



Ektron CMS400.NET Site Replication Manual

Includes Quick Deploy

Version 2.0, Revision 8

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System Requirements

The following components are required when developing or viewing Site Replication and Quick Deploy.

- "Server Requirements" on page 1
- "PC Client Requirements" on page 2
- "Apple Macintosh Client Requirements" on page 2

Server Requirements

Component	Requirements
Recommended hardware configuration	<ul style="list-style-type: none"> • Intel® Pentium® 4 supporting Hyper-Threading or Intel® Xeon® processor (with 800MHz bus) • 1 GB RAM or higher • RAID array for hard drives
Web server operating system	<p>Microsoft® Windows® 2003 Server <i>recommended</i> (32 bit version only)</p> <p>Microsoft® Windows® 2000, XP Professional</p> <hr/> <p><u>Note: XP Home does not support IIS.</u></p> <hr/>
Web application server	<ul style="list-style-type: none"> • Microsoft .NET™ Framework 2.0 (required) • Microsoft Active Server Pages
Web server	Microsoft® Internet Information Server (IIS) 4.0 or higher

Component	Requirements
Databases	<ul style="list-style-type: none"> • SQL™ Server 2005 • SQL™ Server 2005 Express • SQL™ Server 2000 (Enterprise or Standard version)

PC Client Requirements

Component	Requirements
Operating system	Any IBM-PC compatible system running Windows (32 bit versions only) Suggested minimum: Pentium 166 MHz or faster with 64MB of RAM
Browsers	All major browsers including: <ul style="list-style-type: none"> • Microsoft® Internet Explorer 3.0 through 7.0 • Netscape Navigator® Version 3.0 through 7.2 • Mozilla Firefox
Hardware	Any IBM-PC compatible system running Windows (suggested minimum requirements: Pentium 166 MHz or faster with at least 64MB of RAM)

Apple Macintosh Client Requirements

Component	Requirements
Operating system	MAC OS X

Component	Requirements
Browsers	All major browsers including: <ul style="list-style-type: none">• Apple Safari (Recommended)• Microsoft ® Internet Explorer• Netscape Navigator ®• Mozilla Firefox
Hardware	Apple Macintosh

Site Replication and Quick Deploy

NOTE [Ektron CMS400.NET's Site Replication and Quick Deploy software](#) is an extra cost option. Please contact your Ektron sales representative for details on purchasing it.

Site Replication and Quick Deploy are **Ektron CMS400.NET** features that move files between your staging and production servers. Site Replication moves an entire site, while Quick Deploy typically moves content to production as soon as it is published on staging.

See *Also*:

- "Comparison of Site Replication and Quick Deploy" on page 5
- "Site Replication" on page 6
- "Quick Deploy" on page 78
- Ektron's Site Replication/Quick Deploy Best Practices Guide (<http://dev.ektron.com/uploadedFiles/Resources/EktronCMS400Replication-111706.pdf>)

Comparison of Site Replication and Quick Deploy

Feature	Site Replication	Quick Deploy
Direction of Movement	From staging to production only	Two-way between staging and production
What is moved	<ul style="list-style-type: none"> • Virtually everything entered in the staging server; see "What Information is Synchronized" on page 8 • Option to send database and files or files only 	<ul style="list-style-type: none"> • From staging to production: New/updated content and files in folders set up for Quick Deploy; menus, collections, forum configuration information, users/user groups; also, manually-selected files (e.g., templates) in Web root folder • From production to staging: information collected on production server, such as content analytics, poll/survey results, membership users, content and assets inside folders set up for Quick Deploy
What is not moved	Content typically entered on production server; see "What Information is Preserved" on page 9	Files not listed above, under "What is moved"
How triggered	Go to screen and click button	<ul style="list-style-type: none"> • Automatically when one of these events occurs on staging server. <ul style="list-style-type: none"> – content in any folder for which Quick Deploy has been activated is updated (not necessarily published) – a Quick Deploy folder is created or its properties, permissions, or approval chain is updated – a CMS or membership user or user group is updated • Manually by going to screen and clicking button
Backup of earlier version available; can be rolled back if needed	yes	no
Can preview files to be moved beforehand	yes	no

Feature	Site Replication	Quick Deploy
Can review files moved afterwards	yes	yes
Schedule to run automatically at regular interval	yes	no
Effect on database	Creates new one	Synchronizes parts of the database
Privileges needed	Many privileges needed because it affects files and databases	Uses asp.net account

Site Replication

WARNING!

If you upgrade a staging server from version 5.2 to 7.0 but don't choose to upgrade the production server, you need to complete some steps to make the two systems compatible. This procedure is explained in "Upgrading Ektron CMS400.NET" > "Updating a Site Replication Production Machine after Upgrading from 5.2 to 7.0" in the **Ektron CMS400.NET Setup Manual**.

Site Replication is an automated, one-way site synchronization between a staging or test server and a production server. It lets you perfect changes on a staging server, then effortlessly copy them to the production server. In this way, your production server can easily be kept up-to-date, while at the same time be spared simple errors that typically accompany last-minute changes.

(Synchronization differs from copying in that it only copies files that are new or have changed. Since most files on both servers are typically the same, synchronization is faster than copying.)

Whether you've been testing a new site template or an upgraded version of CMS400.NET, Site Replication pushes the latest information to the production server. Site Replication 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.

Before the latest data is copied to the production server, it is backed up. So, you can restore the production server to an earlier version if you ever need to.

For more information about Site Replication, see these topics.

- ["Site Replication vs. the Move Site Procedure" on page 7](#)
- ["Site Replication Overview" on page 8](#)
- ["Possible Site Replication Configurations" on page 10](#)
- ["Prerequisites" on page 11](#)
- ["Installing the Site Replication Feature" on page 13](#)
- ["Configuring the Site Replication Feature" on page 32](#)
- ["Setting up a Staging Server" on page 45](#)
- ["Previewing the Site Replication Process" on page 46](#)
- ["Performing Site Replication" on page 47](#)
- ["Viewing and Restoring a Backup of the Production Server" on page 49](#)
- ["The Site Replication Configuration File" on page 51](#)
- ["Using Site Replication with Multiple Sites" on page 58](#)
- ["Using Site Replication with Development > Staging > Production Servers" on page 62](#)
- ["Testing Site Replication Software" on page 64](#)
- ["The Scheduler Windows Service" on page 69](#)
- ["Troubleshooting Problems with Site Replication" on page 71](#)
- ["Uninstalling Site Replication" on page 76](#)

Site Replication vs. the Move Site Procedure

The **Ektron CMS400.NET** Setup Manual section "Installing Ektron CMS400.NET" > "Moving a Site to Another Directory or Server" describes a procedure for moving an **eWebEditPro+XML** Web site to a new folder or even a different server. You would use that procedure under the following circumstances:

- 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 would use the Site Replication feature.
- 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.

Site Replication Overview

First, install Site Replication software onto both servers. Next, supply configuration information for each server, such as the site directory and when replication begins.

Then, begin using Site Replication to synchronize the test server with the production server. Before initiating the synchronization, a **Preview** button displays the changes that will occur. Once you are ready, begin the synchronization.

At this point, the staging database is backed up then sent over. On the production server, that database is restored and given a new name. Production server files not on the staging server are deleted from the production server. During this time, a screen displays the real-time progress of the replication.

When synchronization is complete, you can view a log of changes made. If you decide the update should not have occurred, you can restore the receiving server.

You can apply security to Site Replication by restricting the IP address and user name of the machine/person who initiates the procedure.

NOTE You should verify that adequate space is available for the Site Replication. The data directories are backed up before the Site Replication begins. The previous version remains, creating a `sitereplication.backup/.dirbackup date time` file. A new copy of the data directories is placed in the same folder and is named `dirupdates date time`.

What Information is Synchronized

Synchronized information includes:

- CMS400.NET code (the CMS400Scripts directory)
- CMS400.NET database schema changes
- CMS400.NET database content
- CMS400.NET assets
- Document Management Functionality code (the AssetManagement directory)
- templates (ASPX, ASP, PHP, JSP)
- library content (uploadedfiles and uploadedimages folders)
- CMS400.NET web.config file
- user list - However, when the user list is copied to the production server, non-administrative users' permission to add content is removed.

What Information is Preserved

The following kinds of information are preserved on the production server, but not sent to the staging server.

- membership users (See Also: ["Updating Membership Users" on page 30](#))
- user profile settings
- license key and URL aliasing settings
- content ratings data
- content tracking statistics
- forum and blog posts (including forum private messages, attachments, and thread watches)
- community folders and permission changes
- CMS400.NET form data tables - contain form/poll/survey submissions from a Web site. Also, any tasks that track form data.
- Web.config settings (may need to be updated manually if you use Site Replication to push an **Ektron CMS400.NET** upgrade that includes new web.config settings. The new settings will not exist on the production server.)

- AssetManagement.config (only needs to be updated manually when upgrading if receiving server has Document Management Functionality)
- AssetManagementData.config (only needs to be updated manually when upgrading if receiving server has Document Management Functionality)
- The most recent searches table, use to generate the Search Phrase Report
- Optionally, a list of tables on the production machine (See Also: "Preserving Database Tables" on page 31)

NOTE Site Replication does not install Windows services. To do that, you must upgrade Ektron CMS400.NET software on the production server.

Preserving Custom Settings on Production Server while during Site Replication

You can preserve custom web.config settings on the production server when doing site replication.

To do this, place the following code into the production server's web.config file, within the `<appSettings>` tag. The key's value is a comma-separated list of appsettings, like this.

```
<add key="ek_ReplicationPreserveAppSettings" value="appsetting1,appsetting2" />
```

This code preserves the `appsetting1` and `appsetting2` keys in the production server's web.config file during Site Replication.

Possible Site Replication Configurations

The following configurations are supported during Site Replication:

- CMS400.NET site and database on same server
 - Assign unique names to the directories. For example, use `http://localhost:81/StageRepl` and `http://localhost/ProdRepl` for URLs.
 - You can put Site Replication on different Web sites. (It is not part of **Ektron CMS400.NET**. It is a standalone Web application.)

- The Production and Staging servers can use the same relative directory. For example, `http://localhost:81/site root folder` and `http://localhost/site root folder`.
- CMS400.NET site and database on separate servers
- Three servers: Development to Staging to Production
 - Configure the development server as a sending server. Send to the staging server.
 - Configure staging server as sending server to production server. Then, add it as the receiving server for the development server. Its sending and receiving directories are the same.
 - Configure the production server as the receiving server for the staging server

See Also: ["Using Site Replication with Development > Staging > Production Servers"](#) on page 62

Site Replication Best Practices

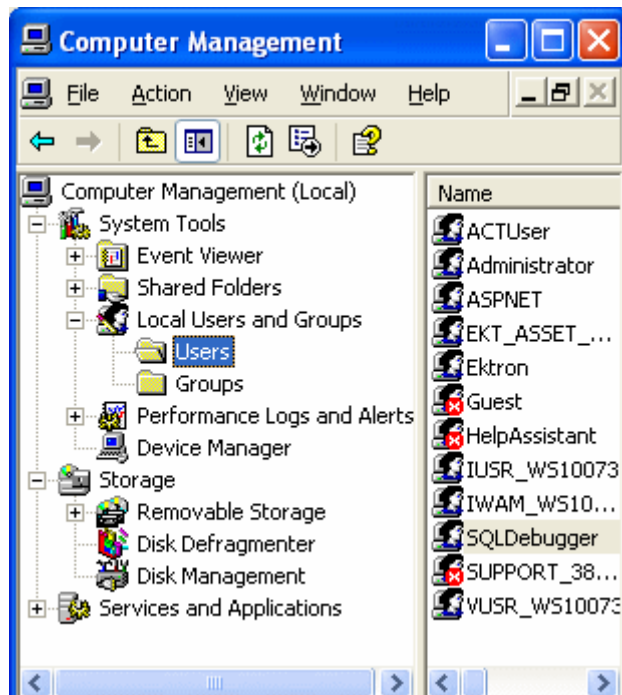
- Each site must have its own database. Two sites cannot share a database.
- You cannot use Site Replication to move files from a production to a staging server.
- To sync the staging and production sites, run Quick Deploy once before running Site Replication for the first time.
- You cannot upgrade a staging server then use Site Replication to move those change to the production server. You must run the upgrade on each server.
- It is important to synchronize the clock on both servers (staging and production).

Prerequisites

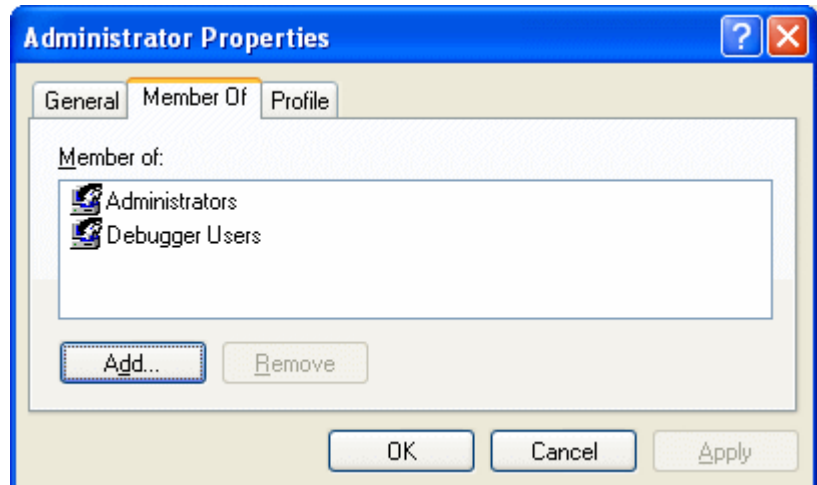
Every user who will use Site Replication must be a member of the Administrators group within Windows' Microsoft Management Console.

To apply this setting to a user, follow these steps.

1. Click **Start > Control Panel > Administrative Tools > Computer Management**.
2. Click **Local Users and Groups** then the **Users** folder.



3. If the user does not appear in the right frame, right click the mouse and select **New User...**. Then complete the dialog.
4. Right mouse click on the user and select **Properties**.
5. Click the **Member Of** tab.

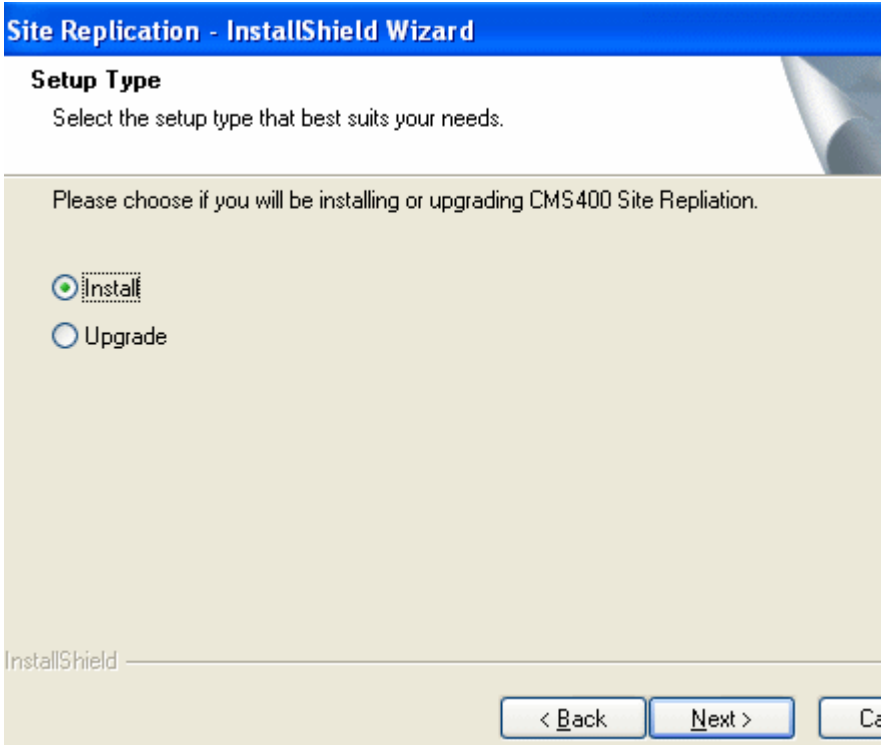


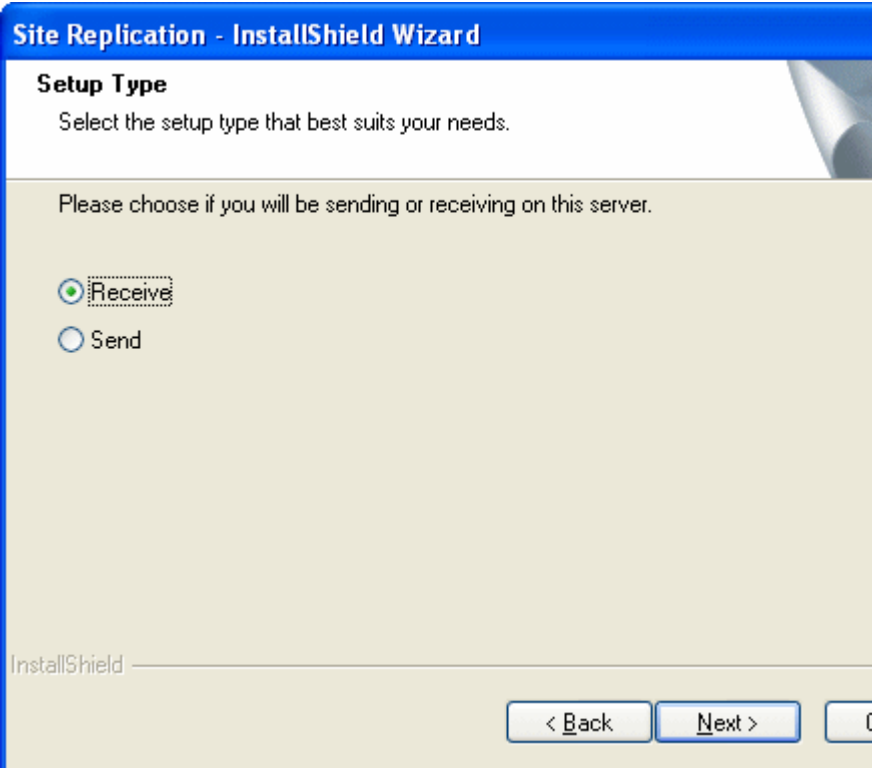
6. If you do not see **Administrators** in the **Member Of** window, click the **Add** button.
7. In the **Enter the object names to select** field, enter **Administrators**.
8. Click **OK** twice.

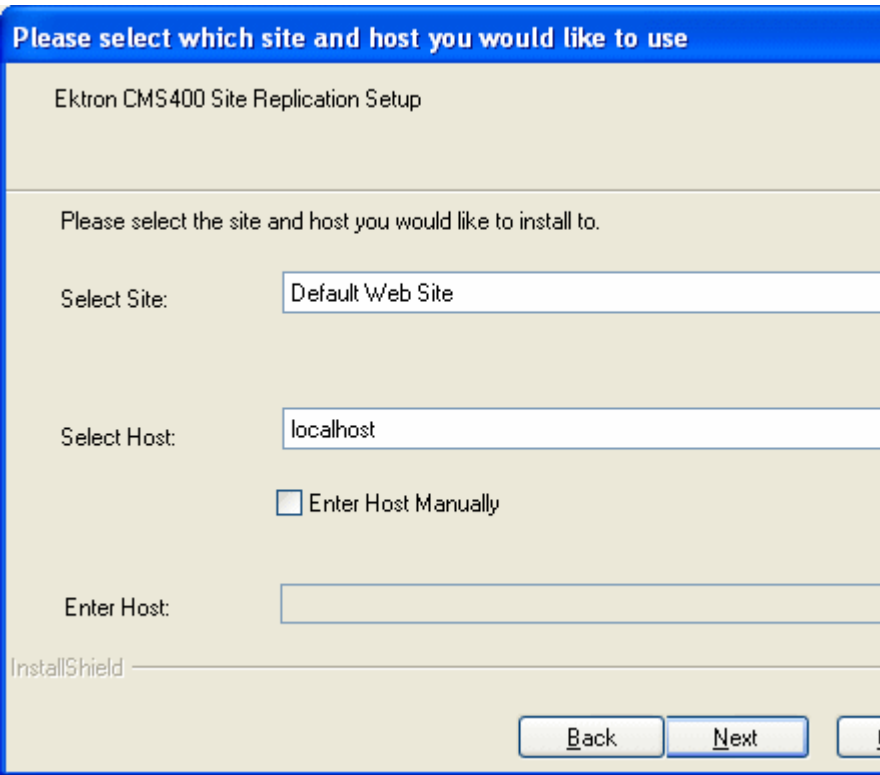
Installing the Site Replication Feature

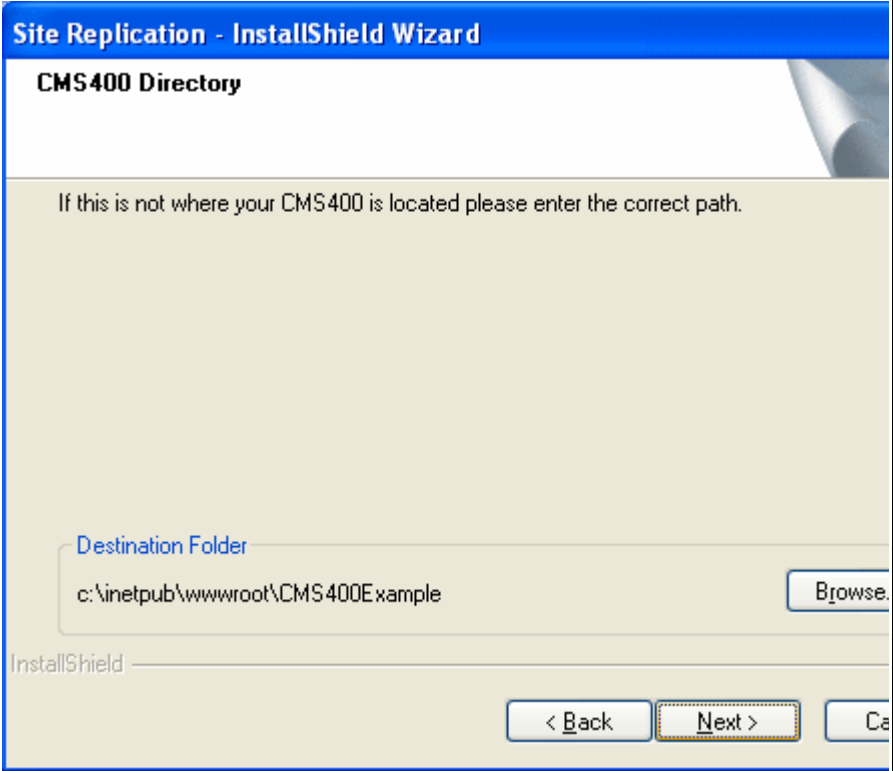
You must install the Site Replication feature on the staging server and all production servers. After installing on a server, you should configure it. See *A/so: "Configuring the Site Replication Feature" on page 32*

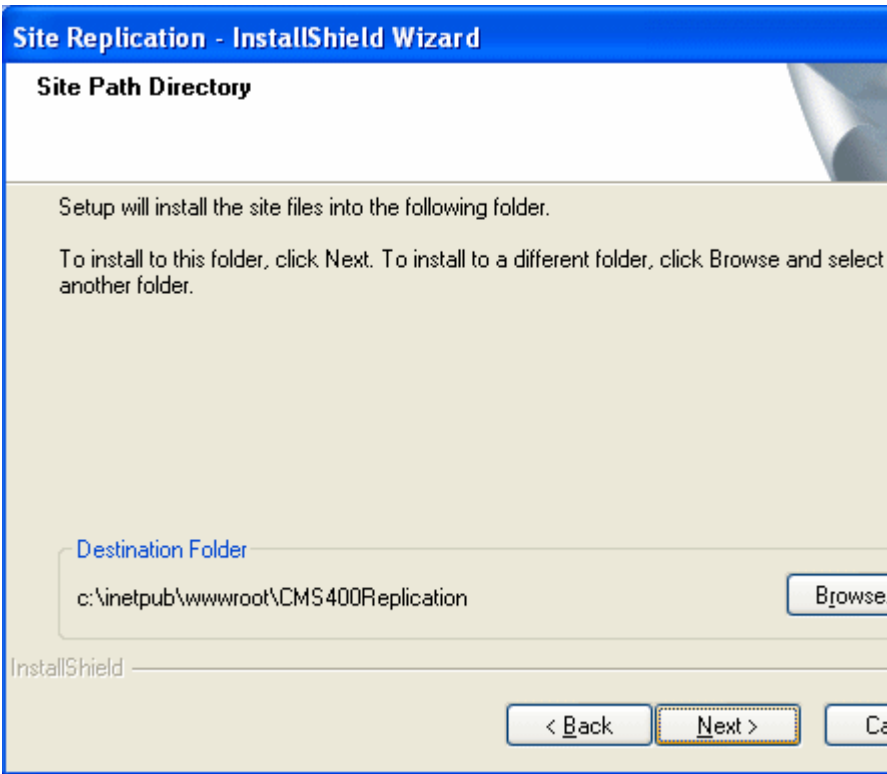
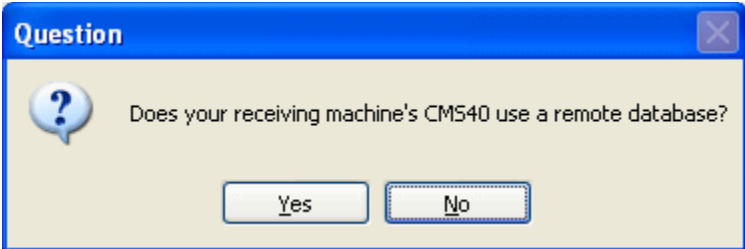
1. Download the Site Replication.exe file from Ektron's Web site.
2. Double click the downloaded file.
3. Follow the screen directions as they appear.

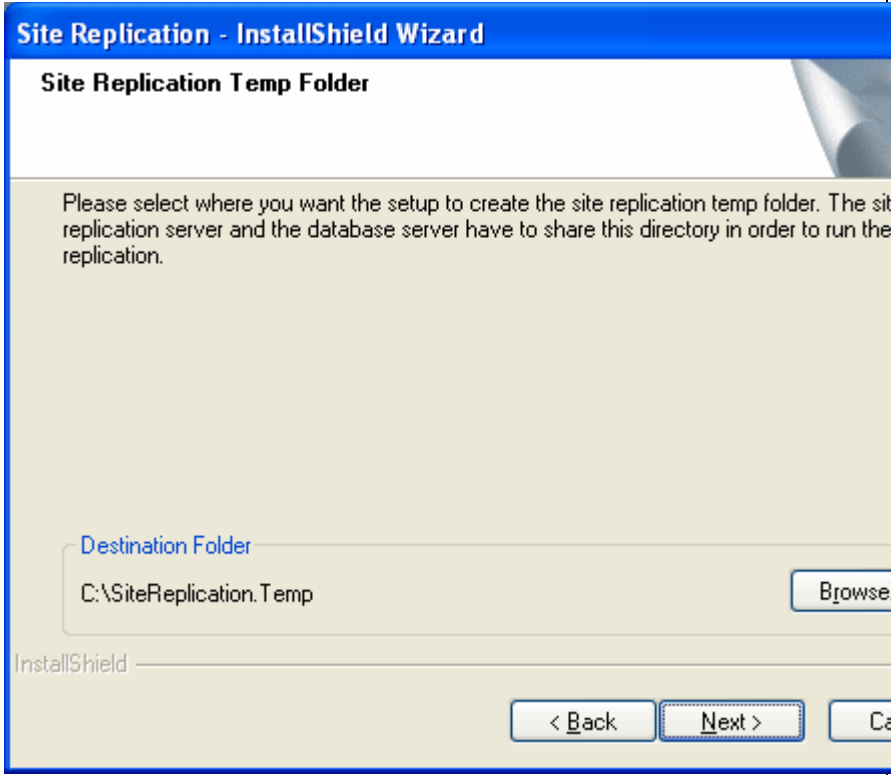
Directions	Screen
<p>1. Indicate if this is a new installation or an upgrade.</p> <p>If doing an upgrade, only perform steps 3 and 6 below.</p>	 <p>Site Replication - InstallShield Wizard</p> <p>Setup Type Select the setup type that best suits your needs.</p> <p>Please choose if you will be installing or upgrading CMS400 Site Replication.</p> <p><input checked="" type="radio"/> Install</p> <p><input type="radio"/> Upgrade</p> <p>InstallShield</p> <p>< Back Next > Ca</p>

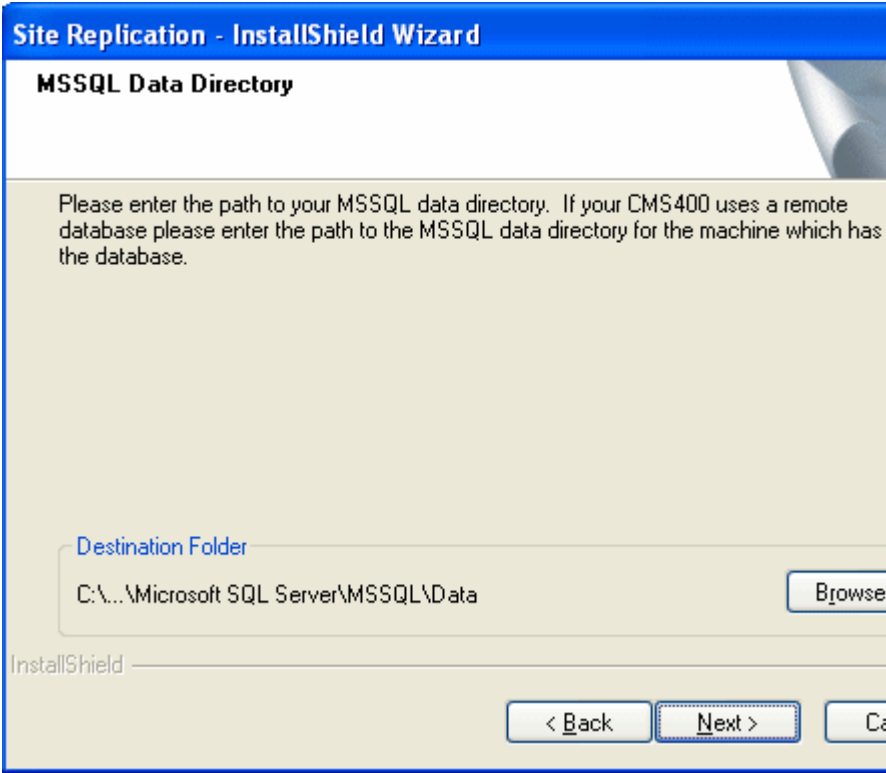
Directions	Screen
<p>2. Indicate whether the server on which you are installing will be used to <i>send</i> or <i>receive</i> information. A staging server would send, while a production server would receive.</p>	 <p>Site Replication - InstallShield Wizard</p> <p>Setup Type Select the setup type that best suits your needs.</p> <p>Please choose if you will be sending or receiving on this server.</p> <p><input checked="" type="radio"/> Receive <input type="radio"/> Send</p> <p>InstallShield</p> <p>< Back Next > C</p>

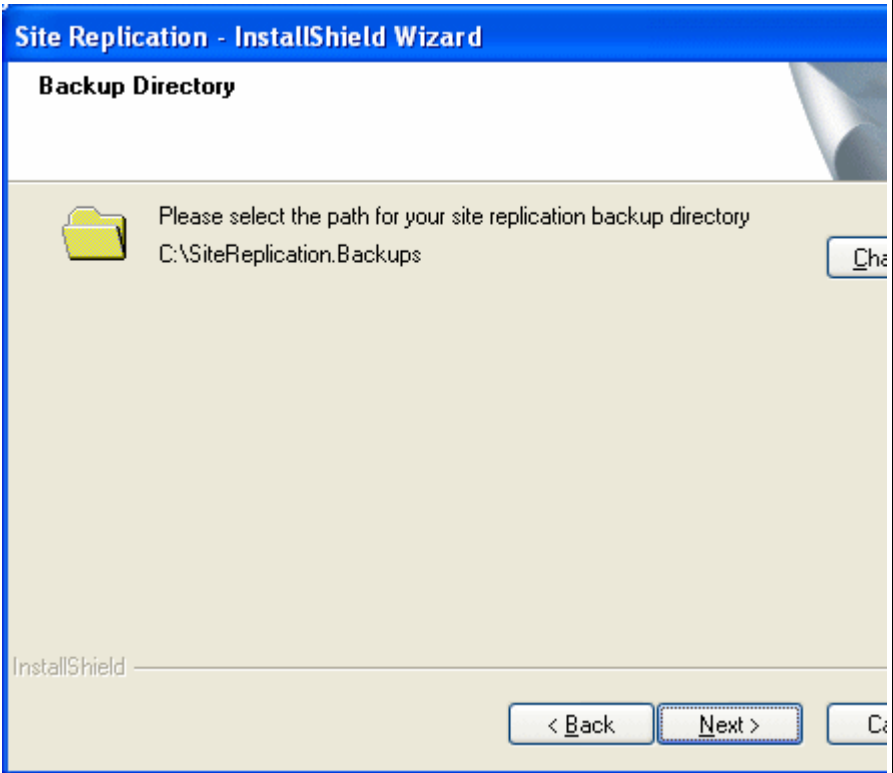
Directions	Screen
<p>3. Identify the Web site for which you are installing the Site Replication feature.</p> <p>If you are unsure, accept the default.</p> <p>4. Select the site host from the dropdown list.</p> <p>Or, you can check the Enter Host Manually box and enter the path to your site host.</p>	 <p>Please select which site and host you would like to use</p> <p>Ektron CMS400 Site Replication Setup</p> <p>Please select the site and host you would like to install to.</p> <p>Select Site: Default Web Site</p> <p>Select Host: localhost</p> <p><input type="checkbox"/> Enter Host Manually</p> <p>Enter Host:</p> <p>InstallShield</p> <p>Back Next !</p>

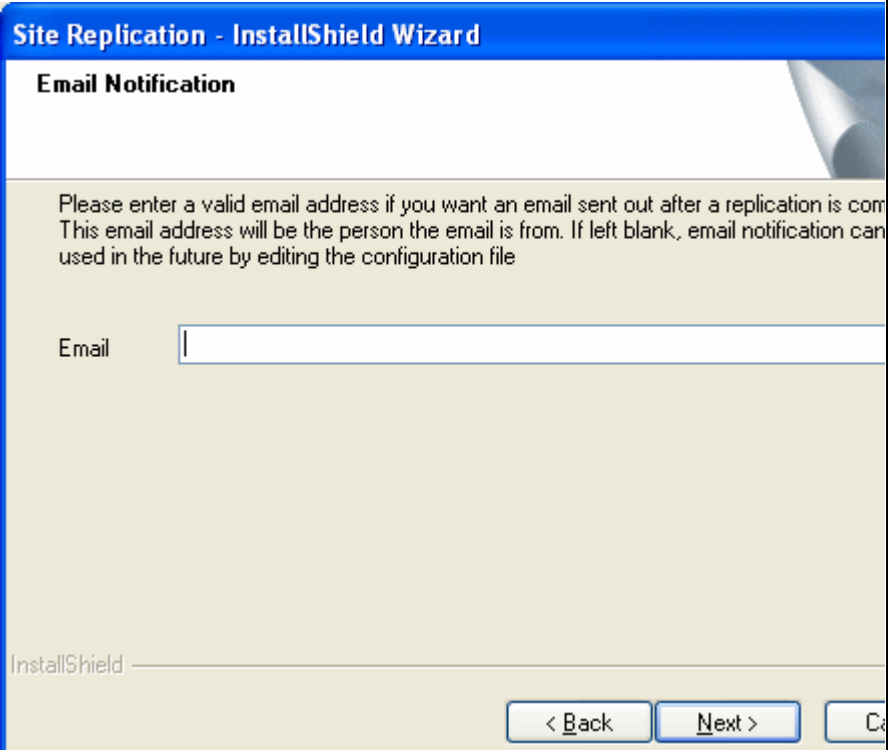
Directions	Screen
<p>5. Enter the directory in which Ektron CMS400.NET resides.</p> <p><u>Important! The staging and production servers must use the same directory name (for example, <code>http://staging server/MySite</code> and <code>http://production server/MySite</code>).</u></p> <p>If not, the content may incorrectly reference images in the <code>uploadedfiles</code> directory of the staging server. As a result, the production server displays broken images.</p>	

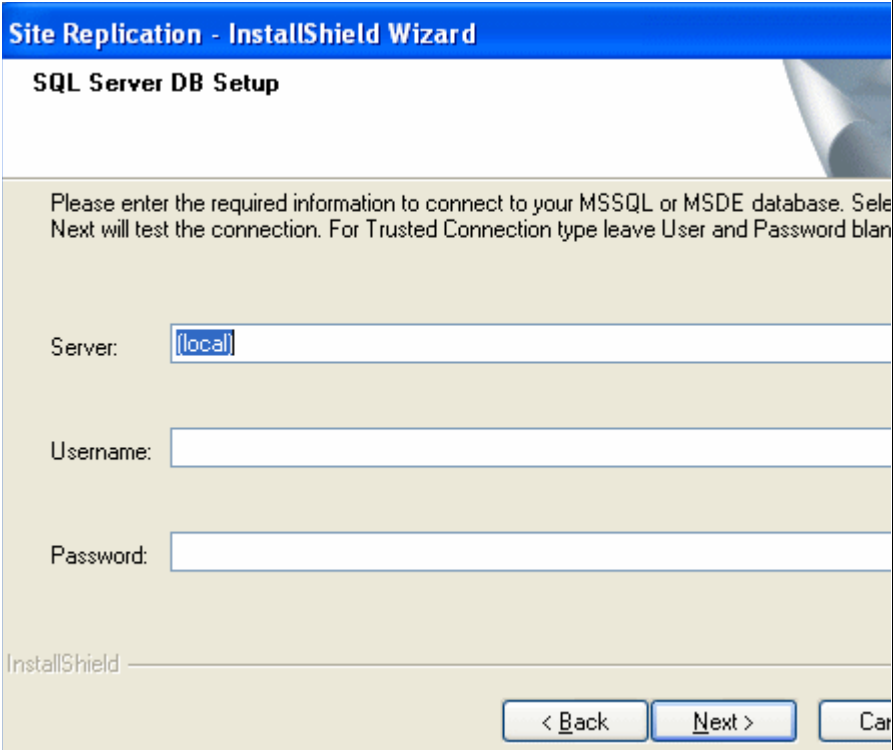
Directions	Screen
<p>6. Enter the folder to which the Site Replication files will be installed. If you are unsure, accept the default.</p>	
<p>7. Click Yes or No to indicate if the server uses a remote database. That is, a database stored on a separate server.</p>	

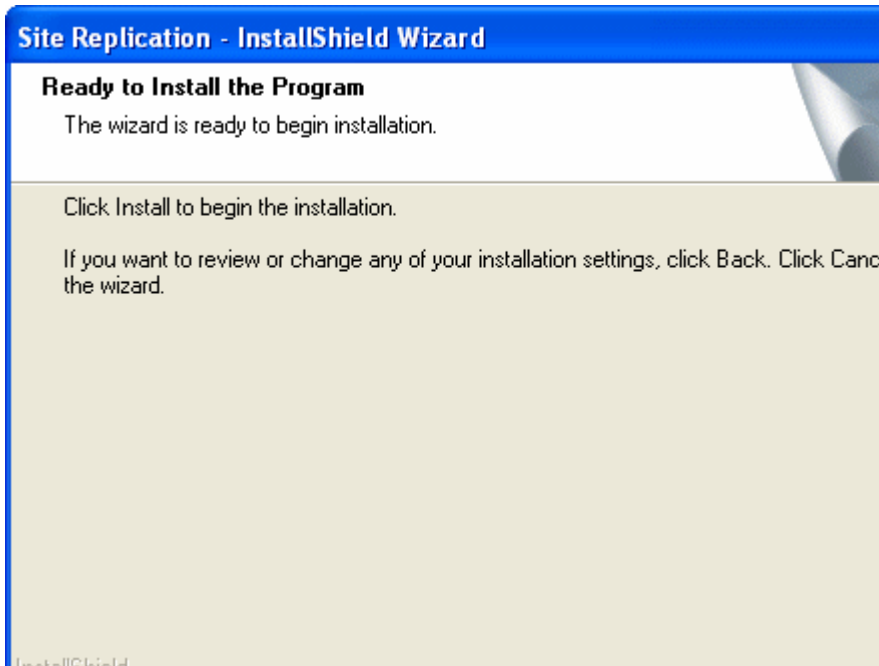
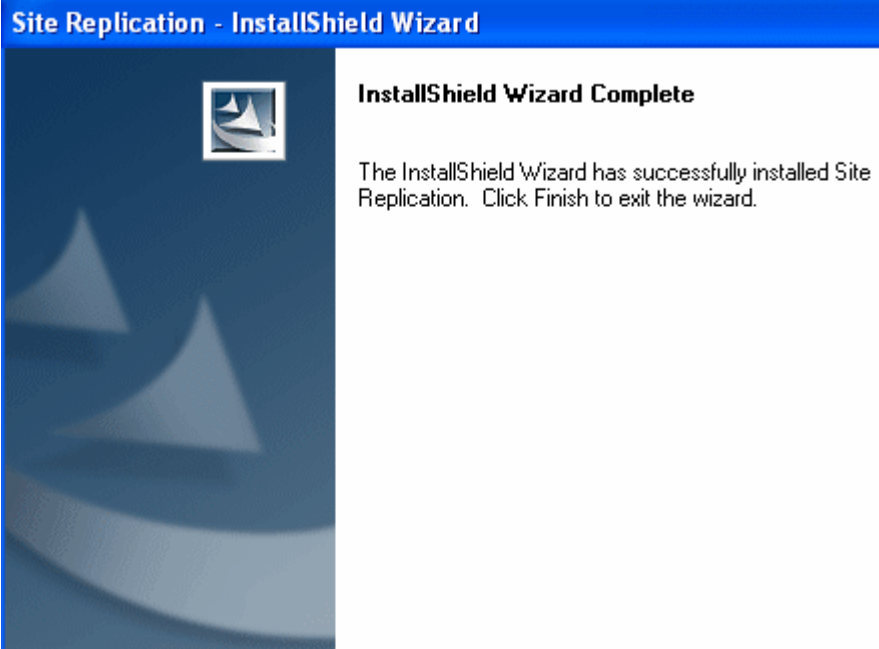
Directions	Screen
<p>8. If your receiving server uses a remote database server, the Site Replication feature uses a temporary folder to store the database prior to replication.</p> <p>A default folder to be used for this purpose appears. You can accept the default or navigate to a different folder on the receiving server.</p>	 <p>Site Replication - InstallShield Wizard</p> <p>Site Replication Temp Folder</p> <p>Please select where you want the setup to create the site replication temp folder. The site replication server and the database server have to share this directory in order to run the replication.</p> <p>Destination Folder C:\SiteReplication.Temp <input type="button" value="Browse..."/></p> <p>InstallShield</p> <p>< Back Next > Ca</p>

Directions	Screen
9. On the receiving server, enter the path to your installation of the MS SQL Server Data directory.	 <p>Site Replication - InstallShield Wizard</p> <p>MSSQL Data Directory</p> <p>Please enter the path to your MSSQL data directory. If your CMS400 uses a remote database please enter the path to the MSSQL data directory for the machine which has the database.</p> <p>Destination Folder C:\...\Microsoft SQL Server\MSSQL\Data Browse...</p> <p>InstallShield</p> <p style="text-align: right;">< Back Next > Ca...</p>

Directions	Screen
<p>10. If you are configuring a receiving server, enter the path to your backups directory.</p> <p>Before new information is pushed from the staging server, production server files are backed up to this directory. See Also: "Viewing and Restoring a Backup of the Production Server" on page 49</p>	 <p>The screenshot shows a wizard window titled "Site Replication - InstallShield Wizard". The current step is "Backup Directory". The instruction reads: "Please select the path for your site replication backup directory". The path entered is "C:\SiteReplication.Backups". At the bottom of the window, there are three buttons: "< Back", "Next >", and "C".</p>

Directions	Screen
<p>11. If you are configuring a sending server, you are prompted to enter a "from" email address. When site replication finishes, the notification uses this as the "from" email address.</p> <p><u>Note: You can enter a "to" email address on the configuration screen.</u></p>	 <p>Site Replication - InstallShield Wizard</p> <p>Email Notification</p> <p>Please enter a valid email address if you want an email sent out after a replication is complete. This email address will be the person the email is from. If left blank, email notification cannot be used in the future by editing the configuration file</p> <p>Email <input type="text"/></p> <p>InstallShield</p> <p>< Back Next > Cancel</p>

Directions	Screen
<p>Server Field Enter the path to the server that hosts the database. If using a remote database, enter the path to the database server, <i>not</i> the receiving server.</p> <p>Username and Password Fields If using a trusted connection, leave the username and password blank. Otherwise, enter a username and password specific to the database for the receiving and sending server.</p>	 <p>Site Replication - InstallShield Wizard</p> <p>SQL Server DB Setup</p> <p>Please enter the required information to connect to your MSSQL or MSDE database. Select Next will test the connection. For Trusted Connection type leave User and Password blank.</p> <p>Server: <input type="text" value="(local)"/></p> <p>Username: <input type="text"/></p> <p>Password: <input type="password"/></p> <p>InstallShield</p> <p>< Back Next > Cancel</p>

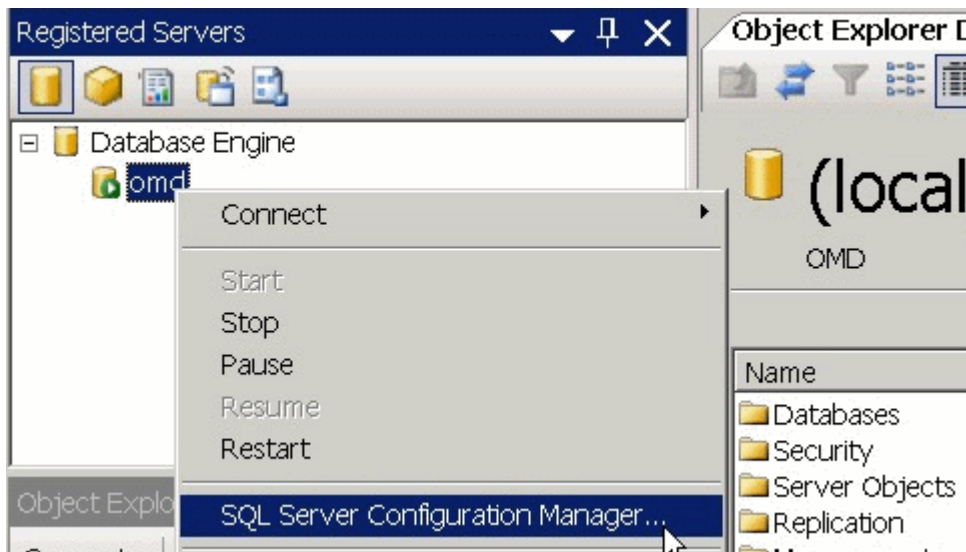
Directions	Screen
<p>12. Click the Install button to begin the installation.</p>	 <p>Site Replication - InstallShield Wizard</p> <p>Ready to Install the Program</p> <p>The wizard is ready to begin installation.</p> <p>Click Install to begin the installation.</p> <p>If you want to review or change any of your installation settings, click Back. Click Cancel the wizard.</p>
<p>13. The installation begins. When it is done, the screen on the right appears.</p>	 <p>Site Replication - InstallShield Wizard</p> <p>InstallShield Wizard Complete</p> <p>The InstallShield Wizard has successfully installed Site Replication. Click Finish to exit the wizard.</p>

Additional Steps Prior to Configuring the Site Replication Feature

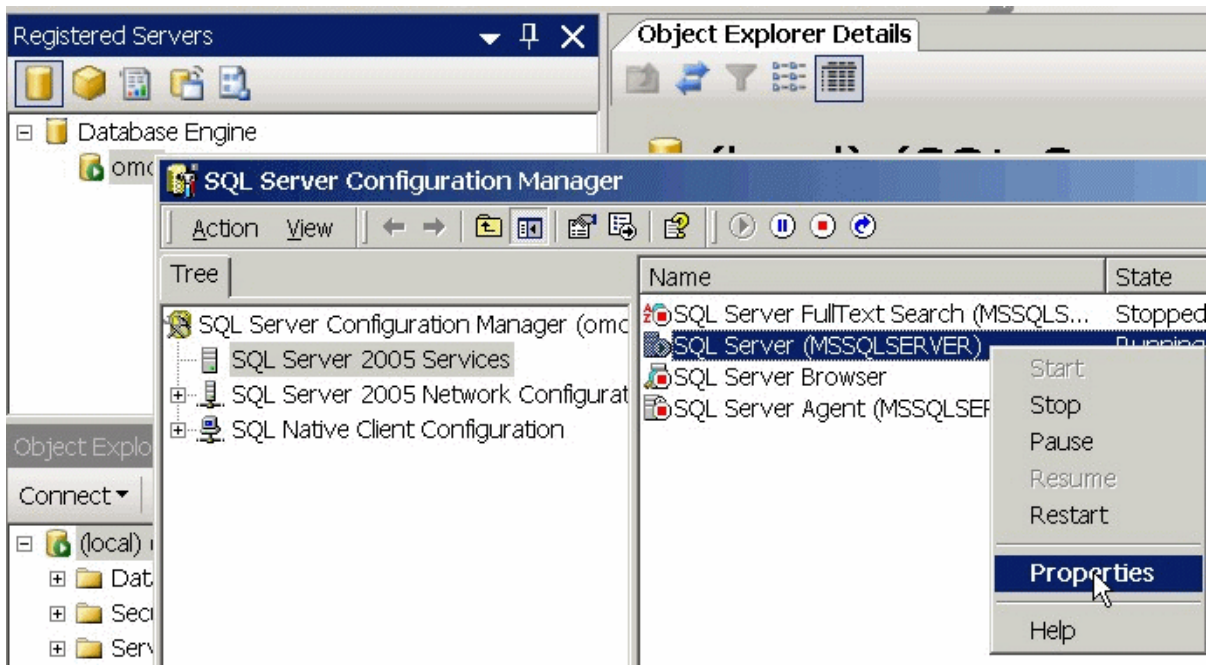
- If you are *not* using a trusted connection, the login user defined in the **Ektron CMS400.NET** web.config file needs sysadmin privileges. The login user is defined in the `user` tag within the web.config's `<connectionstring>` element.

If you *are* using a trusted connection, the user running the replication needs sysadmin privileges.

- If you are using a remote database, configure the MSSQL Windows Service on the remote server to run as one of the following:
 - a local user whose username/password combination on the Web server matches those settings on the SQL server
 - a Domain user. To set up a domain user, follow these steps.
 1. Open SQL Server Management Studio.
 2. Right click the database engine instance.
 3. Select **SQL Server Configuration Manager**.



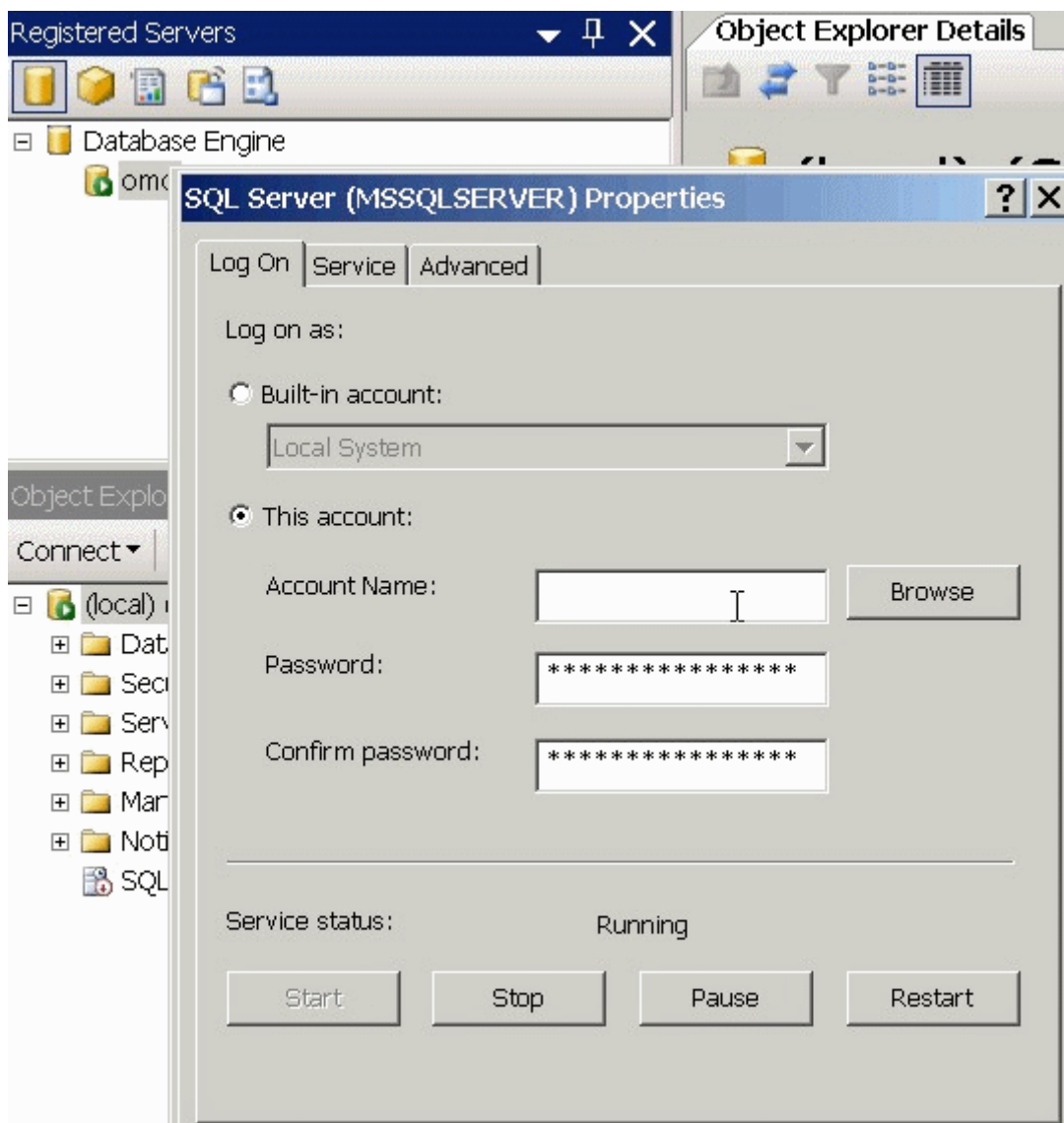
4. Under the **Tree** tab of the **SQL Server Configuration Manager** screen, select **SQL Server 2005 Services**.



5. In the right panel, select **SQL Server (MSSQLSERVER)**.

6. Right mouse click **SQL Server (MSSQLSERVER)**.

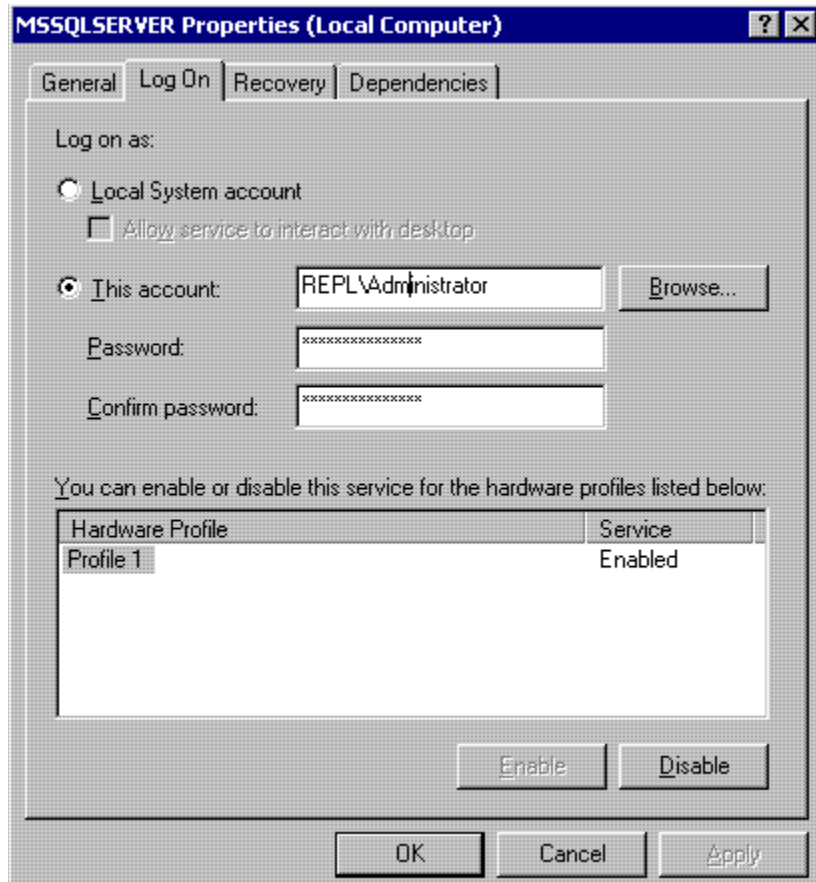
7. Select **Properties** from the menu.



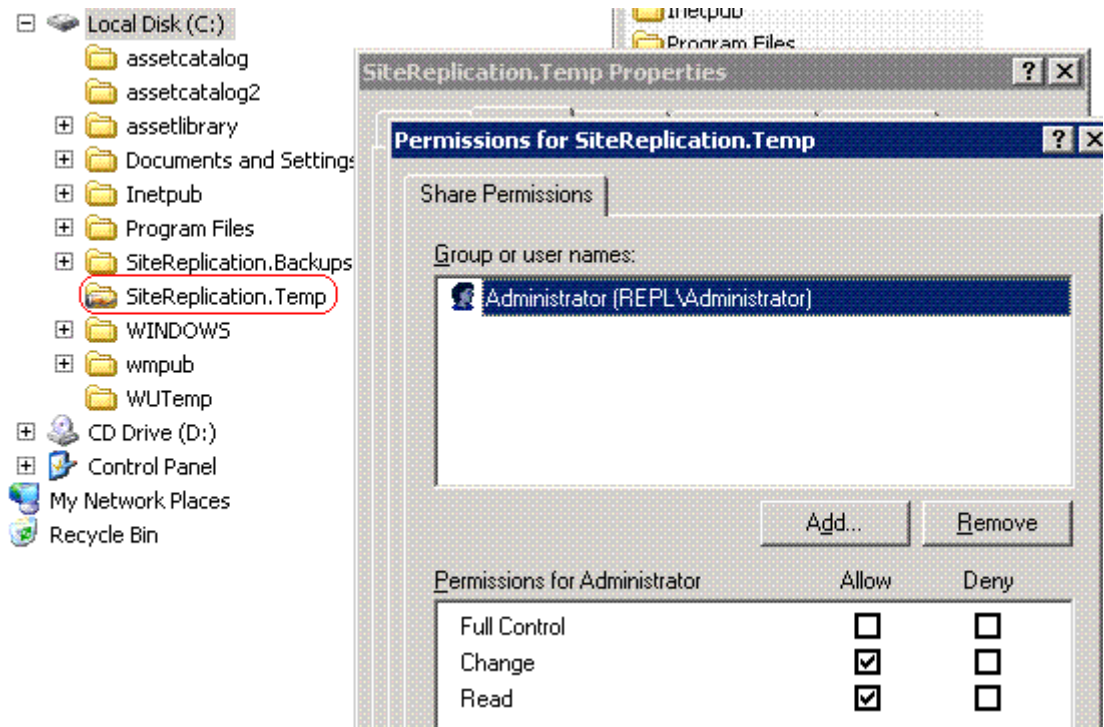
8. On the SQL Server Properties screen, click the **Log On** tab.

9. Select **This account**.

10. Click the **Browse** button and find a domain user who exists on both the **Ektron CMS400.NET** and the database server.



- Give the user selected above permission to read/write to the SiteReplication.Temp directory. To do so, follow these steps.
 - Open Windows Explorer.
 - Right mouse click the `c:/sitereplication.temp` folder.
 - Select **Properties**.
 - Click **Sharing** then **Permissions**.
 - Assign to the user selected above permission to read and write to this directory.

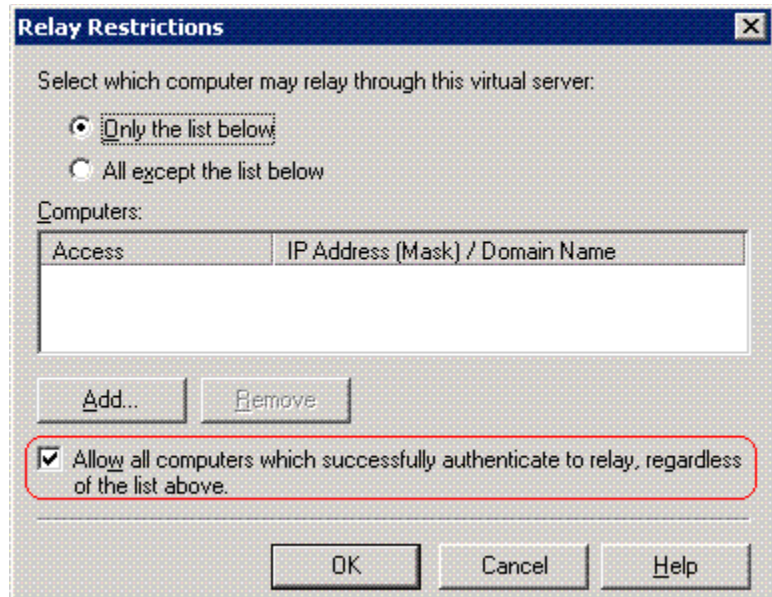


- If you will use email to communicate the completion of the replication, SMTP must be running on the sending (staging) server's IIS.

Also, the CDO objects must be installed. Mail will be sent from CMS400 Site Replication.

Finally, verify that your SMTP server allows relaying from the sending machine. You may need to set the Send\EmailFrom tag in the siterepl.config file to a valid internet email address. You can use the SendEmail web services API test in replication.asmx to test the configuration.

- Go to IIS > Default SMTP Virtual Server > Properties > Access tab > Relay button. Make sure the following field is checked: **Allow all computers which successfully authenticate to relay, regardless of the list above.**



See Also:

- ["Updating Membership Users" on page 30](#)
- ["Preserving Database Tables" on page 31](#)

Updating Membership Users

Typically, membership users are site visitors who register themselves via Web pages that reside on a production server. So, you would not want membership information on the staging server to overwrite that information.

However, if your staging server contains membership users that you want to move to the production server, follow these steps. You might do this on a one-time basis if, for example before your production server goes live.

1. On the production server, navigate to the folder `CMS400 server/ Documents and settings/all users/application data`.
2. Open the `sitereplCMS400Replication.config` file with a simple word processor, such as Notepad.

3. Set the value of `PreserveMembershipUsers` to **False**.

```
<entry name="PreserveMembershipUsers">False</entry>
```

4. Save and close the file.

The next time you run Site Replication, all membership user information on the staging server will be sent to the production server.

After running the replication, you would typically change the value of `PreserveMembershipUsers` to **True**, so that subsequent replications do not affect membership users on the production server.

Preserving Database Tables

Some customers have a custom set of tables in the production database for tracking unique information. If your site has custom tables that you want to preserve during replication, follow these steps to instruct the site replication to do that.

1. On the production server, navigate to the folder `CMS400 server/ Documents and settings/all users/application data`.
2. Open the `sitereplCMS400Replication.config` file with a simple word processor, such as Notepad.
3. Within the `PreserveTables` entry, list the tables to be preserved during replication.

```
<entry name="PreserveTables">my_custom_table_tbl</entry>
```

NOTE

If you enter more than one table, separate each with a comma.

Since the tables may have foreign key relationships, list the primary key tables first. When the tables are deleted, they are deleted in reverse order, so there are no foreign key errors.

When the tables are copied, it is done in forward order so the primary keys are restored before the foreign keys reference them.

4. Save and close the file.

Configuring the Site Replication Feature

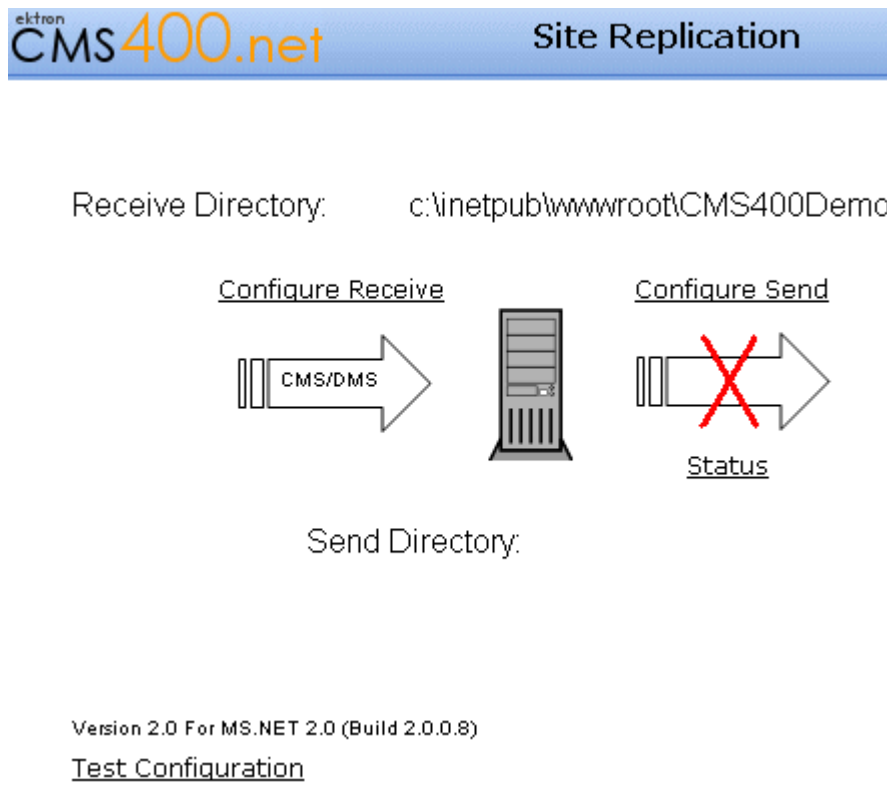
To configure the Site Replication feature, enter the following into your Web browser's address field:

`http://localhost/cms400replication/ConfigReplication.aspx`

Alternatively, follow this path from the Start menu.

Start > All Programs > Ektron > Site Replication > CMS400 Site Replication

The following screen appears if you chose to set up a receiving machine.

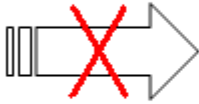



The following screen appears if you chose to set up a sending machine.


ektron
CMS400.net
Site Replication

Receive Directory:

[Configure Receive](#)
[Configure Send](#)







[Status](#)

Send Directory: c:\inetpub\wwwroot\CMS400Demo

Version 2.0 For MS.NET 2.0 (Build 2.0.2.3)

[Test Configuration](#)

This screen displays the following Site Replication information:

- current status
- the receiving directory
- the sending directory
- test configuration

This screen also links to other screens that let you configure, run, and get a detailed status of the replication process. Click **Configure Send** to configure your staging server, and **Configure Receive** to configure a production server.

NOTE Only configure the send page on the staging server, and the receive page on the production server.

See Also:

- "Configuring the Receiving Server" on page 34
- "Configuring the Sending Server" on page 38
- "The Site Replication Status Page" on page 44
- "Testing Site Replication Software" on page 64

Configuring the Receiving Server

Use the configuration receive page to set up information about a receiving server.

NOTE To return to the home screen, click [Replication](#) in the top left corner.

ektron
CMS400.net

Site Replication

[Replication](#) > Receive

Configuration Security Remote DB Backups

Enable Receive:

Receive Directory: i:\NetPub\wwwroot\CMS400DemoProduction

Multisite Directories:

MSSQL Data Directory: j:\Win32Dev\MSSQL\MSSQL.1\MSSQL\Data

MSSQL Log Directory:

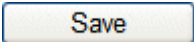
Backups Directory: i:\sitereplication.backups

This screen has four secondary screens, listed across the top:

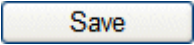
- "Configuration Screen" on page 35
- "Security" on page 36
- "Remote DB" on page 37
- "Backups" on page 37

The following table explains the initial screen's fields.

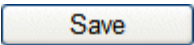
Configuration Screen

Field	Description
Enable Receive	<p>Determines whether the server you are signed into can receive Site Replication information.</p> <p><input checked="" type="checkbox"/> Checked = Receive</p> <p><input type="checkbox"/> Not checked = Do not receive</p>
Receive Directory	<p>The site directory on the receiving (production) server that is updated when Site Replication occurs. For example:</p> <p><code>c:\inetpub\wwwroot\site root folder</code></p> <hr/> <p>Note: If you just installed the Site Replication feature, the receiving directory you specified during installation appears.</p>
Multisite Directories	<p>If your configuration includes several Web sites, you must set up Site Replication for each Multisite Receive Directory.</p> <p>In this field, insert in a comma-separated list of all other multisite directories. (No spaces are allowed in the list.)</p> <p>The Site Replication feature uses this information to point each web.config file to the same database.</p>
MSSQL Data Directory	<p>The location of the MSSQL database directory. The default is:</p> <p><code>c:\Program Files\Microsoft SQL Server\MSSQL\Data</code></p>
MSSQL Log Directory	<p>Enter the location of the MSSQL Log directory, which stores your MSSQL .ldf files.</p>
Backups Directory	<p>The location of the Site Replication backup files. For example:</p> <p><code>c:\SiteReplication.Backups</code></p> <p>The backup directory may require a large amount of space, depending on the size of your site and if you are using the Document Management Functionality. See Also: "Viewing and Restoring a Backup of the Production Server" on page 49</p>
Save Button 	<p>Saves the receiving (production) server information.</p>

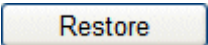
Security

Field	Description
Valid Username	<p>Username used for authentication on receiving (production) server. If you are setting up a receiving server that uses a trusted connection, this user needs sysadmin access for MSSQL.</p> <p>Also, this value must match the Username on the Configuration Sending Server screen.</p> <p>Ektron recommends entering the name in this format: domain name\username.</p> <hr/> <p><i>Note: You do not need to complete this field. If you do, this information provides additional security for which user can send data to this server.</i></p> <hr/>
Valid Sender IP	<p>The IP address of the sending (staging) server, which will be synchronized with the production server you are configuring. It must be a static IP address.</p> <hr/> <p><i>Note: You do not need to complete this field. If you do, this information provides additional security for which server can send data to this server.</i></p> <hr/>
Save Button 	Save the receiving (production) server information.

Remote DB

Field	Description
DB Server's Temp Dir	<p>Most databases can only back up and restore to a local drive. So if your database server is on a different machine than your CMS, both machines must share a domain/group and a user/password for directory access.</p> <p>Ektron recommends setting up a separate directory named SiteReplication.Temp and sharing it on the staging or production server (whichever uses the remote database server). The database server can connect to this network share via a UNC path.</p> <p><u>Note: The MSSQL service must run as a domain user to be able to access a UNC share.</u></p>
Receive DB Temp Dir	If the receiving server uses a remote database server, enter the UNC path to the shared directory on that server. See Also: "DB Server's Temp Dir" on page 37
Save Button 	Save the receiving (production) server information.

Backups

Field	Description
Replication Backups	<p>Displays the number of Site Replication backups stored in the backups directory. See Also: "Setting the Maximum Number of Backups" on page 50</p> <p>The selection box directly below this label lists all saved backups. See Also: "Viewing and Restoring a Backup of the Production Server" on page 49</p>
Button 	<p>Choose a backup from the replication backups selection box.</p> <p>Click Restore to replace the site on the receiving server with the selected backup. See Also: "Viewing and Restoring a Backup of the Production Server" on page 49</p>

Configuring the Sending Server

The first time you configure the sending (staging) server, follow the procedure described in "Setting up a Staging Server" on page 45. Later, you can use the **Configure Send** page modify that information.

NOTE To return to the home screen, click [Replication](#) in the top left corner.

ektron
CMS400.net
Site Replication

[Replication](#) > Send

Configuration
Destinations
Remote DB
Notification
Make Staging

Send Directory:

Exclude Files:

Delete Removed Files:

Send DB When: Always

Schedule On: Once

Destinations: None Specified

Windows Username:

Password:

This screen has these secondary screens, listed across the top:

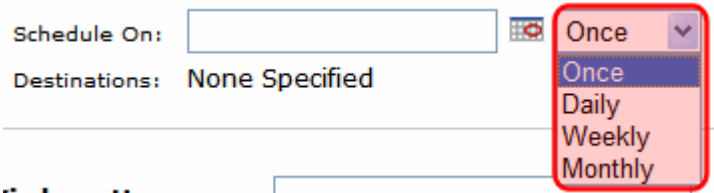

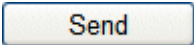
- "Configuration Screen" on page 39
- "Destinations Screen" on page 41
- "Remote DB Screen" on page 42
- "Notification Screen" on page 42

- "Setting up a Staging Server" on page 45

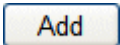
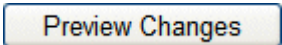
The following tables explain the screens.

Configuration Screen

Field	Description
Send Directory	The location of site directory on the sending server whose content will be synchronized with the production server. For example: <code>c:\inetpub\wwwroot\site root folder</code>
Exclude Files	If you want to exclude certain file types from the replication, enter them here. For example, you may want to exclude all PDF files. For each file type, enter an asterisk (*), period(.), then the file extension. For example *.pdf. Separate each extension with a comma.
Delete Removed Files	During Site Replication, files that were deleted on the staging server are now labeled "deleted" on the production server. Check this box if you want to remove these files from the production server.
Send DB When	Indicate if you want to copy the Ektron CMS400.NET database to the named destination servers. Your choices are: <ul style="list-style-type: none"> • Always • 1st Destination only (only copy the database to the first destination server listed above) • Never

Field	Description
Schedule On	<p>To begin the replication as soon as you press the Send button, leave this field blank.</p> <p>To schedule the replication for a future date and time, click the calendar button and choose a date.</p> <p>To the right of the Schedule On field is a dropdown box that lets you schedule Site Replication to run on a regular basis, such as weekly.</p>  <p>Schedule On: <input type="text"/>  Once ▼</p> <p>Destinations: None Specified</p> <p>If you want to run Site Replication automatically at one of these intervals, select it. See Also: "The Scheduler Windows Service" on page 69</p>
Destinations	<p>The path to the replication.asmx file on every <i>production</i> server that will be updated by this staging server. For example:</p> <pre>http://productionserver1/CMS400replication/replication.asmx</pre> <p>or</p> <pre>http://198.0.25.214/CMS400replication/replication.asmx</pre> <p>You must enter the username and password needed to access that folder before pressing the Add button to add a destination folder.</p>
Windows Username	<p>Username used for authentication on receiving (production) server. If you are setting up a receiving server that uses a trusted connection, this user needs sysadmin access for MSSQL. Enter the domainname\username.</p> <p>It must match the WS Username on the production server's Configuration Receiving Server screen.</p>
Password	Password for the above user.
Send Button 	Begin the Site Replication process. If you scheduled a date/time, the process is delayed until then.

Destinations Screen

Field	Description
Destinations	A Display-only field that lists the path to the replication.asmx file on every production server that will be updated by this staging server.
Destination to add	<p>Enter the path to the replication.asmx file on every <i>production</i> server that will be updated by this staging server. For example:</p> <pre>http://productionserver1/CMS400replication/replication.asmx</pre> <p>or</p> <pre>http://198.0.25.214/CMS400replication/replication.asmx</pre> <p>You must enter the username and password needed to access that folder before pressing the Add button to add a destination folder.</p>
Windows Username	<p>Username used for authentication on receiving (production) server. If you are setting up a receiving server that uses a trusted connection, this user needs sysadmin access for MSSQL. Enter the domainname\username.</p> <p>It must match the WS Username on the production server's Configuration Receiving Server screen.</p>
Password	Password for the above user.
Add Button 	<p>Add a new Destination. See Also: "Destinations" on page 40</p> <p>Before pressing this button, make sure that a valid destination appears in the Destinations field, and the username and password needed to access that folder appear in their respective fields.</p>
Preview Changes Button 	<p>Preview a list of changes to take place when the Site Replication occurs. Use this feature to examine which changes are scheduled before replication begins.</p> <p>Before pressing this button, make sure a valid destination appears in the Destinations field, and the username and password needed to access that folder appear in their respective fields.</p> <p>Then, select a production server from the Destinations field.</p> <p>See Also: "Previewing the Site Replication Process" on page 46</p>

Remote DB Screen

Field	Description
DB Server's Temp Dir	<p>Most databases can only back up and restore to a local drive. So, if your database server is on a different machine than your CMS, both machines must share a domain/group and a user/password for directory access.</p> <p>Ektron recommends setting up a separate directory named SiteReplication.Temp and sharing it on the site replication server. The database server can connect to this network share via a UNC path.</p> <p>So, if the sending server uses a remote database server, enter the site replication server's shared directory.</p>
Send DB Temp Dir	If the sending server uses a remote database server, enter the UNC path to the shared directory on that server.

Notification Screen

Field	Description
email Notification to	<p>Use this field to notify someone when the site replication is finished. Enter the email address of the person you want to notify.</p> <p><u>Note: email notification only works if the sending server's SMTP mail service is enabled. See Also: "If you will use email to communicate the completion of the replication, SMTP must be running on the sending (staging) server's IIS." on page 29</u></p> <p>Here is an example of the email resulting from a successful replication.</p> <p>Completed At 10/7/2005 9:50:26 AM</p>
From Address	Enter the name that will appear in the email's <i>from</i> line.


Make Staging Screen

This screen helps you to set up a staging server when only a production server is currently available. The screen facilitates the setup of the staging server by

- copying Web site and database information from the production server to the staging server
- initializing the staging server with content from the production server

For more information, see ["Setting up a Staging Server" on page 45.](#)

Field	Description
New Connection String	Enter a connection string pointing to the new database.
MSSQL Data Directory	Enter the location of the staging server's MSSQL database directory. The default is: c:\Program Files\Microsoft SQL Server\MSSQL\Data
MSSQL Log Directory	Enter the location of the staging server's MSSQL Log directory, which stores your MSSQL .ldf files.
Temp Directory	
Windows Username	Enter the Username used for authentication on receiving (production) server. If you are setting up a receiving server that uses a trusted connection, this user needs sysadmin access for MSSQL. Enter the domainname\username. It must match the WS Username on the production server's Configuration Receiving Server screen.
Password	Enter the password for the above user.

Field	Description
	<p>Click this button when you are ready to create the staging server based on the information entered on the screen.</p> <p>Before pressing this button, make sure you completed "Setting up a Staging Server" on page 45.</p> <p>When you click the Create Staging button, Site Replication copies the site root folder, the assetlibrary directory, and the CMS400 database from the production server to the staging server.</p>

The Site Replication Status Page

The status page keeps you informed of the Site Replication process. Specifically, it lists the current status of the Site Replication. Also, If a replication is currently in progress, the page displays

- the percentage of completion
- the file currently being replicated
- the destination server's URL

ektron
CMS400.net
Site Replication

[Replication](#) > Status

Destination: http://192.168.0.215/CMS400Replication/Replication.aspx

Overall:

Current File: Checking for updated files

Status: Replication in progress... Cancel

0 KBytes sent.
Time elapsed: 00:00:06.2034426
0 KBytes/sec

Setting up a Staging Server

Follow these directions if you are migrating from a single-server model to a two-server model, that is, a staging and production server. Your current server becomes a production server, and the new server will be a staging server.

After purchasing the appropriate licensing and downloading the Site Replication software, follow these steps.

WARNING! Only follow these steps to set up a sending server. After that, you can perform Site Replication by following "Performing Site Replication" on page 47.

1. Install **Ektron CMS400.NET** on the staging server. Set it up exactly like the production server (for example, all directories must have the same name).

NOTE This procedure is described in the [Ektron CMS400.NET Setup Manual](#).

- During installation, when you are asked to specify **Setup Type**, choose **Minimal**.
2. Install Site Replication software on both servers. See "Installing the Site Replication Feature" on page 13.
 3. Follow the steps described in "Additional Steps Prior to Configuring the Site Replication Feature" on page 25.
 4. Configure Site Replication software on the production server according to instructions in "Configuring the Receiving Server" on page 34.
 5. On the sending server, enter the following into the browser address bar: `http://localhost/ConfigReplSend.aspx`
 6. Click the **Destinations** tab.
 7. In the **Destinations to Add** field, enter the path to the replication.asmx file on the production server. For example:
`http://productionserver1/CMS400replication/replication.asmx`
or
`http://198.0.25.214/CMS400replication/replication.asmx`
Enter only one destination.
 8. Enter the username and password needed to access that folder.
 9. Press the **Add** button.
 10. Click the **Configuration** tab.

11. In the **Send Directory** field, enter the send server's site root directory.
12. Click the **Make Staging** tab. This screen facilitates the setup of the staging server by
 - copying Web site and database information from the production server to the staging server
 - initializing the staging server with content from the production server
13. In the **New Connection String** field, enter a connection string pointing to the new database. You can copy this from the web.config file. For example

```
server=(local);database=remotedb;Integrated Security=true;user=sams;pwd=sam123;
```
14. In the **MSSQL Data Directory** and **MSSQL Log Directory** fields, specify the location of the MSSQL data and log directories.
15. Enter the username and password needed to access the production server.
16. Click **Create Staging**.
17. The Site Replication software initializes the staging server with content from the production server.

Previewing the Site Replication Process

After you configure the Site Replication feature, you can preview which files the replication will transfer before beginning the replication.

If the list looks correct, proceed with the replication. If the list looks wrong or incomplete, review the contents of the sending (staging) server to make sure all content was updated properly. Then, run the preview again to make sure the list of files to be moved is correct before beginning the replication.

To use the preview feature, follow these steps.

1. To access the Site Replication feature, enter the following into your Web browser's address field:

```
http://localhost/cms400replication/ConfigReplication.aspx
```

2. Click **Configure Send**.
3. In the **Destination** field, select the production server with which you will synchronize.
4. Enter the password required to access that production server.
5. Click the **Preview Changes** button.
6. A list of files to be transferred to the production server appears.

Performing Site Replication

For background information about Site Replication, see "[Site Replication](#)" on page 6.

You must configure the Site Replication feature before beginning the actual replication.

IMPORTANT!

Make sure that the system clock on both servers is set to the same time. The Site Replication software uses the clock to determine which files to replicate.

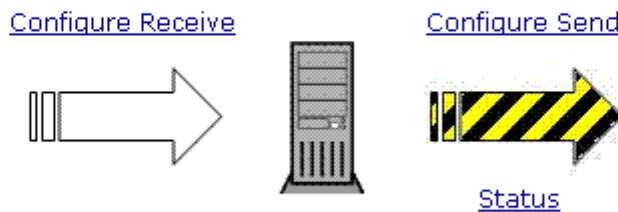
Before beginning the site replication, check free space on the receiving (production) server to make sure it can accommodate your site directory on the sending (staging) server. Also, Ektron recommends using the Preview feature to identify which files will be moved by the replication prior to beginning. See *Also:* "[Previewing the Site Replication Process](#)" on page 46

To use the Site Replication, follow these steps.

1. To access the Site Replication feature, enter the following into your Web browser's address field:
`http://localhost/cms400replication/ConfigReplication.aspx`
2. Click **Configure Send**.
3. In the **Destination** field, select the production server with which you will synchronize.
4. Enter the Username and password required to access that production server.
5. If you want to begin the replication in the future, use the **Schedule on** field. See *Also:* "[Schedule On](#)" on page 40. Otherwise, proceed to the next step.
6. Click the **Send** button.
7. The replication begins.

- The main screen of the sending server changes to the following, indicating you cannot edit its configuration information while replication is taking place.

Receive Directory: c:\inetpub\wwwroot\CMS400Example



Send Directory: c:\inetpub\wwwroot\CMS400Example

- To view the progress of the replication, click **Status**. A screen like the following displays.

Destination: http://192.168.0.25\CMS400replication/replication.asp

Overall: 2441/3732



Current File: \\Workarea\Help\images\edit_sea.gif



Status: Replication in progress...
89544 KBytes sent.
Time elapsed: 00:34:17.8352069
43 KBytes/sec

The screen displays the following information:

- **Destination** - the receiving server
- **Overall** - the number of files already transferred/the total number of files to be transferred
- **Current File** - the file currently being transferred

- **Status** - Information about the replication (number of kilobytes sent so far, time elapsed, speed of transfer)

10. A list of files transferred to the production server appears.

After completing the replication, it's a good idea to spot check the content on the production server to verify that the replication was successful. The following files are available on the receiving server to help you do this.

- log*.txt files store the logs (including errors)
- backup* directories store any changed or deleted files
- dirupdate* directories store pending updates
- dirbackup* directories store snapshots of entire CMS400 directories (To disable this feature, set the Receive\FullDirBackup tag in siterepl*.config to `false`.)

Viewing and Restoring a Backup of the Production Server

When you run a Site Replication, a backup is made of the receiving (production) server before any new or updated files are copied from the sending (staging) server. Only files with the same name but a earlier edit date/time are backed up. A backup directory is specified during installation. After installation, the directory can be changed via the receiving server's **Configuration** screen. See *Also: "Configuring the Receiving Server" on page 34*

On that screen, you can see how many backups are available. Below that, a drop-down box displays information about each backup, such as creation date, time and user.

 Save Cancel

Replication Backups: 1

#1 in C:\SiteReplication.Backups\9-29-2005_3~35~35_PM created by DOCUMENTATION\Administra

You can also view a log of the selected backup, which lists every file copied from the sending to the receiving server. To see the log, click the **Show Log** button.

See Also:

- ["How Backup Files Are Maintained and Numbered" on page 50](#)
- ["Restoring a Backup" on page 51](#)

How Backup Files Are Maintained and Numbered

The Site Replication feature keeps up to a user-defined number of the most recent backups. So, if 10 is the maximum and that many are saved when you initiate a new replication, the oldest backup is deleted. The current files about to be replaced are saved as the number one backup. All remaining backups are renumbered one higher.

Setting the Maximum Number of Backups

By default, the 10 most recent backups are kept. If you want to change this number, follow these steps.

1. In Windows Explorer, navigate to the folder to which you installed Site Replication.
2. Open the web.config file.
3. Adjust the value of the `ek_MaxBackups` tag, as indicated below.

```
<add key="ek_MaxBackups" value="10"/>
```

Restoring a Backup

When you restore a backup, only files that were overwritten and the `web.config`, `assetmanagement.config`, `assetmanagementdata.config` files are restored. Any new files copied to the production server are not deleted.

To restore a backup of files on the receiving (production) server, follow these steps.

1. To access the Site Replication feature, enter the following into your Web browser's address field:

`http://localhost/cms400replication/ConfigReplication.aspx`

2. Click **Configure Receive**.
3. In the bottom section of the screen, display the drop-down selection box under **Replication backups**.
4. Select the backup that you want to restore.
5. Click **Restore**.

The Site Replication Configuration File

The Site Replication feature has a configuration file that maintains and lets you update values set during installation and configuration. Its name is `sitereplCMS400Replication.config`, and it is located in the `C:\Documents and Settings\All Users\Application Data` directory.

You can move the file to a different location. To do that, update the `ek_ConfigFile` tag in the corresponding Web site's `web.config` file.

The following tables describes the file's elements.

- ["Receive Section" on page 52](#)
- ["Send Section" on page 54](#)
- ["Backup Section" on page 56](#)
- ["Schedule Section" on page 57](#)

See Also: ["Site Replication web.config File" on page 57](#)

Hidden Elements

Elements that are prefixed with an asterisk (*) do not appear in the configuration file, but you can add them to change their value. They are hidden because they are typically not used.

Receive Section

These settings apply to the production server.

Element	Default Value	Description
Receive Enabled	true = Site Replication is enabled false = Site Replication is not enabled	Indicates whether Site Replication is enabled on the production server.
Receive Dir	Your Ektron CMS400.NET Web site. The sample site is installed to c:\inetpub\wwwroot\site root folder	The directory that contains your Ektron CMS400.NET Web site.
username		Determines which users can send to the production server. You can also update this field via the Security tab.
Sender IP		Determines which computers can send to the production server. You can also update this field via the Security tab.
*HookURL		Allows you to “hook” a Web service into the replication process. The hook lets you send custom directories/databases during Site Replication.
*AllowAddContent		CMS users' permissions for adding content on the receive machine are usually disabled. This setting lets CMS users add content on the receiving machine.

Element	Default Value	Description
BackupDir	C:\SiteReplication.Backups	The directory to which your Site Replication backups are written. This value can also be updated from the Receiving Configuration screen's Configuration tab's Backups Directory field.
MSSQLDataDir	C:\Program Files\Microsoft SQL Server\MSSQL\Data	The location of your remote MS SQL Data Directory from the viewpoint of the MSSQL server. This value can also be updated from the Receiving Configuration screen's Configuration tab's MSSQL Data Directory field.
MSSQLLogDir	C:\Program Files\Microsoft SQL Server\MSSQL\Log	The location of your remote MS SQL Log Directory from the viewpoint of the MSSQL server.
* MultiSiteDirs		A list of other multisite directories. The Site Replication feature uses this information to determine the directories in which to update the web.config file.
DBTempDir		See "DB Server's Temp Dir" on page 37 This value can also be updated from the Receiving Configuration screen's Remote DB tab's DB Server's Temp Dir field.
MappedDBTempDir		See "Receive DB Temp Dir" on page 37 This value can also be updated from the Receiving Configuration screen's Remote DB tab's Receive DB Temp Dir field.

Element	Default Value	Description
PreserveTables		<p>An optional list of database tables (comma-separated) that you want to preserve on the production server.</p> <p>Since the tables may have foreign key relationships, they should be listed with the primary key tables first.</p> <p>When tables are deleted, it occurs in reverse order so there are no foreign key errors.</p> <p>When the tables are copied, it occurs in forward order, so the primary keys are restored before the foreign keys reference them.</p>
FullDirBackup	true	<p>If set to true, your site is backed up when Site Replication is run.</p>
DeleteOldDBs	true	<p>If set to true, replication only maintains the maximum number of databases. See <i>Also: "Setting the Maximum Number of Backups" on page 50</i></p> <p>Once the maximum number has been saved, the next time replication occurs, the oldest database is deleted from the Site Replication software. Your MSSQL administrator must manually delete the old database.</p> <p>If set to false, all old databases are kept.</p>
PreserveMembershipUsers	true	<p>On the production server, Ektron CMS400.NET and membership users can update information about themselves. For example, they can change their first or last name, password, display name, or language.</p> <p>If this is set to true, changes submitted on the production machine update that information on the staging server.</p>

Send Section

These settings apply to the staging server.

Element	Default Value	Description
URLCount	0	The destination URLs on the Send > Destinations tab.
URLCount name	Dir	The destination URLs on the Send > Destinations tab.
Username		Username for accessing the sending server's database. If entered, this value overrides settings in the staging server's web.config file.
*HookURL		Allows you to "hook" a Web service into the replication process. The hook lets you send custom directories/databases during Site Replication.
SendStageTemp		The temp directory as defined on the Make Staging tab.
SendBufferSizeKB		Sets the buffer size used to transfer data.
SchedRepeat		Indicates when scheduled replications occur.
DeleteFiles		Deletes files on Receive machine that are not on Send machine If your version of Ektron CMS400.NET is 7.0 or higher, you should only set this to <code>true</code> if you do not allow content/attachments/images to be added on the receive machine.
DBTempDir		See "DB Server's Temp Dir" on page 42 This value can also be updated from the Sending Configuration screen's Remote DB Screen Screen tab's DB Server's Temp Dir field.
MappedDBTempDir		See "Send DB Temp Dir" on page 42 This value can also be updated from the Sending Configuration screen's Remote DB Screen Screen tab's Receive DB Temp Dir field.

Element	Default Value	Description
DBWhen		See "Send DB When" on page 39 This value can also be updated from the Sending Configuration screen's Configuration Screen tab's Send DB When field.
NotifyEmail		See "email Notification to" on page 42 This value can also be updated from the Sending Configuration screen's Notification Screen tab's email Notification to field.
FileExcludeMask		See "Exclude Files" on page 39 This value can also be updated from the Sending Configuration screen's Configuration Screen tab's Exclude Files field.
EmailFrom	"CMS400 Site Replication"; only works if the customer's SMTP server requires a valid "from" address	The "from" address of notification email. You should change this to a valid "from" email address. The SMTP server and authentication information are taken from the staging server's web.config file. This value can also be updated from the Sending Configuration screen's Notification Screen tab's From Address field.

Backup Section

These settings apply to the Site Replication backup procedure.

Element	Default Value	Description
Count	0	
*DirN		The backup directory
*DateN		The timestamp of when the backup was performed
*UserN		The user who completed the replication
*PendingDir		Can be ignored

Element	Default Value	Description
*PendingDate		Can be ignored
*PendingUsername		Can be ignored

Schedule Section

These settings apply to Site Replication scheduling. See Also: ["The Scheduler Windows Service"](#) on page 69

Element	Description
*StartTime	Starting time of the replication
*Username	User name to use when performing a scheduled replication.
*Password	Password to use when performing a scheduled replication

Site Replication web.config File

The Site Replication feature has a web.config file that is installed to the directory to which you installed Site Replication. You should only modify a few elements within the `<appsettings>` section. They are described below.

Element	Description
ek_SQLCmdTimeout	Timeout for SQL commands. Only increase this value if you have a large, very busy database.
ek_WSTimeout	Timeout for Web service calls. Only increase this value if you have a slow network.

Element	Description
ek_SimpleUI	Simplifies the Send screen by only displaying the username, password, and send buttons. Set this tag to <code>true</code> if you want to disable most of the configurable information for “dumb” users.
ek_RestoreIndexingState	Set to false if you want to prevent the Site Replication feature from starting the indexing service.
ek_MaxBackups	Determines the maximum number of backups that Site Replication will keep. See Also: "Setting the Maximum Number of Backups" on page 50

Using Site Replication with Multiple Sites

If you are using **Ektron CMS400.NET**'s Site Replication feature to copy content from your staging to production server, you *must* replicate all files at one time. You cannot replicate only one site, since all sites share library files.

While configuring the Replication Send screen, use the **Add** button to identify all destination directories. See Also: ["Configuring the Site Replication Feature" on page 32](#)

When setting up Site Replication for receiving site, in the **Destination** field, select the appropriate destination directory. See Also: ["Performing Site Replication" on page 47](#)

See Also: ["Installation Guidelines" on page 58](#)

Installation Guidelines

To set up multiple sites on a staging server, follow these guidelines.

1. Install the Site Replication feature separately for each site. On the following installation screen, be sure the site is unique.

Ektron CMS400 Site Replication Setup

Please select the site and host you would like to install to.

Select Site:

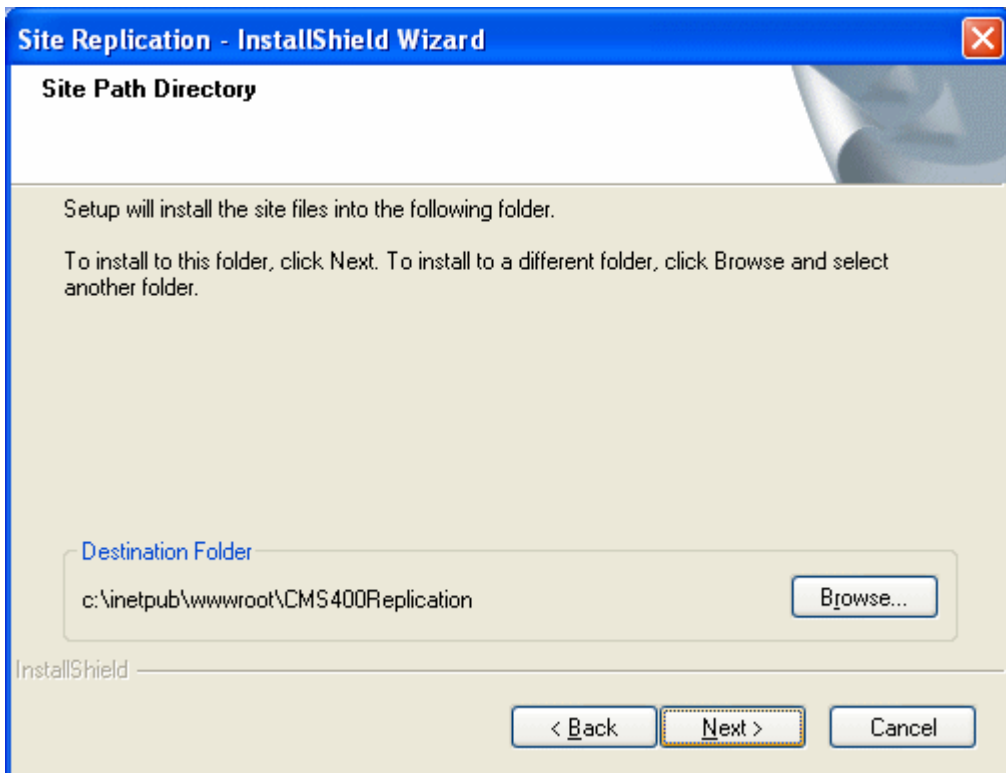
Select Host:

Enter Host Manually

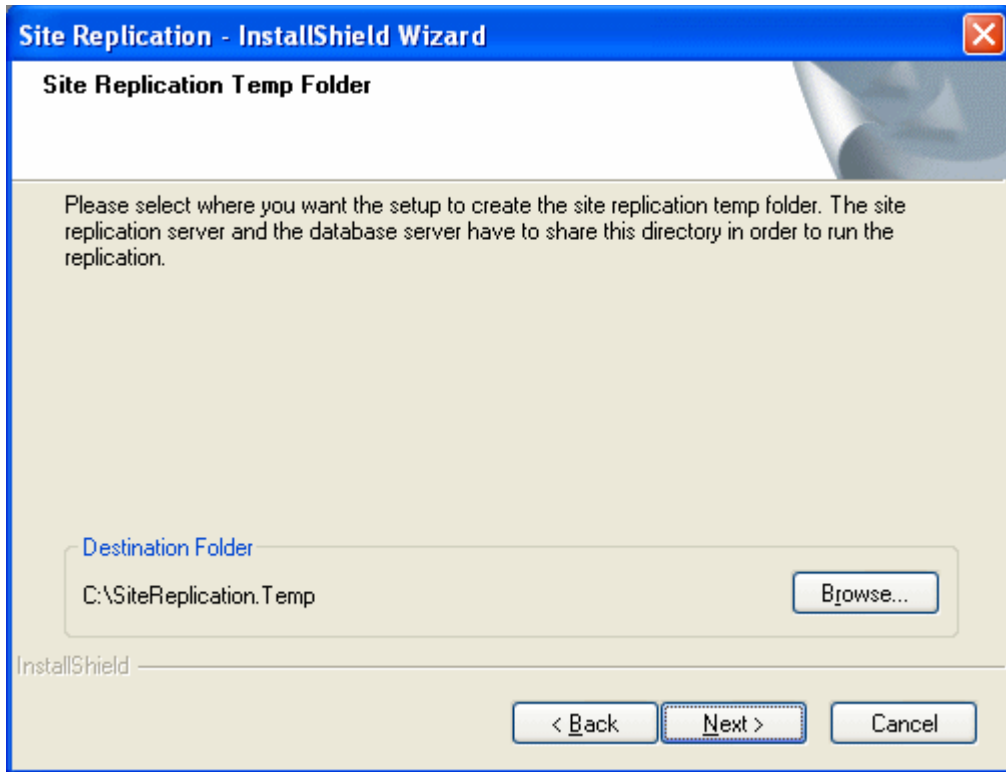
Enter Host:

InstallShield

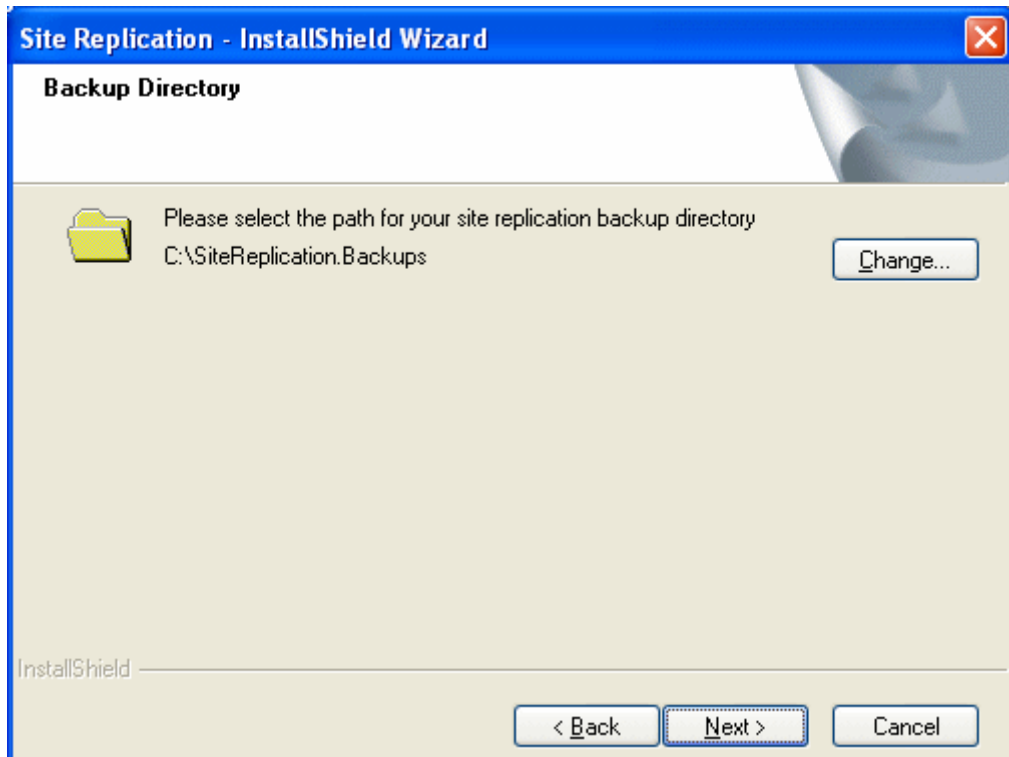
2. When asked to identify the site path directory, be sure the directory name is unique for each site.



3. If your receiving server uses a remote database server, it is good practice for each site to use a unique temporary folder to store the database prior to replication.



4. Specify a unique backup directory for each site.



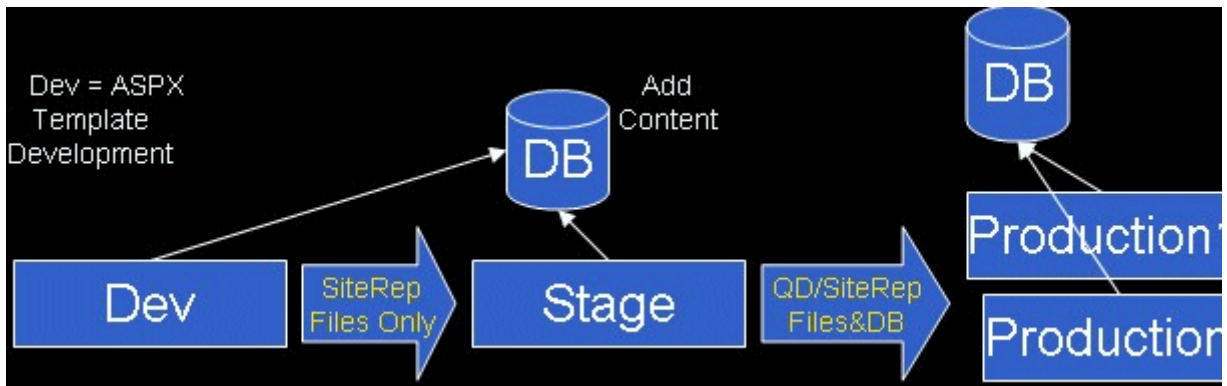
Using Site Replication with Development > Staging > Production Servers

There are two scenarios in which you can use Site Replication across a development, staging, and production server configuration.

- you create .aspx templates on a development server and move them to a staging server
- you're making a radical change to the staging database. In this case, copy the database to the development server, change it, then copy it back to the staging server.

Each scenario is explained below.

Moving .aspx Templates from Development to Staging Server

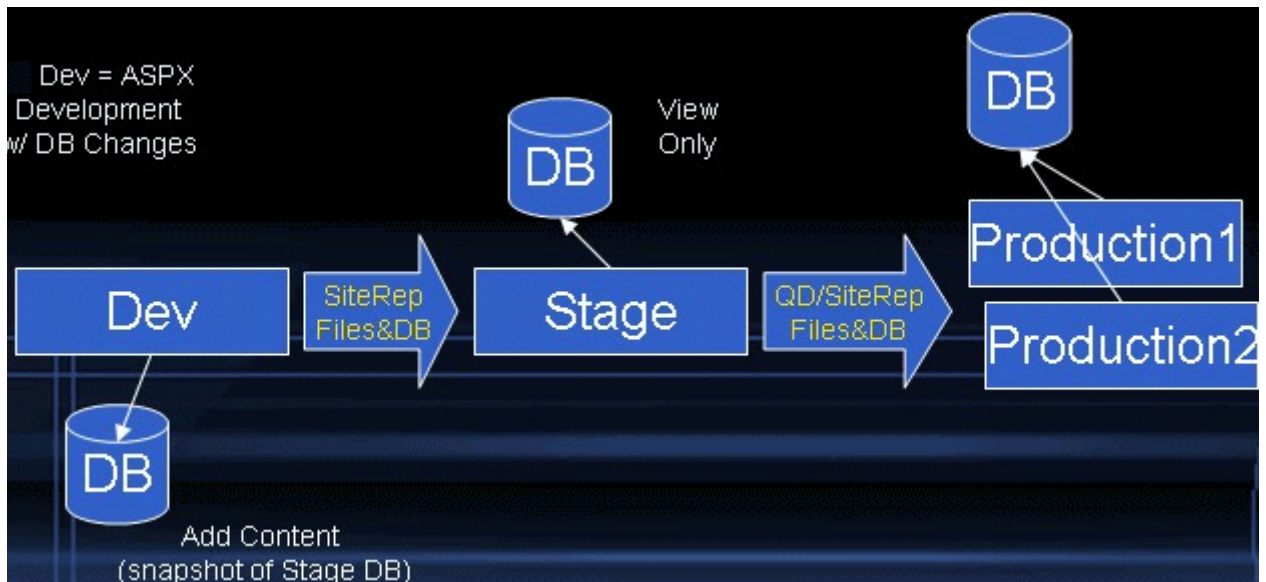


In this scenario, the development server is used to create, modify, and test .aspx templates. You set it up as the **Send** server, and the staging server as the **Receive** server.

When the development work is done, use Site Replication to move only new/updated template files from development to staging. Then, use a Quick Deploy to move the templates and database from staging to production.

If you want to use Quick Deploy, you can only do so between the staging and production servers. You can add content to Quick Deploy folders, menus, and collections on the staging server.

Moving the Database from Development to Staging Server



Use this scenario if you are making radical changes to the database. Once the changes are finalized, use Site Replication to move the files and database from the development to the staging server. You cannot add content to the staging server until Site Replication pushes the database from the development to it.

Then, use a Quick Deploy to move the templates and database from staging to production. Quick Deploy on the staging server can also be used to view analytics, forum entries, etc. from the production server.


Testing Site Replication Software

On the main Site Replication Screen, a **Test Configuration** option lets you verify that your Site Replication software is working properly. You can also use this screen to diagnose problems.

ektron
CMS400.net Site Replication

Receive Dir: c:\inetpub\wwwroot\CMS400Demo

[Configure Receive](#) [Configure Send](#)



Send Dir:

Version 2.0 For MS.NET 2.0 (Build 2.0.2.10)

[Test Configuration](#)

When you click **Test Configuration**, the following screen appears.

[Application](#) > Setup Testing 

System Privileges

Local DB

Remote DB

File Transfer

Notifications

Verify CMS and DMS update directories are unique:

CMS:

C:\SiteReplication.Backups\dirupdates\cinetpubwwwrootCMS400Demo

DMSCatalog:

C:\SiteReplication.Backups\dirupdates\cassetcatalog1921680146

Passed

DMSStorage:

C:\SiteReplication.Backups\dirupdates\cassetlibrary1921680146

Identity on current server:

EKTRON1\bolt

Passed

Verify MS SQLDMO is installed:

8.5.2

Passed

Identity on destination server:

N.A.
No destination
in send config

Test start/stop indexing service on current server:

Test

Test writing to a file in receive directory:

Test

Test writing to SiteReplication.Backups directory:

Test

Test writing to SiteReplication.Temp directory:


N.A.
No Receive [br/>directory spe

This screen lets you verify that Site Replication is configured properly. If all tests pass on your sending, receiving, and remote machines, Site Replication should function properly.

Tests are grouped by tabs into the following areas.

Group	These tests verify	For more information, see
System Privileges	Users have been assigned privileges to write files, restart services, etc. These activities occur during Site Replication.	<ul style="list-style-type: none"> • "Prerequisites" on page 11 • "If you are not using a trusted connection, the login user defined in the Ektron CMS400.NET web.config file needs sysadmin privileges. The login user is defined in the user tag within the web.config's <connection-string> element." on page 25
Local DB	If Ektron CMS400.NET runs on the same machine as the Ektron CMS400.NET database server, you can back up and restore the Ektron CMS400.NET database.	"Viewing and Restoring a Backup of the Production Server" on page 49
Remote DB	If you installed a database on a separate server, you can back up and restore it.	
File Transfer	The transfer of files and databases between sending and receiving servers.	"What Information is Synchronized" on page 8
Notifications	Notification email can be sent.	"If you will use email to communicate the completion of the replication, SMTP must be running on the sending (staging) server's IIS." on page 29

List of Tests Per Server

Tab/Function	Use on sending server	Use on receiving server	Use on remote database server
System Privileges			
Verify CMS and DMS update directories are unique			

Tab/Function	Use on sending server	Use on receiving server	Use on remote database server
Identity on current server:	✓	✓	
Verify MS SQLDMO is installed	✓	✓	
Identity on destination server	✓		
Check Staging/Production Flags	✓		
Test start/stop indexing service on current server	✓	✓	
Test writing to a file in receive directory		✓	
Test writing to SiteReplication.Backups directory		✓	
Test writing to SiteReplication.Temp directory			✓
Local DB			
Test backup CMS DB using Send settings:	✓		
Test restore DB using Receive settings:		✓	
Remote DB			
Test backing up DB using SiteReplication.Temp:			✓
Test restoring DB using SiteReplication.Temp			✓
File Transfer			

Tab/Function	Use on sending server	Use on receiving server	Use on remote database server
Check SQL Server Compatibility	✓		
Check Site Replication Compatibility	✓		
Notifications			
Sent Email to:	✓		

The Scheduler Windows Service

The Site Replication feature installs a Windows service that can launch replication at a predetermined date and time. If you want to use this option, establish the schedule at the **Schedule on** field on the Sending screen's **Configuration** tab (see "[Schedule On](#)" on page 40).

The service is named Ektron Replication Scheduler. It starts automatically when a Site Replication sending server is installed and whenever Windows restarts.

Running the Scheduler Service from a Remote Server

IMPORTANT! Using a localhost web service URL is *strongly* recommended!

The Site Replication sending server (the one on which you want to schedule Site Replication) has an EktronReplScheduler.exe.config file, located in C:\Program

Files\Ektron\SiteReplication\EktronReplScheduler. By default, the file includes this line:

```
<add key="ReplWS" value="http://localhost/CMS400Replication/Replication.asmx"/>
```

As you can see, the URL points to the Web Services file on the sending sender (that is, localhost).

If you want to reference the web service URL using a non-localhost address, change the path to that file in the line above. Then, identify the user name and password required to access Site Replication on the sending server. To do that, add the following lines to the `<appsettings>` element of the `EktronReplScheduler.exe.config` file.

```
<add key="WSUsername" value="EKTRON1\siterepuser"/>
<add key="WSPassword" value="SUJL&!"/>
```

Replace the red text with the domain\user name and password required to access the remote server.

NOTE [To encrypt the password, use Ektron CMS400.NET's Password Encrypt utility, You can access this from the Windows Start button > All Programs > Ektron > CMS400 v70 > Utilities > Encrypt Email Password.](#)

These additions let the Ektron Replication Scheduler Windows service communicate with a remote server's Web services file.

Troubleshooting the Scheduler Windows Service

If the service stops or is not working, here are a few things to check.

1. Open the Windows folder to which you installed Site Replication. By default, this is `C:\Program Files\Ektron\SiteReplication`.
2. Open the `EktronReplScheduler` folder.
3. Open `EktronReplScheduler.exe.config`.
4. Within the `<Appsettings>` tag, look at the `value` property for the `ek_ReplWS` tag. Make sure the URL points to the sending machine's replication Web service URL.

Using the Scheduler Windows Service with Multiple Sites

If your **Ektron CMS400.NET** supports multiple Web site, and all sites use replication, follow these steps.

1. Use the directions in "[Troubleshooting the Scheduler Windows Service](#)" on page 70 to open the EktronReplScheduler.exe.config file.
2. Within the <Appsettings> tag, look at the value property. It contains the path to the Web services file for the site you selected during installation.
3. Insert the path to Web services file for each additional site after the path. Separate each path by a comma (,).

[Uninstalling the Scheduler Windows Service](#)

Uninstalling the Scheduler Windows Service

If you want to uninstall the Scheduler Windows Service, follow these steps.

1. Open the Windows folder to which you installed Site Replication. By default, this is `C:\Program Files\Ektron\SiteReplication`.
2. Click the `Ektron Repl Scheduler.msi` file.
3. A welcome screen appears. Click **Next**.
4. Click **Remove**.
5. Click **Remove** again.
6. The Scheduler Windows Service is uninstalled.

Troubleshooting Problems with Site Replication

Use the following table to troubleshoot error messages that may appear while you are using the Site Replication feature. Note that message text varies depending on your server name, date, database name, etc.

Error	Solution
The request failed with HTTP status 401: Unauthorized	You typed an incorrect username or password. Typically occurs when Site Replication begins.
Server was unable to process request. ---> Can't restore DB. CMS400Min~~7-14-2006_9~15~53_PM already exists on DB server!	<p>This error appears when your configuration consists of two or more production servers that share a database and the Send DB When field is set to Always. In this case, Site Replication tries to copy to the same database on the same machine.</p> <p>To resolve this error:</p> <ol style="list-style-type: none"> 1. Go to the sending server. 2. Access the Site Replication software. 3. Click the Configuration tab. 4. Verify that Send DB When is set to 1st Destination Only.
Server was unable to process request. ---> Access to the path 'C:\Documents and Settings\All Users\Application Data\sitereplCMS400Replication.config' is denied.	<p>Anonymous Access is enabled for your Ektron CMS400.NET Site Replication directory.</p> <p>To fix it for the staging and production servers, open IIS and disable Anonymous Access on your Site Replication directory.</p> <p>To do that, follow these steps.</p> <ol style="list-style-type: none"> 1. Open IIS. 2. Navigate to the CMS400Replication directory. 3. Open Properties. 4. On the Directory Security tab, under Anonymous Access and Authentication Control, click the Edit button. 5. Ensure that Anonymous Access is unchecked.
(The error below appears in the Identity on Destination Server test diagnostic.) Failed! This web application should not allow Anonymous access!	See above

Error	Solution
<p>Server was unable to process request. ---> Access to the path '\\ZEUS\SiteReplication.Temp\7-14-2006_9~34~30_PMRecvStageDB.tmp.uncompressed' is denied.</p>	<p>Your production server is using a remote database, and the specified user does not have permission to update it. To resolve the error, follow these steps.</p> <ol style="list-style-type: none"> 1. Go to SiteReplication.Temp directory. 2. Right click and choose Properties. 3. Click the Sharing Tab. 4. Click the Permissions button. 5. Add a user that exists on the production and database server. (That is, a user in the domain these servers share). 6. Give the user Read and Change permissions.
<p><i>(The error below appears in the Test writing to SiteReplication.Temp directory in the test diagnostics.)</i></p> <p>Failed!</p> <p>Error: Access to the path '\\ZEUS\SiteReplication.Temp\tmp.ekreplprobe' is denied</p>	<p>See above</p>
<p>WARNING: Could not copy content_hits_tbl: Timeout expired. The timeout period elapsed prior to completion of the operation or the server is not responding.</p> <p><u>Note: The default value, 30 seconds, causes the server to time out if your tables are large and the MSSQL drives aren't fast enough.</u></p>	<p>Add the following to your Site Replication production server's web.config file. (Note: This is not the Ektron CMS400.NET web.config file.)</p> <pre><add key="ek_SQLCmdTimeout" value="600"/></pre> <p>The timeout value is in seconds. Increase the value as needed to accommodate the copying of your content_hits table.</p>

Error	Solution
<p>Server was unable to process request. ---> Could not restore database "\ZEUS\SiteReplication.Temp\7-14-2006_11~21~00_PMRecvStageDB.tmp.uncompressed' on receiver. Error was: [Microsoft][ODBC SQL Server Driver][SQL Server]Device activation error. The physical file name 'C:\Program Files\Microsoft SQL Server\MSSQL\Data33\CMS400Min~~7-14-2006_11~21~00_PM.mdf' may be incorrect. [Microsoft][ODBC SQL Server Driver][SQL Server]File 'CMS400Min' cannot be restored to 'C:\Program Files\Microsoft SQL Server\MSSQL\Data33\CMS400Min~~7-14-2006_11~21~00_PM.mdf'. Use WITH MOVE to identify a valid location for the file. [Microsoft][ODBC SQL Server Driver][SQL Server]Device activation error. The physical file name 'C:\Program Files\Microsoft SQL Server\MSSQL\Data33\CMS400Min~~7-14-2006_11~21~00_PM_log.ldf' may be incorrect. [Microsoft][ODBC SQL Server Driver][SQL Server]File 'CMS400Min_log' cannot be restored to 'C:\Program Files\Microsoft SQL Server\MSSQL\Data33\CMS400Min~~7-14-2006_11~21~00_PM_log.ldf'. Use WITH MOVE to identify a valid location for the file. [Microsoft][ODBC SQL Server Driver][SQL Server]RESTORE DATABASE is terminating abnormally.</p>	<p>The path to the MSSQL Data Directory is incorrect. To resolve it, follow these steps.</p> <ol style="list-style-type: none"> 1. Sign on to the production server. 2. Access the Site Replication software. 3. Open the Configuration Receive screen. 4. On the Configuration tab, enter the correct path to the MSSQL Data Directory. <p>If you are using a remote database, enter the path to database server's MSSQL Data Directory.</p>
<p>Server was unable to process request. ---> Invalid Site Replication Sender Connection IP Address!</p>	<p>On the production server's Configure Receive screen > Security tab, you entered Valid Sender IP address. Then, you tried to run Site Replication from a different server.</p> <p>To resolve the error, run Site Replication from server specified at Valid Sender IP address.</p>
<p>Server was unable to process request. ---> Invalid Site Replication Sender Username or Password!</p>	<p>On the production server's Configure Receive screen > Security tab, you entered a Valid Username. Then, you signed in as a different user and tried to run Site Replication.</p> <p>To resolve the error, sign in as the specified user then run Site Replication.</p>

Error	Solution
<p>Server was unable to process request. ---> [Microsoft][ODBC SQL Server Driver][SQL Server]Cannot open user default database. Login failed.</p>	<p>The Site Replication user lacks permission to back up and add a new database. To resolve the error, make sure the user has SysAdmin permissions for the SQL server database.</p> <p>This user is specified in the <connectionstrings> element of the Ektron CMS400.NET web.config file.</p> <p>If you do not want to enter the user information into the Ektron CMS400.NET web.config file, enter it into the C:\Documents and Settings\All Users\Application Data\sitereplCMS400Replication.config file. Settings in that file override those in the web.config file. Within <code>sitereplCMS400Replication.config</code>, use these fields.</p> <ul style="list-style-type: none"> • Send\DBUser – username for accessing the sending server's database • Send\DBPassword – password for accessing the sending server's database. Be sure to encrypt it using Ektron CMS400.NET's EncryptEmailPassword.exe (located in C:\Program Files\Ektron\CMS400vrelease\Utilities) • Receive\DBUser – username for accessing the receiving server's database • Receive\DBPassword – password for accessing the receiving server's database. Be sure to encrypt it as described above
<p>Failed!</p> <p>The server rejected one or more recipient addresses. The server response was: 550 5.7.1 Unable to relay for test@ektron.com.</p>	<p>This is an email notification error. To fix it, follow these steps.</p> <ol style="list-style-type: none"> 1. Open IIS. 2. Right click Default SMTP Virtual Server. 3. Choose Properties. 4. Click the Access tab. 5. Click the Relay button. 6. Under Select which computer may relay through this virtual server, change the setting from Only the list below to All except the list below. 7. Make sure the Allow all computers which successfully authenticate to relay box is checked.

Error	Solution
<p>Status: Last replication failed! Client found response content type of 'text/html; -8', but expected 'text/xml'. The request failed with the error message: -- Server Error in '/' Application.</p> <hr/> <p>Runtime Error</p> <p>.</p> <p>.</p>	<p>Occurs at the beginning of a Site Replication. Indicates that the Site Replication directory is not set as an application.</p> <p>To make the Site Replication directory an application, follow these steps.</p> <ol style="list-style-type: none"> 1. Go to IIS. 2. Select the CMS400replication folder. 3. Select Properties. 4. On the Directory tab, under Application Settings > Application Name, make sure CMS400Replication appears. If it does not, click the Create button and enter it. <p>Do this for both the staging and production site replication folders</p>
<p>While running Test backing up DB using SiteReplication.Temp, you get the error below.</p> <p>Failed using DB User (Trusted Connection)! Error: [SQL-DMO]Database name required.</p>	<p>Possible fixes</p> <ul style="list-style-type: none"> • Check the connection string in the web.config file. Delete any blank spaces at the end of the connection string. • Make sure the connection string says <code>user</code> (not <code>uid</code>) to specify the SQL user.

Uninstalling Site Replication

There is no option to automatically uninstall Site Replication, because it can be installed many times on a server. So, to uninstall Site Replication, you have to delete everything manually.

To uninstall Site Replication, follow these steps for both the staging and production server.

1. Open the `C:\Program Files\Ektron\SiteReplication` folder.
2. Click the Ektron Repl Scheduler.msi file.
3. Choose the remove option. This removes the Ektron replication service.
4. Delete the `C:\Program Files\Ektron\SiteReplication` folder.
5. Open `C:\Documents and Settings\All Users\Application Data`.
6. Delete the `sitereplCMS400Replication.config` file.

7. Delete the CMS400Replication folder in your web root. For example, C:\Inetpub\wwwroot\CMS400Replication.
8. On the *production machine only*, delete the C:\SiteReplication.Backups directory.
9. If you see the C:\SiteReplication.Temp folder, delete it.

Quick Deploy

Quick Deploy is a simpler form of Site Replication that quickly moves updated content and other **Ektron CMS400.NET** items from a staging to production server. It is designed to bypass the normal process of QA testing a staging site, then pushing changes to a production server via Site Replication.

Quick Deploy also moves data recently collected from site visitors on the production server back to the staging server, such as new membership users, Content Analytics, and Poll/Survey results. The feature is explained through the following topics.

- ["When Not to Use Quick Deploy" on page 78](#)
- ["Information Copied During Quick Deploy" on page 79](#)
- ["Quick Deploy Prerequisites" on page 80](#)
- ["Using Quick Deploy" on page 83](#)
- ["Automatic Movement of CMS Content Using Quick Deploy" on page 83](#)
- ["Manual Movement of CMS Content Using Quick Deploy" on page 84](#)
- ["Manual Movement of Menus and Collections Using Quick Deploy" on page 84](#)
- ["Moving non-Content Files with Quick Deploy" on page 88](#)
- ["Quick Deploy Troubleshooting" on page 90](#)

When Not to Use Quick Deploy

You cannot use Quick Deploy to move regular folders from staging to production server. (However, Quick Deploy does copy community and Quick Deploy-enabled folders from staging to production.) In this case, use Site Replication.

Also, Quick Deploy is meant to move specific folders. It is not a substitute for Site Replication, which copies *all* folders from staging to production.

Information Copied During Quick Deploy

From Staging to Production Server

A Quick Deploy copies the following information from the staging to production server.

- Content that is *published* (whether new or updated) or *deleted* (only folders, Blogs, and Discussion Forums whose **Quick Deploy** property is checked; this includes Community folders)
- Content and folder properties, metadata, and taxonomy

WARNING!

New metadata definitions are not moved to the production server by Quick Deploy. After you create any new metadata definitions, immediately use Site Replication to move them from staging to production. If you do not, your next Quick Deploy may generate errors due to metadata definitions that do not exist on the production server.

- New or updated files in the uploadedfiles, uploadedimages, assets and assetlibrary directories
- CMS and membership users and user groups
- Forum configuration information (replace word table, restricted IP addresses, user rank)
- Workflow and permission for folders whose **Quick Deploy** property is checked
- If an administrator initiates the Quick Deploy using the Quick Deploy screen
 - aspx templates (See "Moving non-Content Files with Quick Deploy" on page 88)
 - manually selected files, as described in "Moving non-Content Files with Quick Deploy" on page 88

NOTE

Collections and Menus have their own Quick Deploy procedure. See "Manual Movement of Menus and Collections Using Quick Deploy" on page 84.

From Production to Staging Server

Quick Deploy copies following information from the production to the staging server. If the information exists on the staging server, it is overwritten by production server information.

- Content that is *published* (whether new or updated) or *deleted* (only folders, Blogs, and Discussion Forums whose **Quick Deploy** property is checked; this includes Community folders)
- New Blog and Discussion Forum comments entered through the Web site
- New form submissions and submission tasks. (When forms are submitted, new tasks direct users to handle the forms, and notification email is sent to the users.)
- Workflow and permission for folders whose **Quick Deploy** property is checked
- Poll/survey results
- Site Analytic information
- Content rating data
- Search phrases
- CMS and membership users and user groups
- Assets

IMPORTANT!

If the same file is edited on staging and production servers, the file with the latest edit date/time overwrites. In other words, Quick Deploy compares the edit date/time of any file being imported, and only overwrites an existing file if the new file's edit date/time is later.

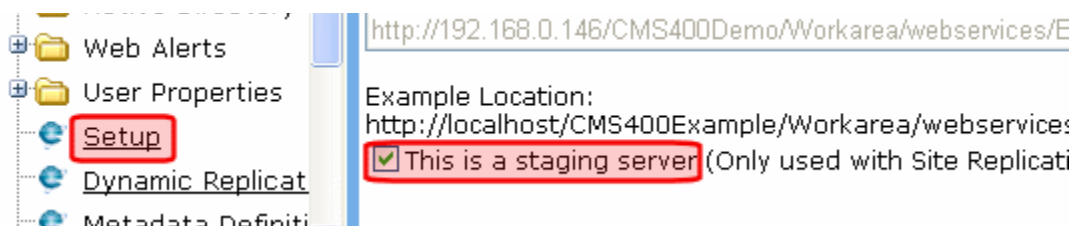
Quick Deploy Prerequisites

- Your license key supports Quick Deploy.

NOTE

Ektron CMS400.NET's Site Replication software is an extra cost option. Please contact your Ektron Sales representative for details on purchasing it.

- Identify the staging server. To do this, edit the **Settings > Configuration > Setup** screen and check the **This is a staging server** checkbox (see illustration below).



- Both servers have the same version of **Ektron CMS400.NET** (minimum build 6.0.2)
- On both servers, enable Quick Deploy in the web.config. To do this, open `siteroot/web.config`. Then, change the value of the `<add key="ek_EnableReplication" value="true" />` element to `true`.
- On both servers, change the password that enables the servers to recognize each other. If you do not change the password, anyone can send Quick Deploy commands between any staging server and any production server on the internet to change content.

To do this, follow these steps.

1. Go to the staging server and open `siteroot/web.config`.
2. Uncomment the `ek_ReplPassword` element.

```
<!--add key="ek_ReplPassword" value="MyPassword" /-->
```

3. Change the `value` of the `ek_ReplPassword` element to a unique string.
4. Follow the same steps on the production server. The passwords on both servers must match.

- In the staging server's web.config, specify the Quick Deploy Web service URL. To do this, open `siteroot/web.config` and find the line that specifies the URL.

```
<add key="ek_ReplicationWS" value="http://localhost/site root folder/WorkArea/WebServices/ReplicationService.asmx"/>
```

Within that line, replace `localhost` with the production server. For example:

```
<add key="ek_ReplicationWS" value="http://555.555.555.55/site root folder/WorkArea/WebServices/ReplicationService.asmx"/>
```

- Within **Ektron CMS400.NET**, check the **Quick Deploy** property for folders, blogs, discussion boards, menus, and collections that contain content to be replicated dynamically.

NOTE You can only set folder properties after all above settings have been made.

To do this, access the folder and click **View > Folder Properties**. Near the bottom of the screen is **Quick Deploy** followed by **Yes** or **No**.

To change the **Quick Deploy** setting, click the Edit button (🔍) then change the value of the **Replicate Folder Contents** check box (illustrated below).

NOTE Only changes made while the Quick Deploy checkbox is checked are copied to the production server. Once you uncheck a folder's **Quick Deploy** checkbox, Quick Deploy ignores changes made to content in a folder, menu, collection, blog, or discussion board.

The screenshot shows a web-based interface for editing folder properties. The title bar reads "Edit Properties for the folder 'About Us'". Below the title bar are navigation icons (save, back, help) and a set of tabs: "Properties", "Metadata", "Web Alerts", "Smart Forms", and "Breadcrumbs". The "Properties" tab is active. The "Foldername:" field contains "About Us". The "Description:" field contains "[Select Template]" and a magnifying glass icon. Below the description field is the "Add a New Template" section. At the bottom, the "Quick Deploy:" section is highlighted with a red rounded rectangle, showing a checked checkbox for "Replicate Folder Contents".

Unlike other folder properties, this value is *not* inherited in most cases -- you must check each folder to be replicated. See *Also: "Quick Deploy Settings and Community Folders" on page 82.*

Quick Deploy Settings and Community Folders

Quick Deploy treats regular folders, Discussion Boards, and Blogs equally. Each has a **Quick Deploy: Replicate Folder Contents** checkbox.

However, on *Community Folders*, Quick Deploy is automatically enabled, and there is no checkbox. If you create a Blog or

Discussion Board inside a Community Folder, Quick Deploy is automatically enabled. Again, there is no checkbox.

NOTE Forums do not display a Quick Deploy checkbox. Instead, the setting is controlled by the Forum's Discussion Board.

Enabling Multiple Production Destinations

If you want Quick Deploy to update several load-balanced production servers, identify each one in the staging server's web.config file at the `ek_ReplicationWS` element. Separate each URL with a comma (,).

The **Ektron CMS400.NET** database is only synchronized to the first server in the list, because all production servers should share the same database. Additional servers receive only static file updates, that is, files in the uploadedfiles, uploadedimages, assets, and assetlibrary directories.

Using Quick Deploy

- ["Automatic Movement of CMS Content Using Quick Deploy" on page 83](#)
- ["Manual Movement of CMS Content Using Quick Deploy" on page 84](#)
- ["Manual Movement of Menus and Collections Using Quick Deploy" on page 84](#)
- ["Moving non-Content Files with Quick Deploy" on page 88](#)

Automatic Movement of CMS Content Using Quick Deploy

Whenever any of these events occurs on the *staging server*, a Quick Deploy is initiated.


- content in any folder for which Quick Deploy has been activated is updated (not necessarily published)
- a folder for which Quick Deploy is enabled is created or its properties, permissions, or approval chain is updated
- a CMS or membership user or user group is updated

NOTE Changes made on the *production server* never initiate a Quick Deploy. This is because the staging server is usually behind a firewall.

When one of these events occurs, the Ektron Windows Service moves all information ready to be moved between the two servers. (See Also: The **Ektron CMS400.NET** Administrator Manual > “Managing Your CMS400 System” > “Ektron Windows Service.”) For a complete list of that information see, “[Information Copied During Quick Deploy](#)” on page 79.

Manual Movement of CMS Content Using Quick Deploy

An administrator can initiate a manual Quick Deploy at any time using the Quick Deploy screen. To do so, follow these steps.

1. Complete all prerequisites listed in “[Quick Deploy Prerequisites](#)” on page 80.
2. Click **Settings > Configuration > Quick Deploy**.
3. Click the **Replicate** button (.
4. **Starting Replication...** appears.
5. Once the connection is established, the screen displays the status of the replication. For example:

```
CMS400.net Replication Started with: http://192.168.0.nnn/site root folder/WorkArea/
WebServices/ReplicationService.aspx at 5/4/2006 11:31:41 AM
```

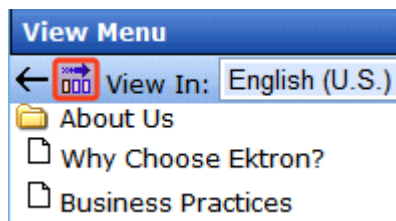
6. When Quick Deploy completes, the screen lists the moved files and completion date and time.

Manual Movement of Menus and Collections Using Quick Deploy

When you create a menu or collection, you can check the **Quickdeploy This Menu/Collection** checkbox. (The checkbox can be changed at any time using the Edit Menu/Collection screen.)

If the checkbox is checked, you can move the menu/collection to the production server at any time by clicking the Replicate button on the View Menu/Collection screen (illustrated below).

NOTE If you are using the approval feature with a collection, the replicate button only appears if the collection is approved. See the Ektron CMS400.NET Administrator Manual section “Web Site Navigation Aids” > “Collections” > “Setting up Approval for Collections.”



When you click the Replicate button, the following items move from staging to production server.



- the selected collection or menu (and its submenus)
- new or updated files in the uploadedfiles, uploadedimages, assets and assetlibrary directories
- CMS and membership users and user groups
- forum configuration information (replace word table, restricted IP addresses, user rank)
- workflow and permission for folders whose **Quick Deploy** property is checked

In addition, files listed in ["From Production to Staging Server" on page 80](#) are moved from the production to the staging server.

To quick deploy a menu or collection, follow these steps.

1. Complete all prerequisites listed in ["Quick Deploy Prerequisites" on page 80](#).
2. From the staging server's workarea, go to **Modules > Menus**. or **Modules > Collections**.
3. Click the menu/collection that you want to deploy to the production server.

NOTE You can only do this with a menu/collection for which Quick Deploy is enabled.

4. Click the **Replicate** button (.
5. The Quick Deploy screen appears.
6. Click the **Replicate** button (.
7. **Starting Replication...** appears.

8. Once the connection is established, the screen displays the status of the replication. For example:

CMS400.net Replication Started with: http://192.168.0.nnn/site root folder/WorkArea/WebServices/ReplicationService.asmx at 5/4/2006 11:31:41 AM

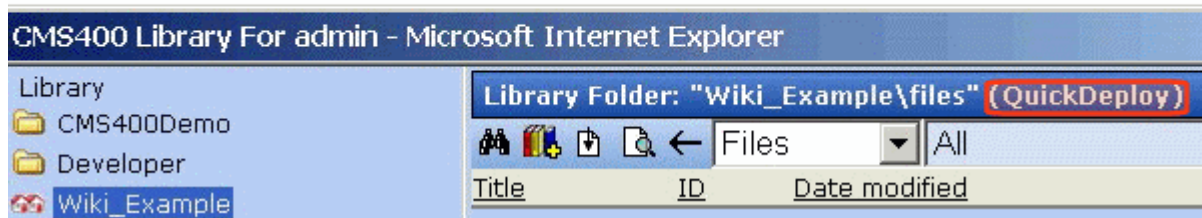
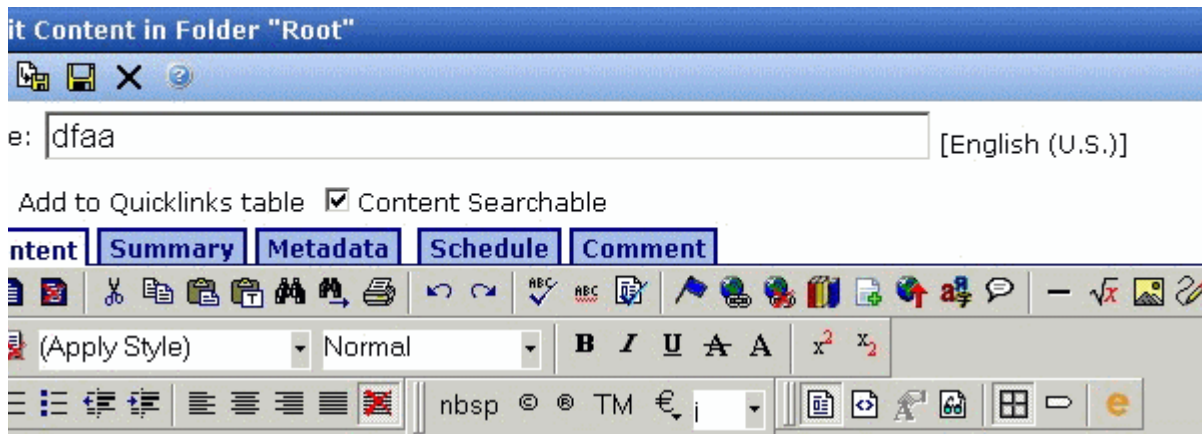
9. When Quick Deploy completes, the screen lists the moved files and completion date and time.

Linking to Library or Content Items

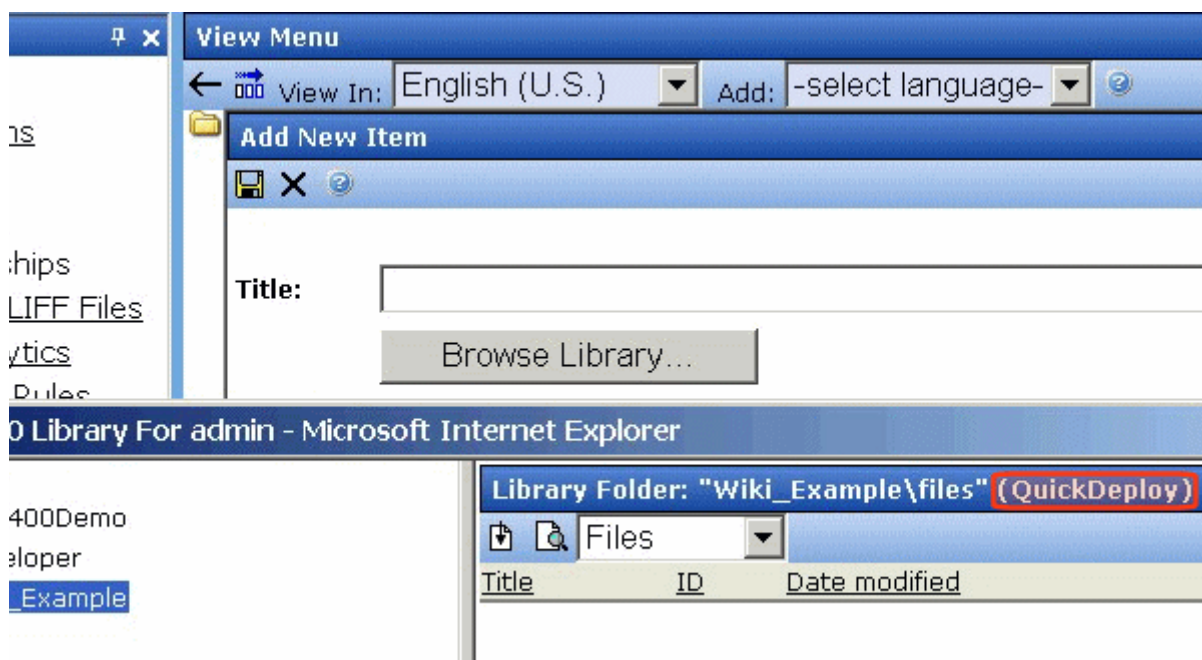
If a Quick Deployed content item, menu, or collection includes a link to a library or content item that only resides on the staging server, the link appears broken when viewed on production. To fix the problem, use Site Replication to push the linked item to production.

To help alert you to such problems, **Ektron CMS400.NET** indicates when it is safe to link to content within that folder by displaying **QuickDeploy** next to the folder name.

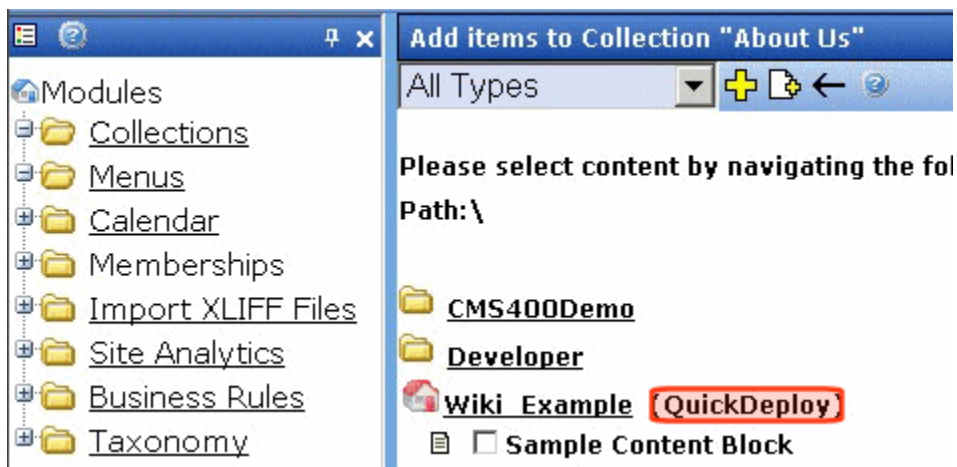
Quick Deploy Indicator on the Edit Content Screen



Quick Deploy Indicator on the Add Menu Item Screen



Quick Deploy Indicator on the Add Collection Item Screen



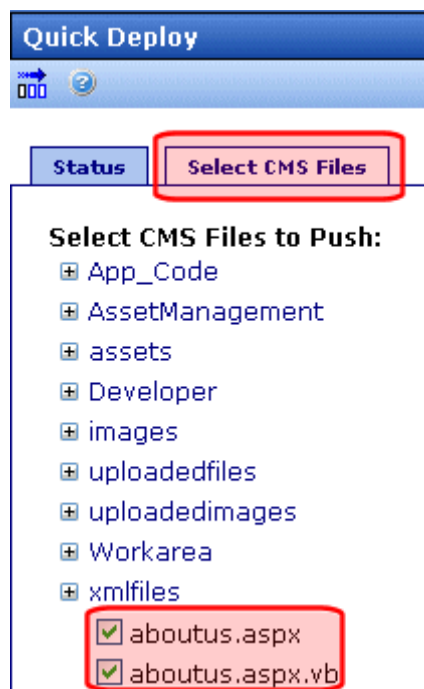
Moving non-Content Files with Quick Deploy

You can use Quick Deploy to move non-content files from staging to production whenever you want. In addition to files listed in "Information Copied During Quick Deploy" on page 79, you can move other CMS files, such as .aspx templates. The files must reside in the **Ektron CMS400.NET** root directory or a subdirectory.

NOTE You cannot select files within the web.config and the bin directories.

To move non-content files between the servers, follow these steps.

1. Complete all prerequisites listed in "Quick Deploy Prerequisites" on page 80.
2. Click **Settings > Configuration > Quick Deploy**.
3. Click the **Select CMS Files** tab.
4. Check each file to move to the production server.



5. Click the **Replicate** button ().
6. **Starting Replication...** appears.

- Once the connection is established, the screen displays the status of the replication. For example:

CMS400.net Replication Started with: `http://192.168.0.nnn/site root folder/WorkArea/WebServices/ReplicationService.aspx` at 5/4/2006 11:31:41 AM

- When Quick Deploy completes, the screen lists the moved files and completion date and time.

The screenshot shows a web application window titled "Replicate". On the left is a navigation menu with items: "ings", "Jsers", "Jser Groups", "roles", "help", "Ektron Explorer", "Configuration", "Active Directory", "Web Alerts", "User Properties", "Setup", "Quick Deploy" (highlighted with a red box), and "Metadata Definiti". The main content area displays the following text:

```

Current Status:
Idle

CMS400.net Replication Started with:
http://192.168.1.163/CMS400Demo/WorkArea/WebServices/ReplicationSe
5/23/2006 9:44:11 AM

Sending up c:\inetpub\wwwroot\CMS400Demo\assets\135BD744-2C76-4E
E224E44097B9.txt
Sending up c:\assetlibrary\1bec3bd3c014dc187de56337913a3e5
\c9d10b2959bd48edb168cdd09a36c8e81.txt
Sending up c:\assetlibrary\1bec3bd3c014dc187de56337913a3e5
\c9d10b2959bd48edb168cdd09a36c8e81.txt.ekt
CMS400.net Replication P
objects
CMS400.net Replication Completed at: 5/23/2006 9:45:07 AM

```

TECHNICAL NOTE

Replication log information is also captured in the Windows Event log. If you set `web.config's ek_LogLevel` to 1, every database row that was changed is logged.

Quick Deploy Troubleshooting

Symptom	Cause	Resolution
CMS400.net Replication Error: Access to the path 'C:\inetpub\mudslide1\ site root folder\test.txt' is denied	User dragged a file into the site root folder then tried to Quick Deploy it. The folder lacks adequate permissions.	<ol style="list-style-type: none"> 1. Assign the site root folder write and modify permissions for the ASPNET and IIS_WPG users. See illustration below. 2. Assign the same permissions to the file causing the error.

