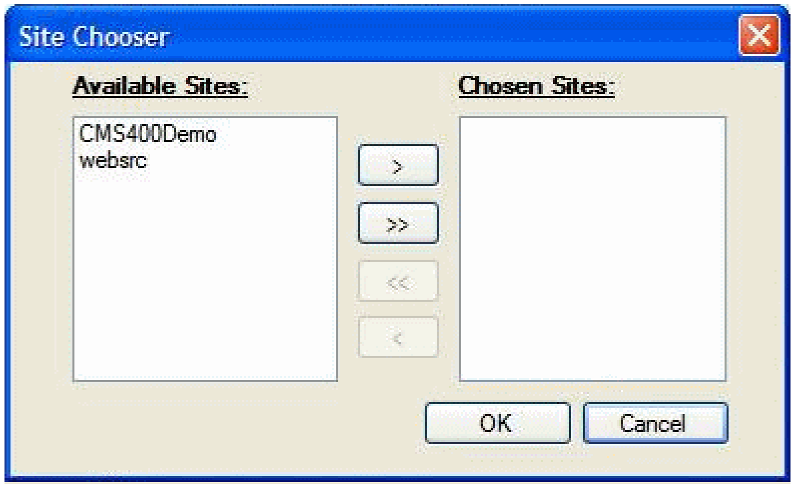


To apply a plug-in or event to a specific site, follow these steps.

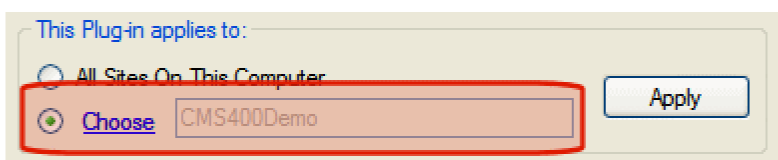
1. Open the Ektron Extensibility Configuration Editor by clicking **Start** > **Programs** > **CMS400** > **Utilities** > **Plug-in Configuration**.
2. Click the plug-in or event in the menu tree.
3. Under the **Sites** property, select either **All Sites on This Computer** or **Choose** radio buttons. The first time you select the Choose radio button, the Site Chooser screen appears.



Note: If the Site Chooser screen does not appear when you click the **Choose** radio button, click the **Choose** hyperlink next to the radio button.



4. Highlight the sites in the **Available Sites** column to which the plug-in or event will be assigned.
5. Click the > button to move the selected sites to the **Chosen Sites** column. Click >> to move all of the sites. To remove a selection from the **Chosen Sites** column, highlight it and click the < button. To remove all selections, click the << button.
6. Click **OK**.
7. The chosen sites appear in the text box.



8. Click **Apply**.
9. Click the Save ( ) button.

Determining What Happens After an Error Occurs

The **Recovery** property allows you to decide how to handle errors that arise when utilizing plug-ins and events. For this property there are two choices:

- **Halt Current CMS Operation** - in the event of an unhandled error, this selection stops the current operation completely. For example, if you publish a piece of content and the OnBeforePublish event has an unhandled error, the content is not published and the error message associated with the action is displayed.

- **Continue Current CMS Operation** - when this option is selected, the choices below are available.
  - **Continue On to the Next Event** - in the event of an unhandled error, the process moves to the next event. For example, if you had three plug-ins that contained the OnBeforePublish event and it failed in the first instance, the process would then move on to the next OnBeforePublish event.
  - **Cancel Impending Events** - in the event of an unhandled error, the process cancels all impending occurrences of the event. For example, if you had three plug-ins that contained the OnBeforePublish event and it failed in the first instance, all subsequent OnBeforePublish events are canceled.

To apply the **Recovery** property to a Plug-in or Event, follow these steps.

1. Open the Ektron Extensibility Configuration Editor by clicking **Start** > **Programs** > **CMS400** > **Utilities** > **Plug-in Configuration**.
2. Click the plug-in or event in the menu tree.
3. Under the Recovery property, select the **Halt Current CMS Operation** or **Continue Current CMS Operation** radio button.
4. If you select Continue Current CMS Operation, select **Continue On to the Next Event** or **Cancel Impending Events** radio button. Otherwise, continue to the next step.
5. Click **Apply**.
6. Click the Save ( ) button.

Setting the Information Properties in the Plug-in Code

You can add Author, Organization and Description information to your plug-in code. This helps you identify who wrote the plug-in and what it does. This information can be assigned at the assembly level (the plug-in) or the method level (the event). The method level attributes override the attributes assigned at the assembly level.

You assign assembly level attributes in the AssemblyInfo.cs or AssemblyInfo.vb depending on the language you are using. Method level attributes are assigned in the plug-in code above the method. The example below is at the method level using C#:

```
[ExtensionAuthor("John Smith")]
[ExtensionDescription("Appends text to the html")]
public override bool OnBeforePublish()
```

The following table shows more syntax examples for C# and VB.

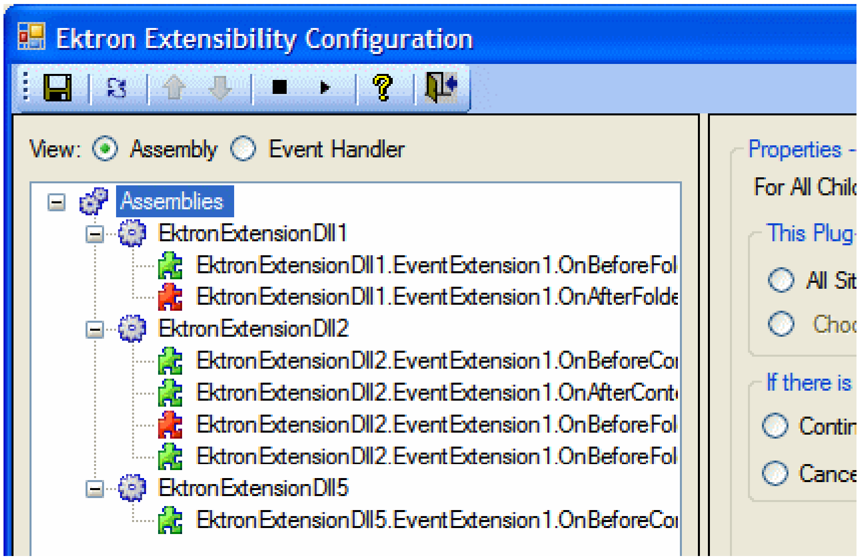
Example Type	Language	Example
Method Level	C#	[ExtensionAuthor("John Smith")] [ExtensionDescription("Appends text to the html")] public override bool OnBeforePublish()
Assembly Level	C#	[assembly: AssemblyDescription("Assembly Level Description")] [assembly: Ektron.Cms.Extensibility.ExtensionAuthor("John Smith")] [assembly: AssemblyCompany("Ektron Company Extension")]
Method Level	VB	<ExtensionAuthor("John Smith")>_ <ExtensionDescription("Before Content Add Description")>_ Public Overrides Function OnBeforeContentAdd() As Boolean Note: The continue character "_" must be used at the end of each description line.
Assembly Level	VB	<Assembly: AssemblyDescription("Assembly Level Description")> <Assembly: Ektron.Cms.Extensibility.ExtensionAuthor("John Smith")> <Assembly: AssemblyCompany("Ektron Company Extension")>

Enabling and Disabling Plug-ins and Events

Plug-ins and events are enabled and disable using the Enable Events ( ) and Disable Events ( ) buttons. You can enable or disable single events by clicking on the event and then clicking the Enable or Disable button.

If you want to enable or disable all the events in a plug-in, click on the plug-in while in the Assemblies view. Next, click the **Enable** or **Disable** button. To enable or disable all of the events of the same type, click on the event while in the Event Handler view. Next, click the **Enable** or **Disable** button.

When events are enabled, their puzzle icon is green. If they are disabled, their puzzle icon is red. Plug-ins and events are enabled by default.



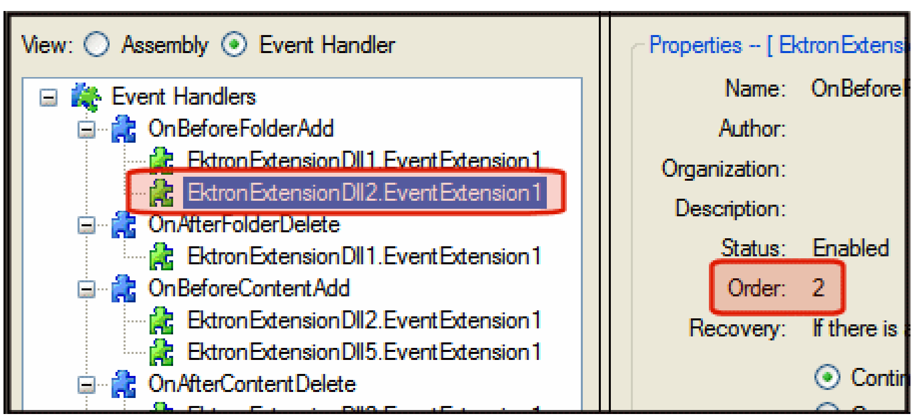
Setting the Plug-in Order of Execution by Event

Setting the plug-in execution order allows you to control when events of the same type are executed. For example, if you have three OnBeforePublish events in three separate plug-ins, you can decide which OnBeforePublish event happens first, second and third.

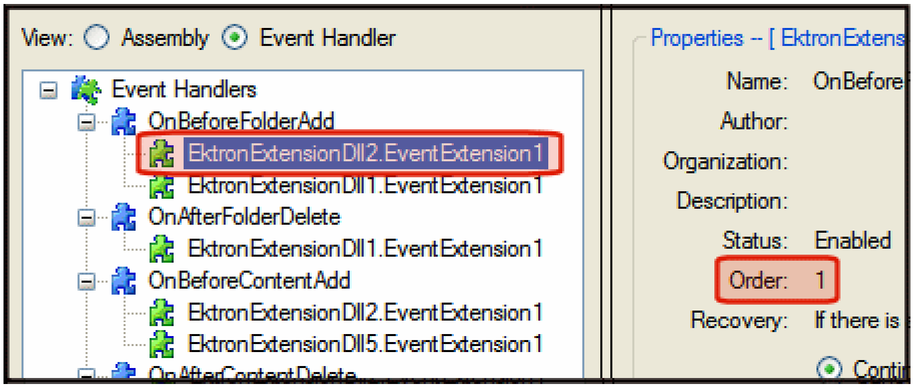
The order of events can only be set in Event Handler view. This way you see the plug-ins sorted by event. To change the plug-in execution order, click a plug-in and use the Event Up ( ) or Event Down ( ) button to reorder plug-ins.

In the before and after example below, the EktronExtensionDll2.EventExtension1 has been move to order position 1 (one) for the OnBeforeFolderAdd event.

Before:



After:



Connecting to the Web Service API From a Plug-in

You can connect to the Web Service API from a plug-in by using a Web service proxy. Calling a Web service proxy accessor creates a connection to a particular Web service. For example, using the `GetContentProxy()` creates a connection to the Web Service API `Content.asmx`.

When using the Web service proxy, the Web service connects to the site that produced the event. For example, if you have three sites and site two uses a plug-in with the OnBeforePublish event that calls a Web service, the Web service connects back to site two only.

Because the Plug-in Architecture and CMS400.NET run on the same server, no authentication is needed when making a Web Service API call. Once a connection is made, you can call any Web service method that is available. For information on Web service methods, click **Help** > **Contents** > **Ektron CMS400.NET API Documentation** > **Ektron Namespace** > **Web Services API**.

Below is a list of available Web service proxies.

Note: In the Web Service Connection column, the ... refers to `/<site webroot>/Workarea/webservices/WebServiceAPI`

Proxy Accessor	Returns	Web Service Connection
GetActiveDirectoryUserProxy()	ActiveDirectoryUserProxy	.../User/ActiveDirectoryUser.asxm

Proxy Accessor	Returns	Web Service Connection
GetAssetProxy()	AssetProxy	.../Content/Assest.asmx
GetBlogProxy()	BlogProxy	.../Content/Blog.asmx
GetBusinessRulesProxy()	BusinessRulesProxy	.../BusinessRules.asmx
GetCalendarEventTypeProxy()	CalendarEventTypeProxy	.../Calendar/CalendarEventType.asmx
GetCalendarProxy()	CalendarProxy	.../Calendar/Calendar.asmx
GetContentProxy()	ContentProxy	.../Content/Content.asmx
GetCustomFieldsProxy()	CustomFieldsProxy	.../CustomFields.asmx
GetFolderProxy()	FolderProxy	.../Folder.asmx
GetFontProxy()	FontProxy	.../Font.asmx
GetFormProxy()	FormProxy	.../Content/Form.asmx
GetLibraryProxy()	LibraryProxy	.../Library.asmx
GetMetadataProxy()	MetadataProxy	.../Metadata.asmx
GetPermissionsProxy ()	PermissionsProxy	.../Permissions.asmx
GetSearchManagerProxy()	SearchManagerProxy	.../Search/SearchManager.asmx
GetSiteMapProxy()	SiteMapProxy	.../SiteMap.asmx
GetSiteProxy()	SiteProxy	.../Site.asmx
GetTaskProxy()	TaskProxy	.../Task.asmx
GetTaskCategoryProxy()	TaskCategoryProxy	.../Task/TaskCategory.asmx
GetTaskCategoryTypeProxy()	TaskCategoryTypeProxy	.../Task/TaskCategoryType.asmx
GetThreadedDiscussionProxy()	ThreadedDiscussionProxy	.../Content/ThreadedDiscussion.asmx
GetUserProxy()	UserProxy	.../User/User.asmx

Debugging a Plug-in

When a Plug-in Extension is not working, it is necessary to debug it. The sections explain how to debug a C# plug-in or a VB plug-in.

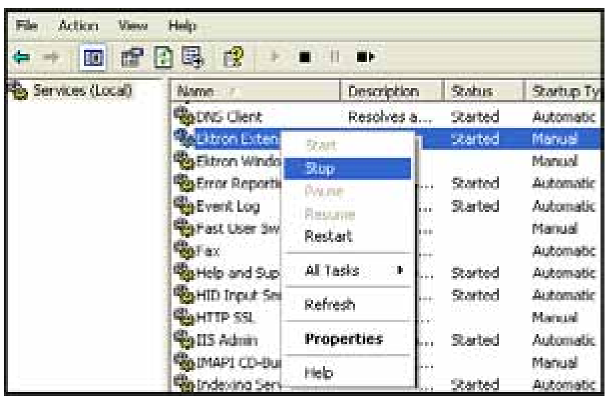
- "Debugging a C# Plug-in Extension" on page 21-505
- "Debugging a VB Plug-in Extension" on page 21-510

Note: You should only debug a plug-in on a non-production machine. Real-time plug-in updates are disabled when debugging takes place. For example, deleting or replacing a plug-in that's in the watch directory is not supported while in debug mode.

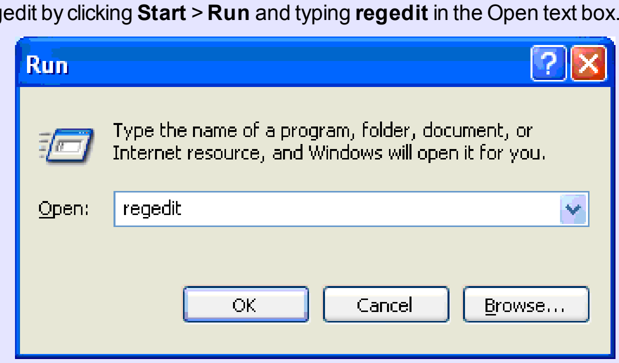
Debugging a C# Plug-in Extension

Steps

1. Navigate to **Start** > **Control Panel** > **Administrative Tools** > **Services** and stop the Ektron Extensibility Server.

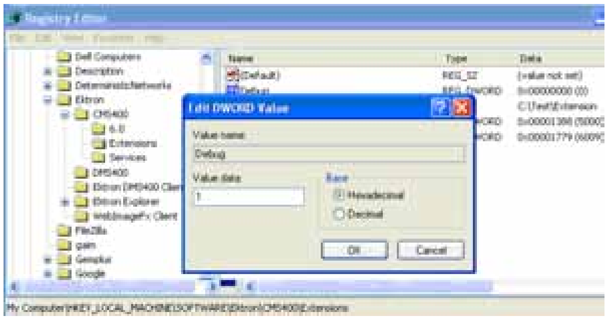


2. Run Regedit by clicking **Start** > **Run** and typing **regedit** in the Open text box. Next, click **OK**.

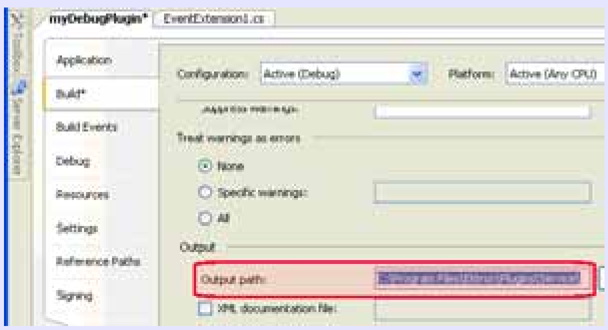


Steps

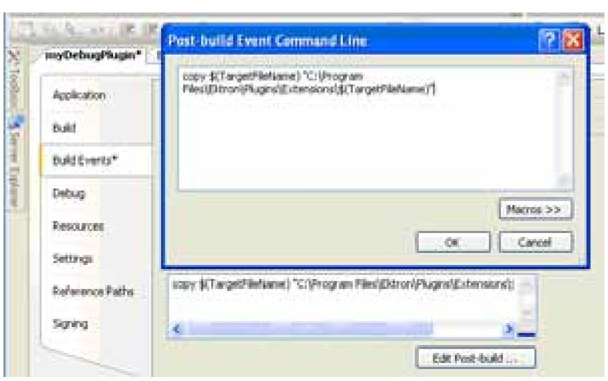
3. Change the entry **`HKEY_LOCAL_ MACHINE\SOFTWARE\Ektron\CMS400\Extensions\Debug`** to **1**. Use either Hexadecimal or Decimal.



4. In Visual Studio, right click on the project in the Solution Explorer and select properties. Next, click the Build tab change the **Output path** of the plug-in so it builds in the service directory. This is the directory that has the ExtensionService.exe in it. The default install location is `C:\Program Files\Ektron\Plugins\Service\`.

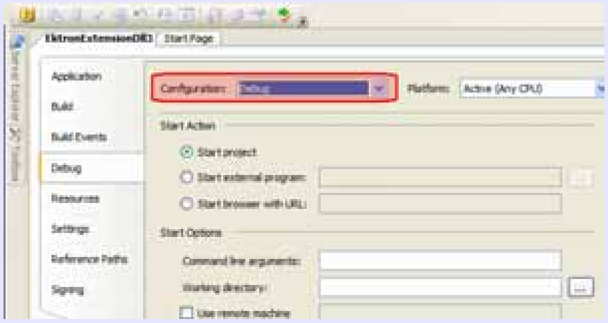


5. Copy the built plug-in to the watch folder via the **Post-build** step on the Build Events settings page. The default install location is `C:\Program Files\Ektron\Plugins\Extensions`.

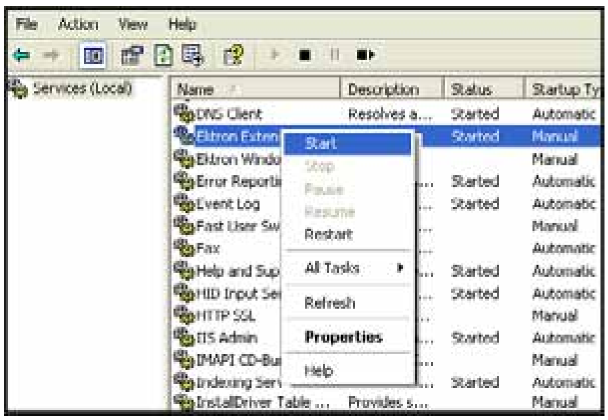


Steps

6. On the **Debug** tab, change Configuration to “Debug” and build the plug-in.

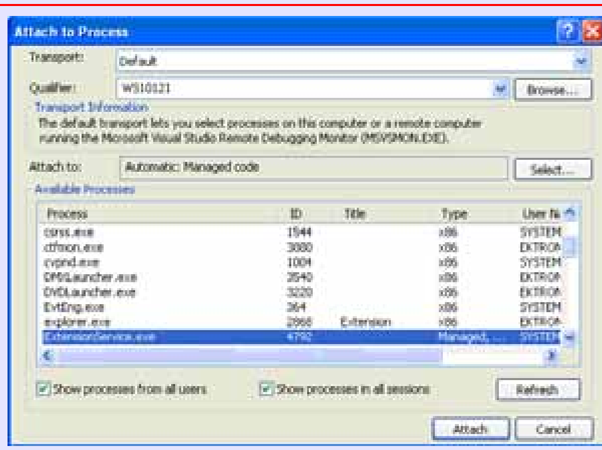


7. Start the Ektron Extensibility server.



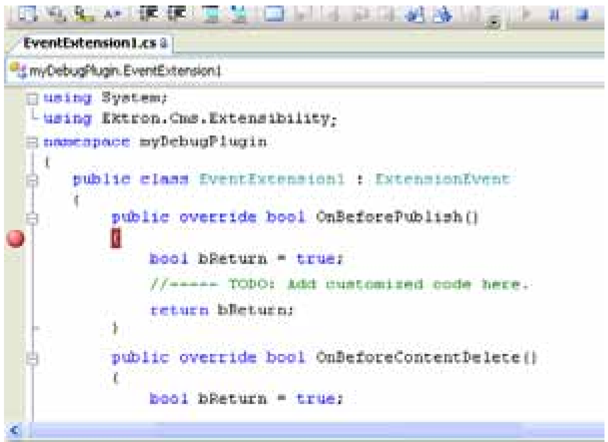
8. In Visual Studio, click **Debug** > **Attach to Process** or **Ctrl**+**Shift**+**R**. Next, click the ExtensionService.exe process, then click the **Attach** button.

Warning! Important: If you do not see the ExtensionService.exe, make sure that **Show processesfrom all users** and **Show processes in all sessions** are checked.

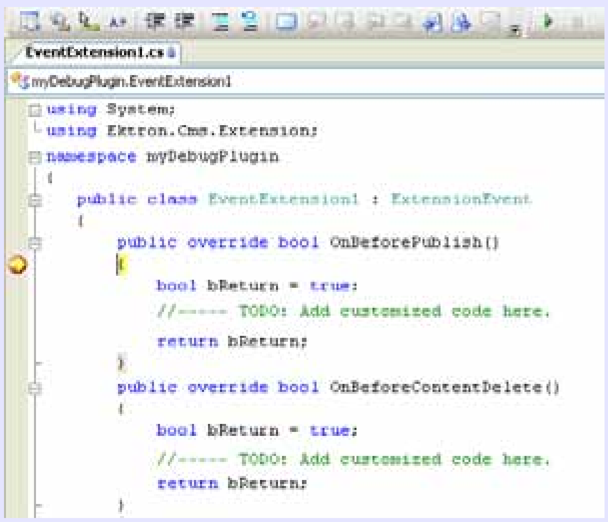


Steps

9. Set the breakpoint(s) in the plug-in where debugging is to take place.



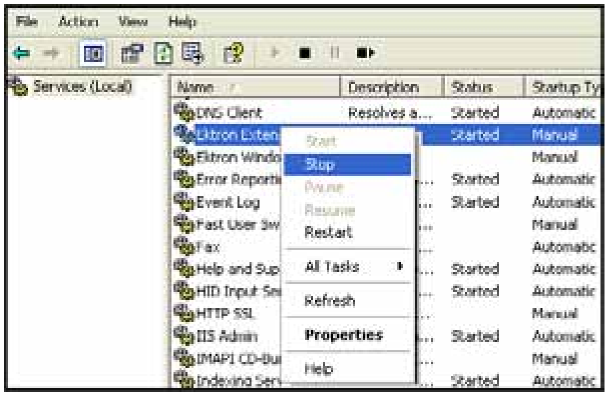
10. Execute the action within the CMS to trigger the event. For the example breakpoint below, publish a piece of content. The breakpoint is hit as shown below.



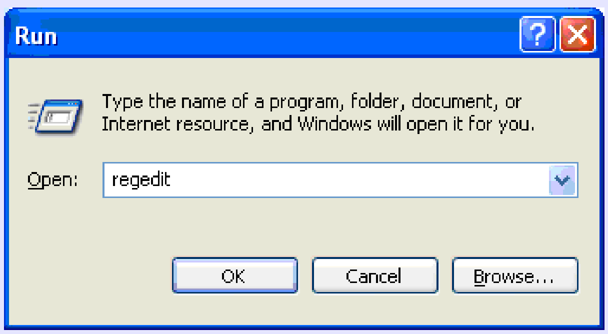
Debugging a VB Plug-in Extension

Steps

1. Navigate to **Start** > **Control Panel** > **Administrative Tools** > **Services** and stop the Ektron Extensibility Server.

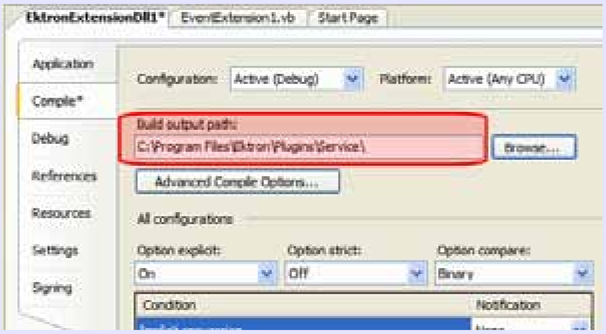


2. Run Regedit by clicking **Start** > **Run** and typing **regedit** in the Open text box. Next, click **OK**.



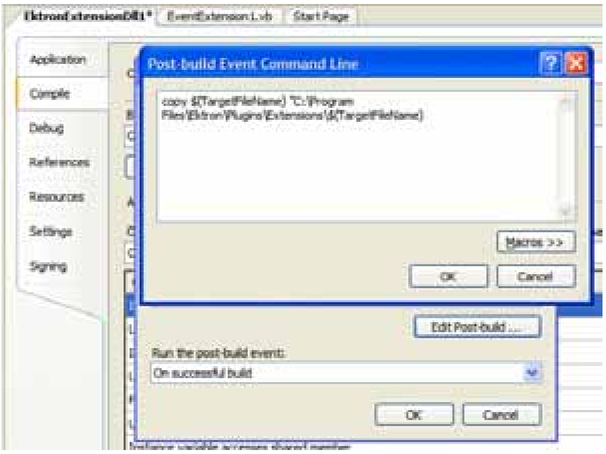
3. Change the entry `HKEY_LOCAL_MACHINE\SOFTWARE\Ektron\CMS400\Extensions\Debug` to **1**. Use either Hexadecimal or Decimal.

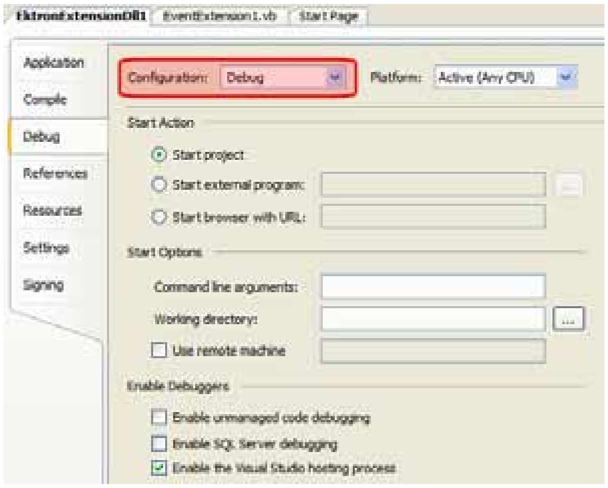
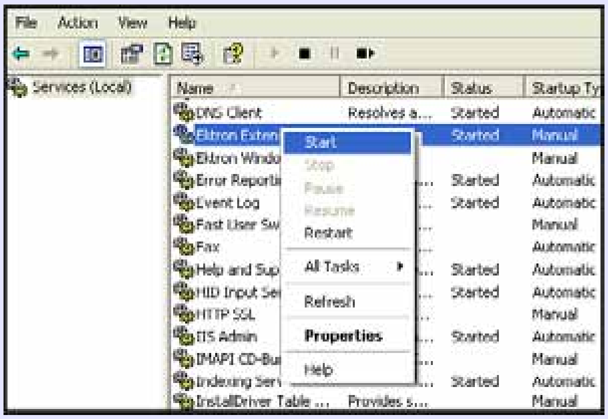
4. In Visual Studio, right click on the project in the Solution Explorer and select **Properties**. Next, click the Compile tab change the **Build Output**

Steps
path of the plug-in so it builds in the service directory. This is the directory that has the ExtensionService.exe in it. The default install location is `C:\Program Files\Ektron\Plugins\Service\`. 

5. Copy the built plug-in to the watch folder via the **Post-Build** event. On the Compile tab, click the **Build Events...** button. Next, click the **Edit Post-build...** button. Enter the following information and click **OK**.

```
copy $(TargetFileName) "C:\Program
Files\Ektron\Plugins\Extensions\$(TargetFileName)
```

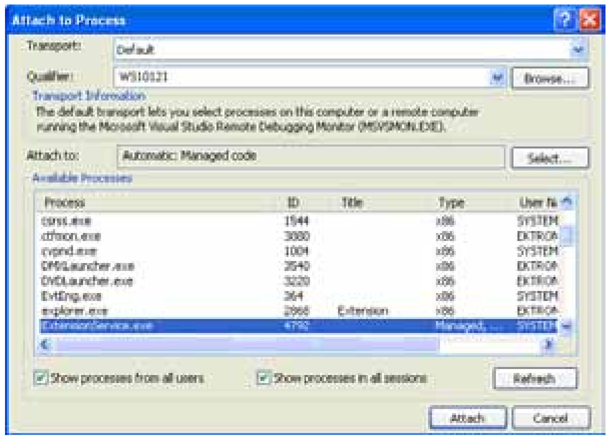


Steps
6. On the Debug tab, change **Configuration** to “Debug” and build the plug-in. 
7. Start the Ektron Extensibility Server. 

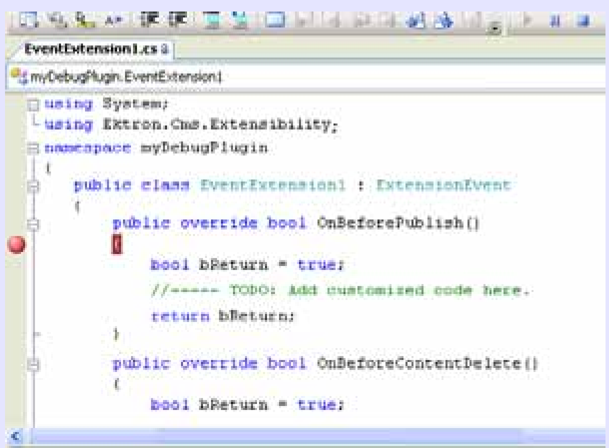
Steps

8. In Visual Studio, click **Debug** > **Attach to Process** or **Ctrl+Shift+R**. Next, click the ExtensionService.exe process, then click the **Attach** button.

Warning! Important: If you do not see the ExtensionService.exe, make sure that **Show processesfrom all users** and **Show processes in all sessions** are checked.

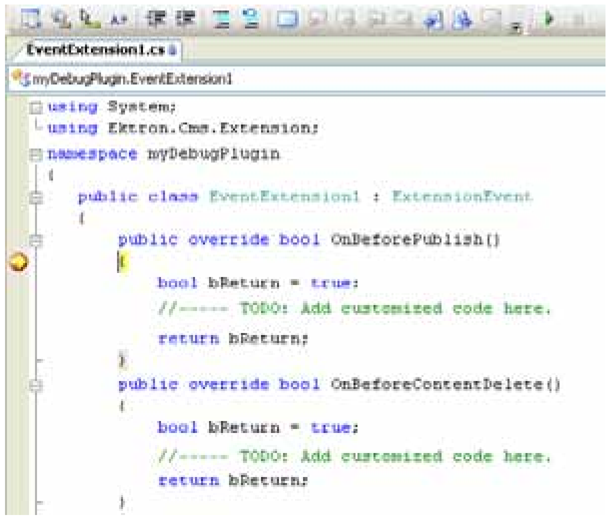


9. Set the breakpoint(s) in the plug-in where debugging is to take place.



Steps

10. Execute the action within the CMS to trigger the event. For the example breakpoint below, publish a piece of content. The breakpoint is hit as shown below.



Using the Search Engine Optimization (SEO) Control

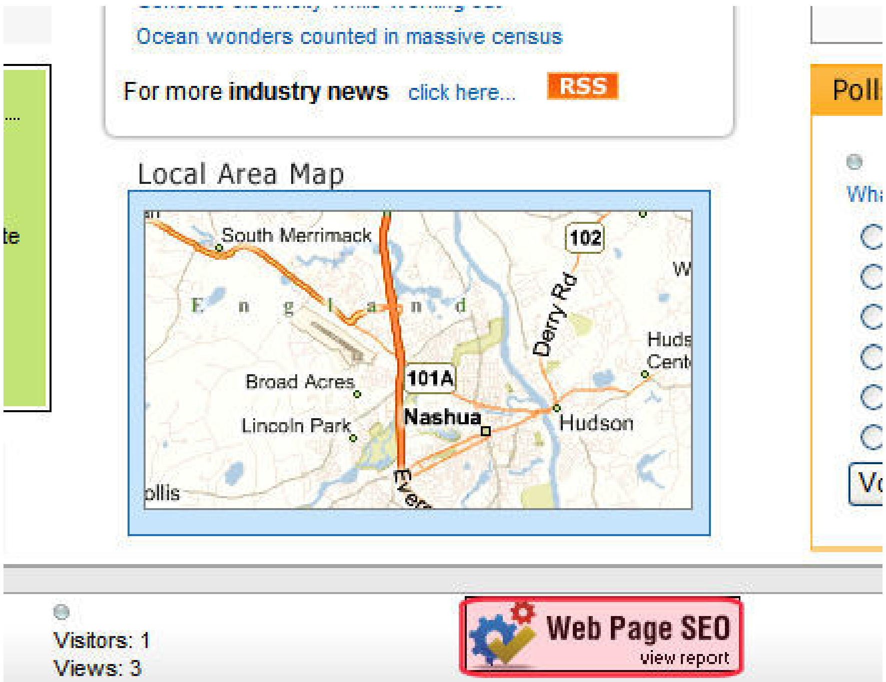
Ektron CMS400.NET offers a wide array of tools to ensure your Web site is optimized for search engines, and that your Web pages climb to the top of the ranks. Among these is an SEO Page Analysis Tool that gives you the key information you need in "real-time" in order to maximize your returns in organic Web searches.

This SEO tool analyzes the pages of your Web site for W3C compliance, what information Google has about the page, Alexa rankings, image alt text, keyword density and metadata. The tool lets you know how (and if) you've set these values.

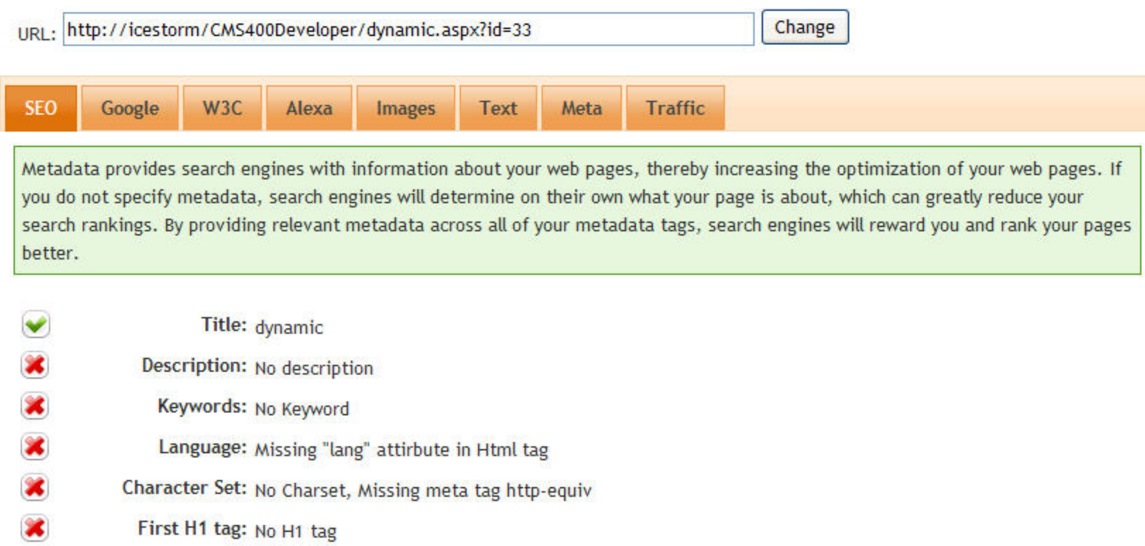
This chapter explains how to use the SEO control.

Appearance of the SEO Control

The Search Engine Optimization (SEO) Control appears as an image on any template or master page on which you drop it, as circled below.



When a logged-in user clicks the image, he sees a detailed report of how search engines evaluate the page. For example, the report runs the page through a W3C validation site, or displays how search engines evaluate the page's text.



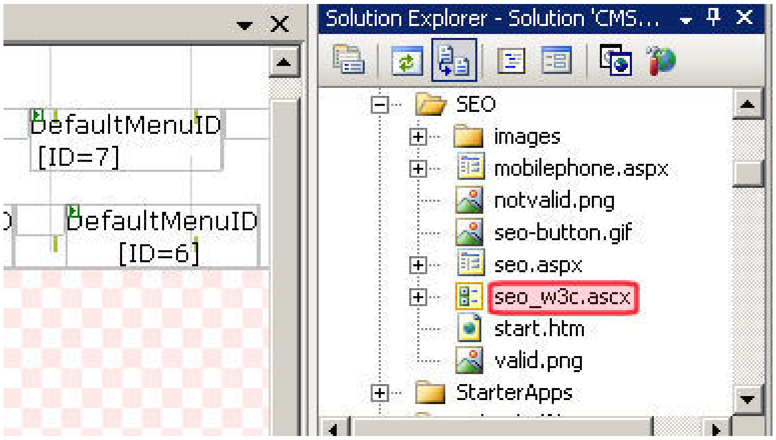
Installing the SEO Control

You can only install the SEO control onto pages within an Ektron CMS400.NET Web site. This is because the CMS contains files required by the control.

1. Open `C:\Program Files\Ektron\CMS400v80\CommonFiles\StarterApps\`.

Note: If you don't see an SEO folder within StarterApps, your version doesn't support the SEO control.

2. From the `StarterApps` folder, copy the `SEO` folder to the root folder of the Web site in which you want to use the control.
3. Open Visual Studio.
4. Open your Web site.
5. Open a master page or template on which you want to place the SEO control.
6. Open Solution Explorer, and your web site within it.
7. Open the SEO folder.



8. Drag the SEO control (seo_w3c.ascx) on to an area of the page.
9. Save the page.

Viewing a Web Page's SEO Report

Only logged in CMS or Membership users can see the SEO control.The following summarizes the information on the SEO Report.

Tab	Description
SEO	Compares viewed page against a basic SEO checklist, such as if keywords are included, language and charset values, etc.
Google	Information that search engines have about your page, including pages that link to it, indexed pages on the site and what the page looks like on a mobile device.
W3C	Validates Web page for markup and CSS compliance, and also checks for broken links and the ability of the page to be displayed on mobile devices. By having correct markup that conforms to HTML or XHTML standards, search engines will detect words and phrases correctly, a key element in SEO. Correct markup also ensures that search engine spiders can easily understand the content and navigation on the page. Proper code will make it easier for spiders to parse as expected and digest the content for organic search engines.
Alexa	Alexa is a leader in providing insight on the overall ranking of your web site on the Internet. Alexa overview, traffic, related and linked-to sites.
Images	To ensure SEO and compliance, all images on your pages should contain alt tags. This enables searching of the images (since engines cannot read the contents of an

Tab	Description
	image). In addition, alt tags must be used for 508 compliance. This tab identifies all images and their alt tags.
Text	A keyword density analysis report displays text graphically in much the same way that organic search engines see your page. Web pages that are content rich typically yield higher search engine rankings than pages that are mainly images or multimedia based. This report displays words, two-word phrases and three-word phrases in a cloud format, revealing words and phrases that show up most often on the page. This information helps you to optimize your content and reach your target audience. 
Meta	The page's metadata
Misc	Additional search information

Learning About Visual Studio

This section provides background information about Microsoft's Visual Studio. For more information, use the help feature installed with Visual Studio and Microsoft's developer Center (http://msdn.microsoft.com/vstudio/).

Grid Layout vs. Flow Layout

Note: The following definitions are from Visual Studio Help:

Grid Layout - Absolute positioning attributes are inserted into elements that are added, and updated in elements that are moved. Elements can be dragged across the Design view surface. The positioning grid and Snap to Grid are available.

Flow Layout - Elements are added without absolute positioning attributes. Web browsers arrange elements in the order that they occur on the page, from top to bottom. You cannot drag elements across the Design view surface or use the positioning grid.

Grid layout is the default, which means that all controls drawn to the Web form in the designer window will have absolute positioning. Here is an example.

```
<body MS_POSITIONING="GridLayout">
 <form id="Form1" method="post" runat="server">
  <asp:Button id="Button1" style="Z-INDEX: 101; LEFT: 160px; POSITION: absolute; TOP: 80px" runat="server" Text="Button"></asp:Button>
  <asp:Button id="Button2" style="Z-INDEX: 102; LEFT: 480px; POSITION: absolute; TOP: 88px" runat="server" Text="Button"></asp:Button>
  <asp:GridView id="GridView1" style="Z-INDEX: 103; LEFT: 208px; POSITION: absolute; TOP: 152px" runat="server"></asp:GridView>
 </form>
</body>
```

In Grid layout, you can position your controls like a WYSIWYG editor with no knowledge of HTML. However, because absolute positioning is not rendered consistently by all browsers, the page layout can be flexible based on the size of other controls on the page, and the Web browser window.

When other controls are dynamically populated, such as a GridView, controls that appear beneath it in the Web form would be obscured if they were positioned absolutely at design time. In addition, when utilizing globalization of pages with different languages, the size of text areas can vary and cause obstructions.

Index

D

N

O

P

Q

R

S