



Ektron CMS300 Setup Manual

Version 4.8, Revision 1

Ektron® Inc.
5 Northern Blvd., Suite 6
Amherst, NH 03031
Tel: +1 603-594-0249
Fax: +1 603-594-0258
Email: sales@ektron.com
<http://www.ektron.com>

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What's In This Manual

In this manual, the Ektron CMS300 Setup Manual, Version 4.8, you will find information including:

- Preparing for Windows XP SP2
- Ektron CMS300 Minimum Requirements
- Pre installation Tasks
- Upgrading Ektron CMS300
- Installing Ektron CMS300
- Ektron CMS300 Hosting Example
- Setting Up an MS-SQL, MySQL, or Oracle Database
- Creating a DSN-less Connection
- Configuring and Using SSL for Ektron CMS300
- Migrating Your Existing Web Site to Ektron CMS300

Online Learning Center

A lot of the information in this manual is also presented in an tutorial, animated format on Ektron's Web site. To access Ektron's CMS300 Web Training, go to <http://www.ektron.com/training/cms300training/>.

Preparing for Windows XP SP2

Microsoft Windows XP Service Pack 2 includes significant changes affecting **Ektron CMS300** security, especially in regard to the installation of the eWebEditPro ActiveX control. The most significant change affects the eWebEditPro+XML editor in data design or data entry modes. To work around this change, configure **Ektron CMS300** to allow pop-up windows for automatic download and installation.

More Information on Windows XP Service Pack 2

For more information on Windows XP Service Pack 2, visit the Microsoft site at www.microsoft.com/technet/prodtechnol/winxppro/maintain/winxpsp2.mspx. One article on that site of particular interest to developers is "Changes to Functionality in Microsoft Windows XP Service Pack 2". Part 5 of that article, "Enhanced Browsing Security," details changes to Internet Explorer.

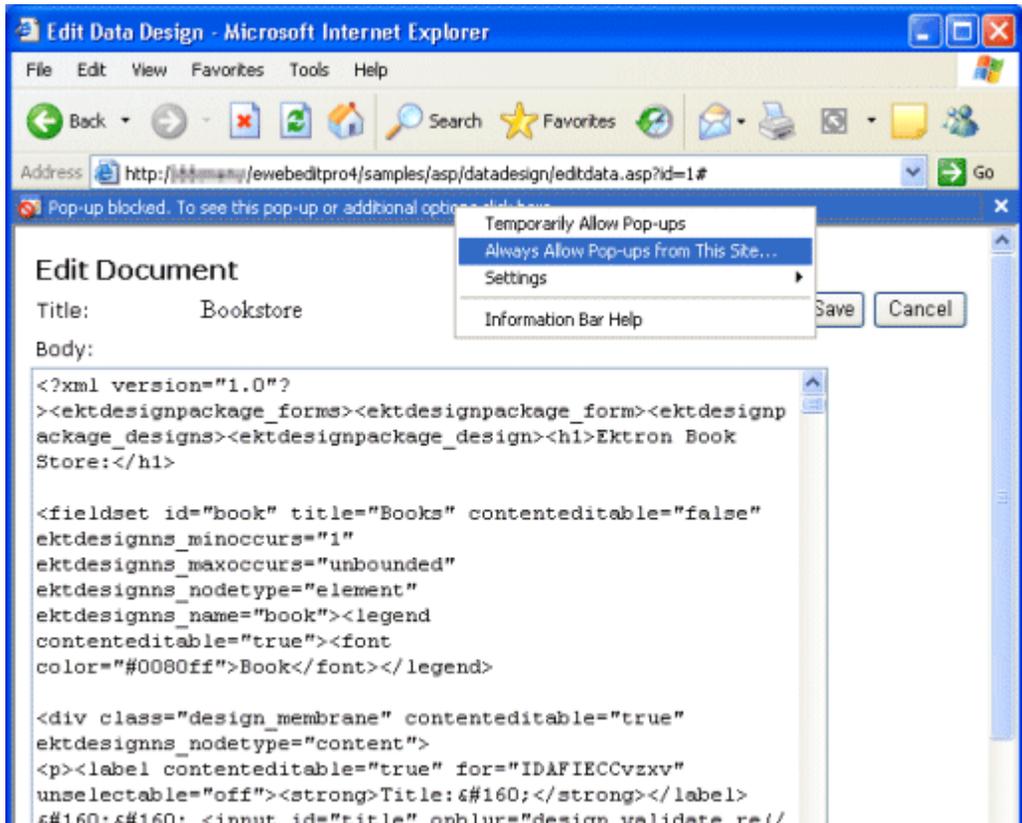
Disabling the Popup Blocker

Pop-up windows are used to initially install the editor in Internet Explorer (IE) and by other features, such as selecting an image and setting Section 508 Data Table properties. By default, Windows XP SP 2 blocks pop-up windows. For Ektron products to operate effectively, allow pop-up windows for web sites that host Ektron products.

Enabling Popup Windows

When a Web page in IE running on Windows XP Service Pack 2 (XPSP2) attempts to open a pop-up, the Information Bar appears at the top of the page. The message on the Information Bar is **Pop-up blocked. To see this pop-up or additional options click here...**

To allow proper operation of the editor, enable pop-up windows for the Web site. To do so, click the Information Bar and select **Always Allow Pop-ups from This Site**.



For easier administration, add the Web site as a Trusted site. By default, this change disables the pop-up blocker.

Download and Installation with Windows XP SP2

The installation of the Ektron editor is only required the first time it is used and for every upgrade. The automatic installation supported in IE uses a pop-up to walk the user through the process. Therefore, the first step is to enable pop-up windows (see ["Enabling Popup Windows" on page 2](#)). An additional step to install the editor requires an extra mouse click by the user.

If you are an administrator, you may want to configure client computers to avoid these extra steps. One simple way is to add the Web site that hosts Ektron products as a Trusted Site.

When installing the editor, the user should follow these steps.

1. When the Automatic Download and Installation page appears, click the **Install** button.
2. When the next window appears, the Information Bar displays this message:
To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...
3. In place of the editor, the following message appears.
Click here to install the following ActiveX control: 'eWebEditPro' from 'Ektron Inc'...
4. Click on either message and select **Install ActiveX Control...**



Upgrading Ektron CMS300

Before You Upgrade

License keys from versions prior to 4.0 do not work. If you have not yet performed the license key upgrade wizard on the Ektron.com Web site, go to the following URL and follow the screen instructions.

http://www.ektron.com/ektron_store.aspx

Upgrading

If you are using a previous version of Ektron CMS300, you can upgrade through the installation program. The upgrade consists of the following steps.

1. "Performing the Upgrade" on page 7
2. "Upgrading the Database" on page 11
3. "Updating Strings" on page 13
4. "Updating Your Setup File" on page 29

This chapter explains the upgrade process and any other steps needed to upgrade **Ektron CMS300**.

Performing the Upgrade

If you are using a previous version of Ektron CMS300, you can use the upgrade included in the installation file. The upgrade installs the new files for Ektron CMS300.

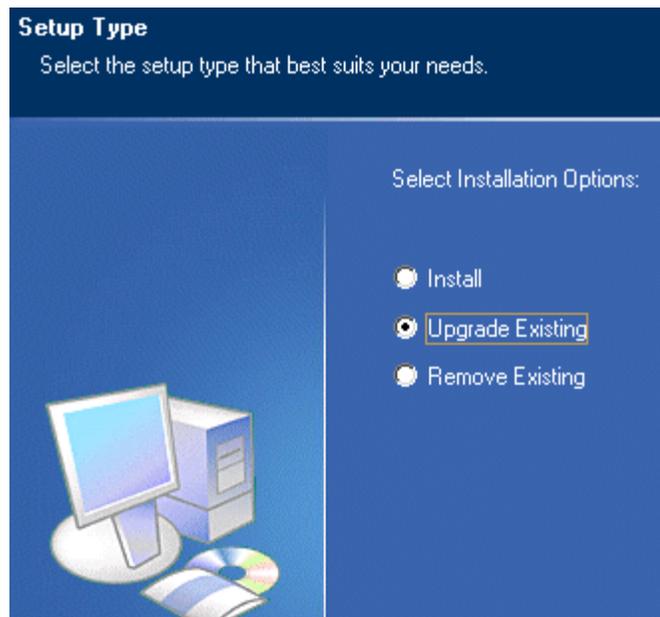
This section explains the steps for a Ektron CMS300 upgrade.

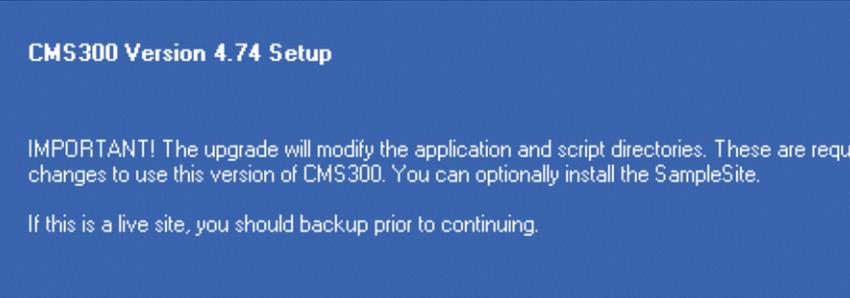
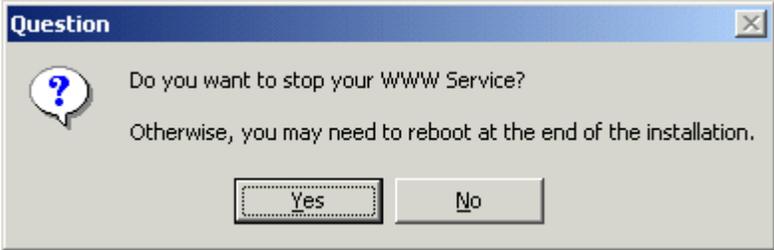
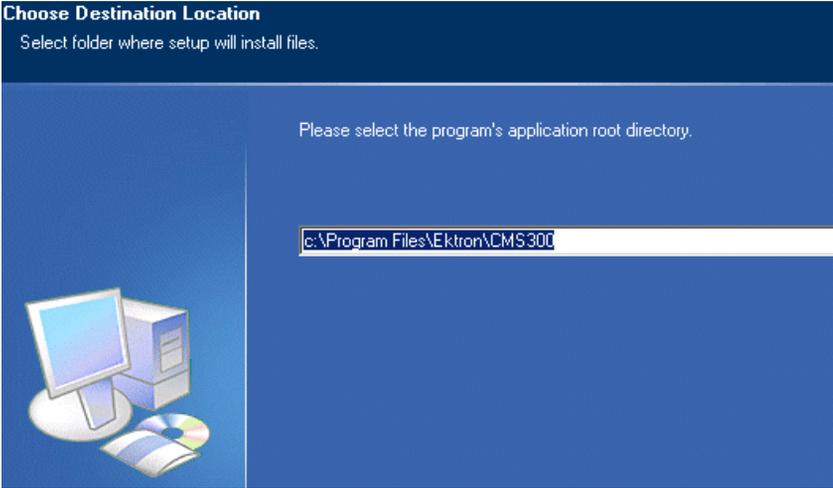
1. Double click the Ektron CMS300 executable file you downloaded from the Ektron site.

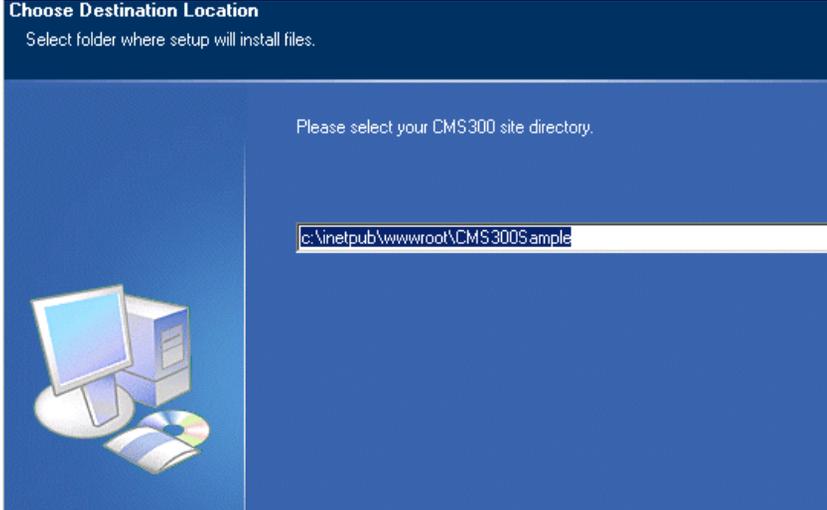
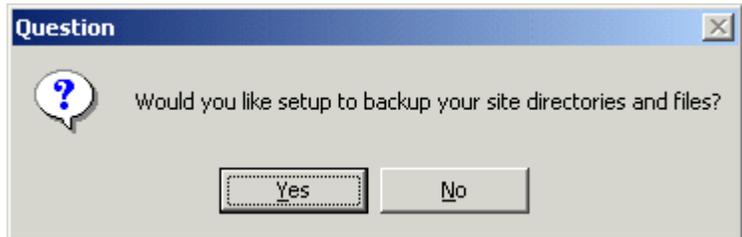
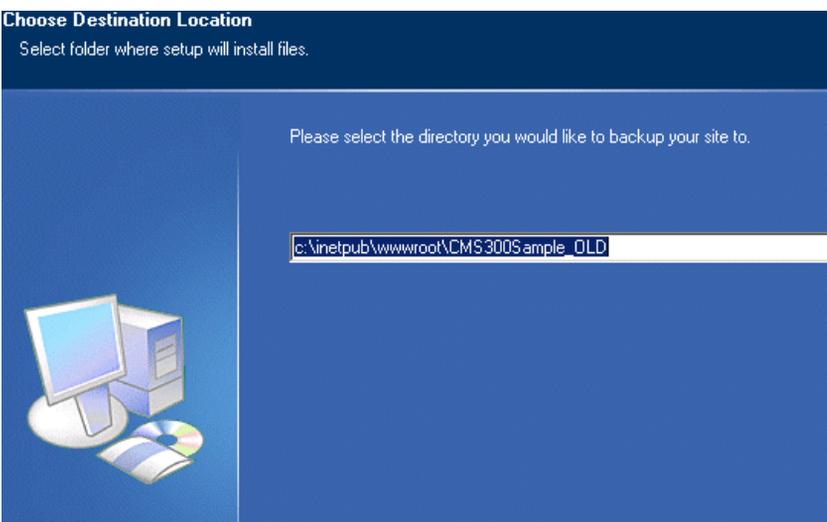
2. At the setup type screen, click **Upgrade Existing**.

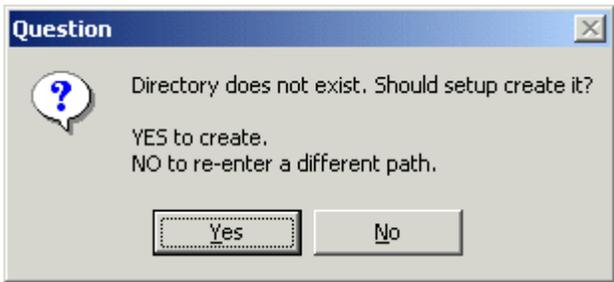
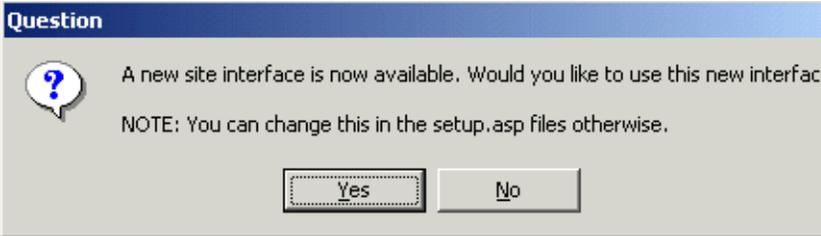
Click **Next** to continue.

[For information about installing a new instance of Ektron CMS300, see "Installing Ektron CMS300" on page 30.](#)



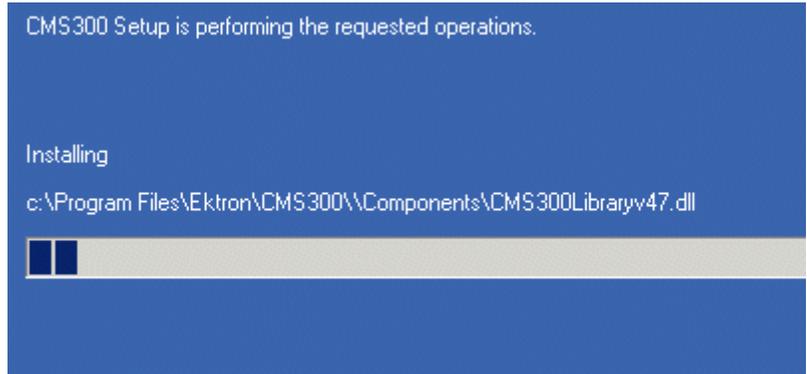
<p>3. The screen on the right appears. Read it and click Next.</p> <p>Later, this procedure gives you a chance to backup your site.</p>	 <p>CMS300 Version 4.74 Setup</p> <p>IMPORTANT! The upgrade will modify the application and script directories. These are required changes to use this version of CMS300. You can optionally install the SampleSite.</p> <p>If this is a live site, you should backup prior to continuing.</p>
<p>4. To avoid the possibility of rebooting at the end of the upgrade, you may stop your WWW service here.</p> <p>Click Yes to stop your WWW service.</p>	 <p>Question</p> <p>Do you want to stop your WWW Service?</p> <p>Otherwise, you may need to reboot at the end of the installation.</p> <p>Yes No</p>
<p>5. At the Choose Destination Location screen, specify the location of your application root directory.</p> <p>This is the location of the Ektron CMS300 components and utilities.</p> <p>If the default is incorrect, click the browse button to locate the correct directory. Or, enter the path into the text field.</p> <p>Click Next to continue.</p>	 <p>Choose Destination Location</p> <p>Select folder where setup will install files.</p> <p>Please select the program's application root directory.</p> <p>c:\Program Files\Ektron\CMS300</p>

<p>6. Specify the location of your Ektron CMS300 Web site. The site directory is the location of your Web site templates, CMS300scripts directory, etc.</p> <p>If the default location is incorrect, click the browse button to locate the correct directory, or enter the full path into the text field.</p> <p>Click Next to continue.</p>	
<p>7. The screen on the right appears. Click Yes to make a backup of your Ektron CMS300 Web site files.</p> <p>If you click No, proceed to step 13.</p>	
<p>8. Specify the location to which you want to backup your Ektron CMS300 files.</p> <p>Keep the default, enter a new path, or click the browse button to browse for a folder.</p> <p>Click Next to continue.</p>	

<p>9. If the directory does not exist, you are asked if you want to create it.</p> <p>Click Yes to create a new directory. Click No to go back and select a different folder to backup the files to.</p>	
<p>10. The upgrade program installs and configures the necessary files.</p>	
<p>11. You are prompted to select a program folder for Ektron CMS300.</p>	<p>Setup will add program icons to the Program Folder listed below. You may type a new folder name or select one from the existing folders list. Click Next to continue.</p> <p>Program Folder: <input type="text" value="Ektron\CMS300"/></p> <p>Existing Folders:</p> <ul style="list-style-type: none"> Accessories Administrative Tools Adobe Adobe Acrobat 4.0 Ektron HTML Help Workshop Microsoft .NET Framework SDK v1.1 Microsoft Visual Studio .NET 2003 Mozilla Paint Shop Pro 6 ...
<p>12. You are asked if you want to use the new interface.</p> <p>The new interface uses a floating tool bar rather than a fixed one. The toolbar appears when the user logs in and browses the Web site.</p>	

For more information, see the **Ektron CMS300** Administrator manual section “Introduction to Ektron CMS300” > “Getting Started” > “Recognizing Content Blocks” > “The Floating Toolbar”

13. **Ektron CMS300** installs the files.



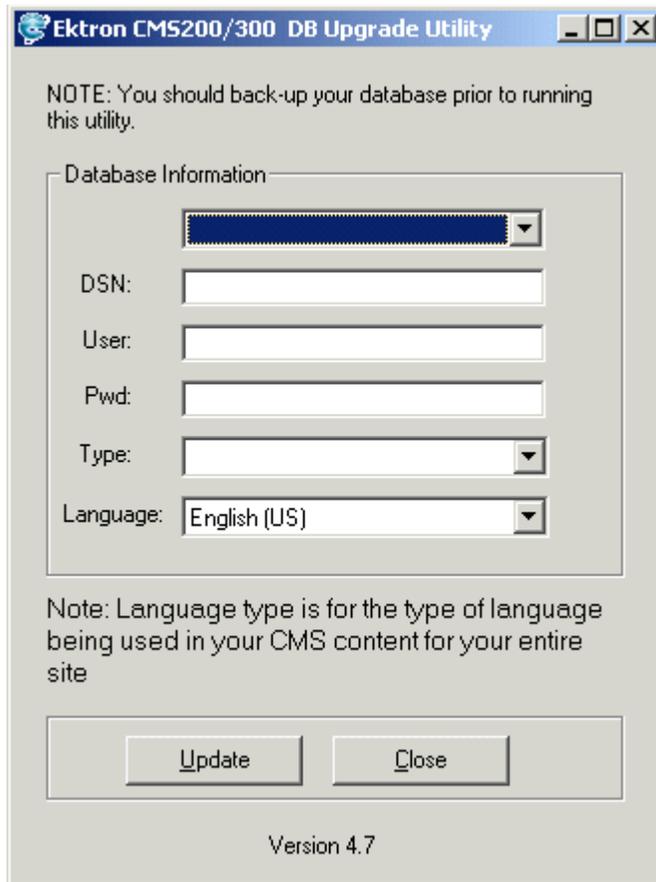
14. After all files are installed, you are prompted to upgrade the database. To upgrade the database now, click **Yes**.

Note: For important information about upgrading the database, see "Performing the Database Upgrade" on page 17.

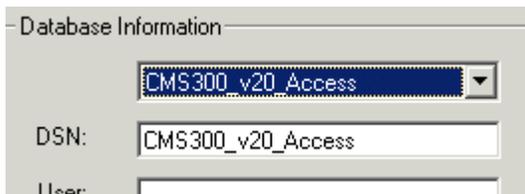


Upgrading the Database

15. The Ektron CMS300 Database Upgrade Utility appears.

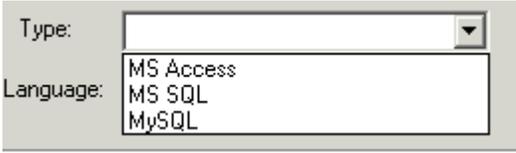
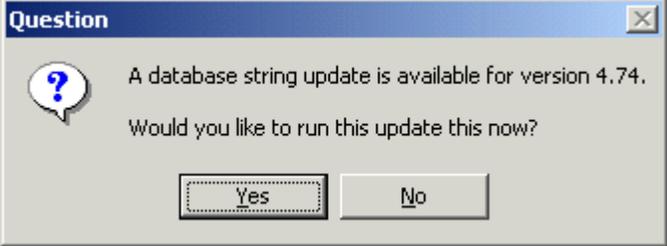


16. **Ektron CMS300** attempts to create an ODBC connection. If it cannot, follow the directions in ["Creating DSNs" on page 41](#). Then, continue with the next step.
If it can create an ODBC connection, the screen in the right column appears.



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

18. Specify the username and password that is needed to access the DSN if required.

<p>19. Choose the database type of your previous (source) Ektron CMS300 database.</p>	
<p>20. Select the Language of your content blocks. If your content blocks are in several languages, select the language of the majority of them.</p> <p>After upgrading your database, all content blocks are assigned the language that you select. If some should not be in that language, find those content blocks and change their language. For more information, see the Ektron CMS300 Administrator manual section Special Features > Multi-Language Support > Working with non-English Content > Resolving Conversion Issues.</p> <hr/> <p>Warning! If you select a language other than English, you must also open the <code>webroot\CMS300sample\CMS300Scripts\setup.xxx</code> file. (The file extension matches your server platform.) Then, change the <code>DefaultContentLanguage</code> variable to the language to which you assigned the content via the Language field above. In <code>setup.xxx</code>, you must enter the new language's locale ID value. A list of supported languages and their locale id values is in "Appendix A: List of Supported Languages," in the Ektron CMS300 Administrator manual.</p> <hr/>	
<p>21. Click the Update button to execute the database upgrade utility.</p>	
<h3 style="text-align: center;">Updating Strings</h3> <p>Ektron CMS300 provides language support for French and German. If you are upgrading from a previous version and using your old database, the translated strings are not included. The installation includes a utility that populates your old database with the translated strings.</p>	
<p>22. After the database is upgraded, you are prompted to update the database with new, required strings.</p> <p>Click Yes to continue, or No to update the strings at a later time.</p>	

23. The Language Update utility opens.

The screenshot shows a Windows-style dialog box titled "Ektron CMS Language Update Utility". It is divided into several sections:

- Database Information:** A dropdown menu is currently empty. Below it are text boxes for "DSN:", "User:", "Pass:", and "Type:". The "Type:" box has a small dropdown arrow on its right side.
- Languages:** A section containing three checked checkboxes: "English", "French", and "German".
- Options:** A section containing two radio buttons: "Repopulate" (which is selected) and "Add New Strings".
- Buttons:** At the bottom of the dialog are two buttons: "Update" and "Close".

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

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

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

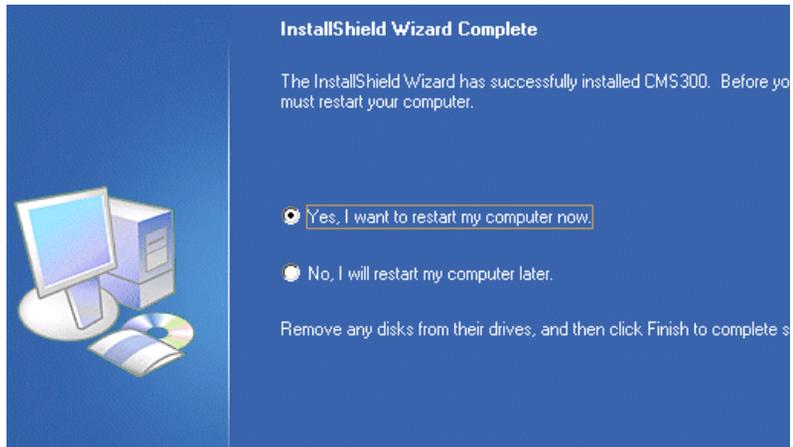
27. Select the action you want to perform.

- **Repopulate** - deletes all strings and repopulates the database
- **Add New Strings** - adds only new strings in the current release of **Ektron CMS300**. (Recommended if you changed existing strings)

28. Select the **Languages** to be updated/added to the database.

29. Click the **Update** button. The changes are made to your language strings.

30. You are asked if you want to restart your computer now or later. You must restart before beginning to use **Ektron CMS300**.



What Happens After You Run the Upgrade

During the upgrade, the following changes occur.

- A backup of your old Sample site is created.
- The `/CMS300Scripts` directory and all files and folders under it are replaced with new files.

NOTE The installation replaces the old `/CMSx00Scripts` directory with the new scripts directory. So, you don't need to manually update the `/CMS300Scripts` directory.

- The database gets updated.

NOTE If you ran the `dbupgrade` and the language update utilities during the upgrade, your old database is updated to match the new database. The DSN, however, remains what you used in the previous version. Hence, do not update `setup.xxx` file with the new Database and DSN.

- The new COM Objects get added under `C:/Program Files/Ektron/CMS300/Components` directory.

NOTE While the old COM objects still exist under the Components directory, the application uses the new COM objects. During the upgrade, install automatically registers the v4.7 COM Objects. You do not need to register them.

- The `webimagefx` directory under `C:/Program Files/Ektron/CMS300/Components` directory is overwritten with the new WebImageFX files.

- The new scripts are added under the utilities directory.
- Install does not upgrade the sample site. It places new sample sites under `C:/Program Files/Ektron/CMS300/Utilities/CMS300Sample`.

NOTE If you want to replace the old CMS300 Samples folder with the new sample site, copy the CMS300Sample folder from `C:/Program Files/Ektron/CMS300/Utilities` directory and paste it in your CMS300Samples directory under `C:/Inetpub/wwwroot/CMS300Samples`.

- The databases `cms300_v47_min_access2000.mdb` and `cms300_v47_sample_access2000.mdb` get placed under `C:/Program Files/Ektron/CMS300/Utilities` directory.

What Happens Next?

After upgrading your sample site, you are ready to use **Ektron CMS300**. If you did not run the dbupgrade or language update during installation, you need to do so manually. The next chapter explains how.

Upgrading Your Database

If the database upgrade wasn't successful during the installation, or you chose to do it outside the install, use the Ektron CMS300 database upgrade utility to upgrade your database.

Prerequisites

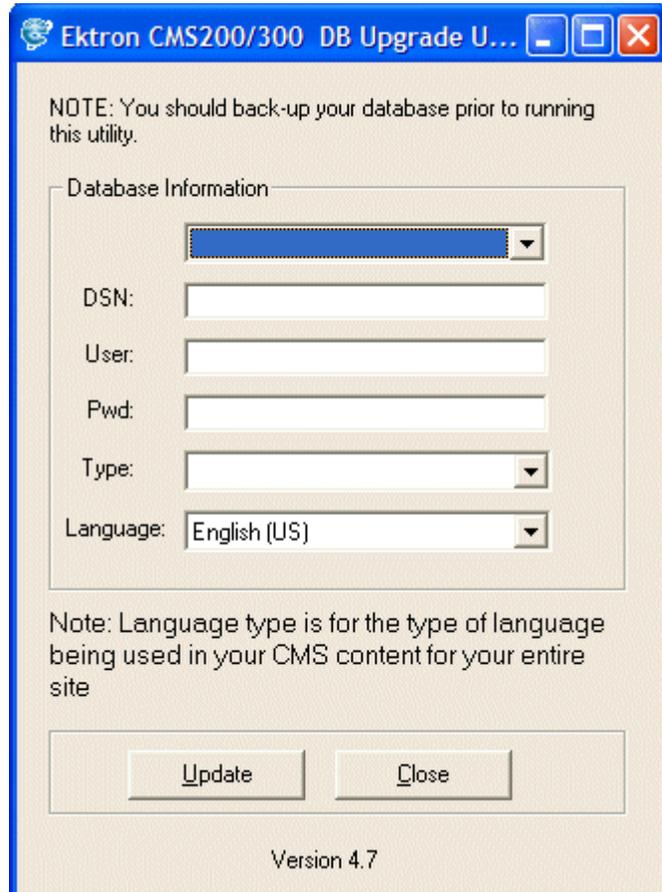
Before upgrading your database, be sure the following conditions are met:

- Ektron CMS300 is installed on your server. See ["Installing Ektron CMS300" on page 30](#) or ["Performing the Upgrade" on page 7](#) for more information.
- A DSN pointing to the old database exists on your server. It will be updated.

Performing the Database Upgrade

To perform the database upgrade, follow these steps.

1. Click the Windows Start button then follow this path: **Programs > Ektron > CMS300 > Utilities > Database Upgrade**. (If this path does not work, click the dbupgrade.exe file, located under C:\Program Files\Ektron\CMS300\Utilities folder.)
2. The Database Upgrade utility opens.



For information on backing up a database, see ["Backing Up Databases" on page 19](#)

3. Follow the directions beginning with ["Ektron CMS300 attempts to create an ODBC connection. If it cannot, follow the directions in "Creating DSNs" on page 41. Then, continue with the next step."](#) on page 12.

Backing Up Databases

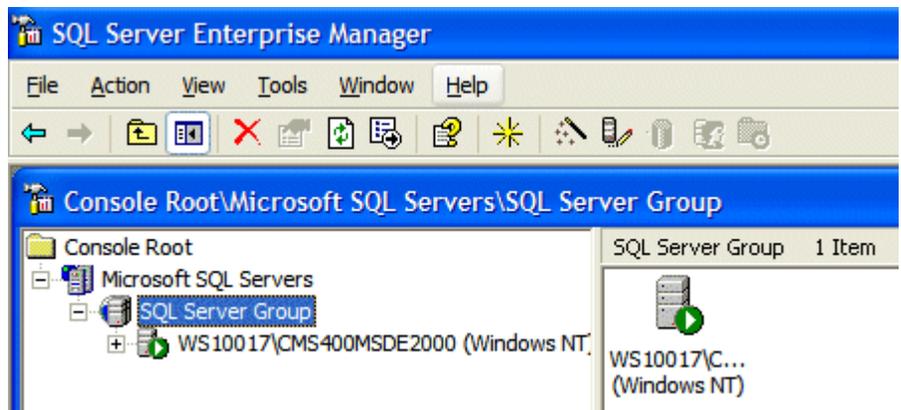
To protect information contained within the database, it is recommended that you back it up before performing a database upgrade. This section describes how to backup and restore Microsoft SQL and MSDE2000 databases. The steps to perform each are in the following sections:

- "Backing Up a Microsoft SQL Database" on page 19.
- "Restoring a Microsoft SQL Database" on page 23.
- "Backing Up an MSDE2000 Database" on page 26.
- "Restore an MSDE2000 Database" on page 26

Backing Up a Microsoft SQL Database

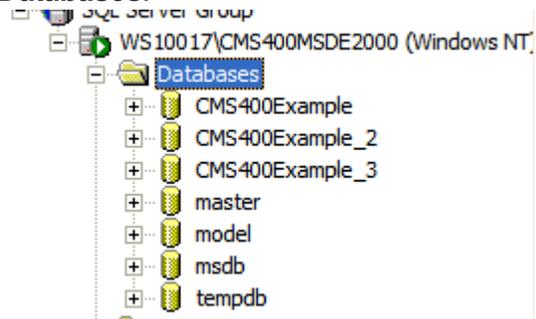
The following is an example of the steps to create a backup of a Microsoft SQL database.

1. Open Microsoft SQL Server Enterprise Manager.
2. Click on **Microsoft SQL Servers > SQL Server Group**.

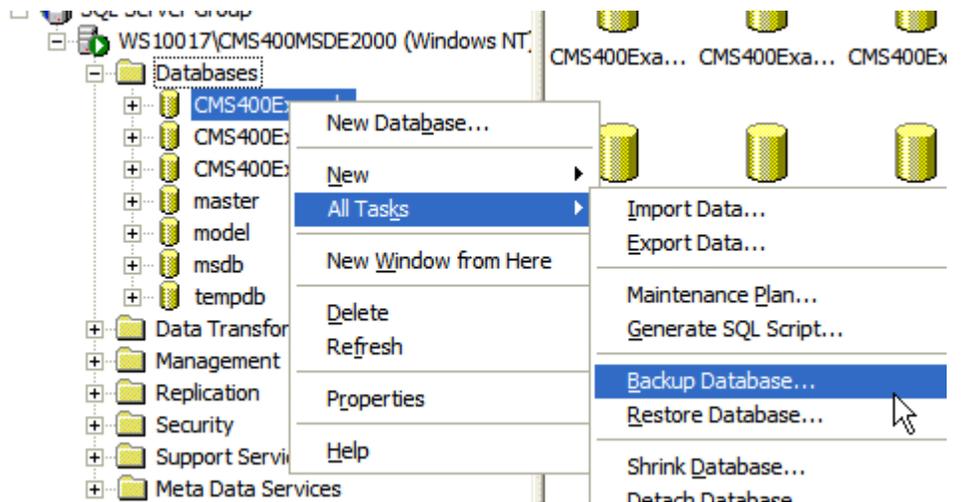


3. Click on the server where the database is located.

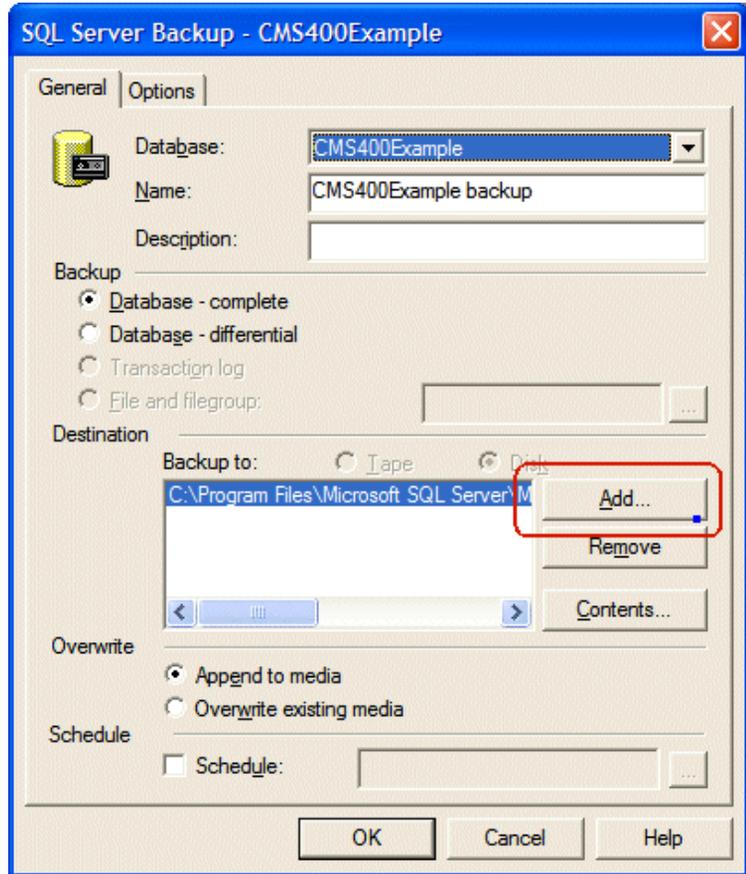
- Click on **Databases**.



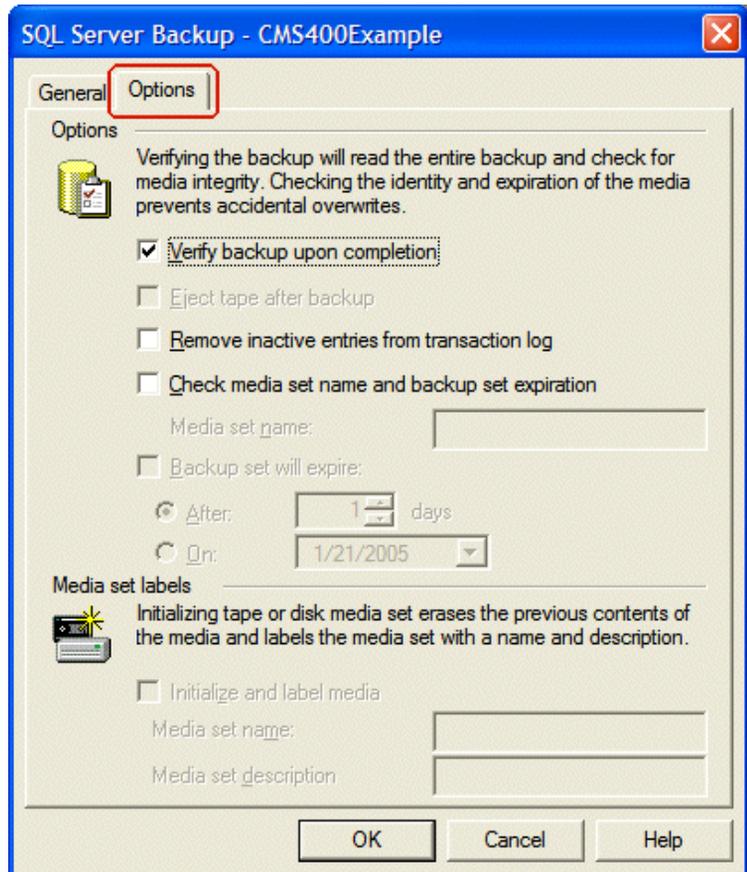
- Choose the database to backup.
- Right click on the **Database** and click **All Tasks > Backup Database**.



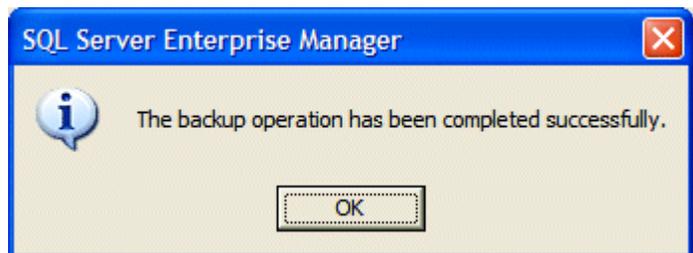
7. Add a location to backup the file.



8. Set any options.

9. Click **OK**.

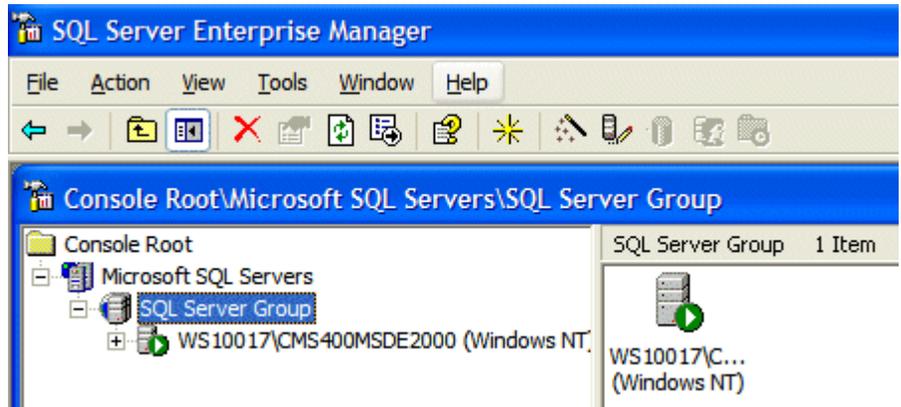
If the Backup is successful, this window appears.



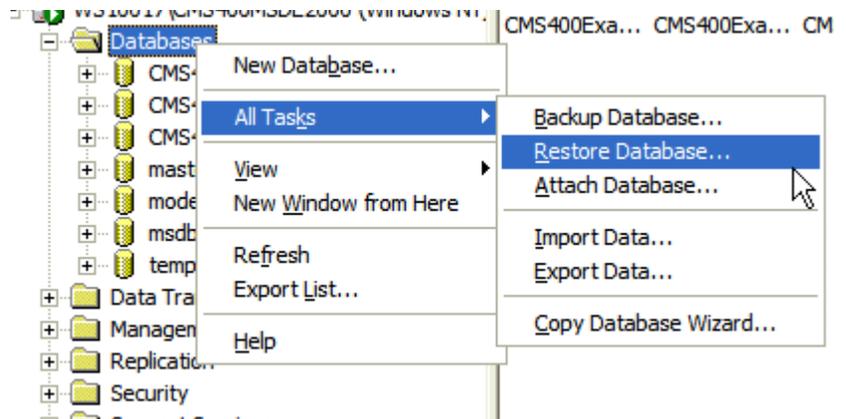
Restoring a Microsoft SQL Database

The following is an example of the steps to restore a backup copy of a Microsoft SQL Database.

1. Open Microsoft SQL Server Enterprise Manager.
2. Click on **Microsoft SQL Servers > SQL Server Group**.

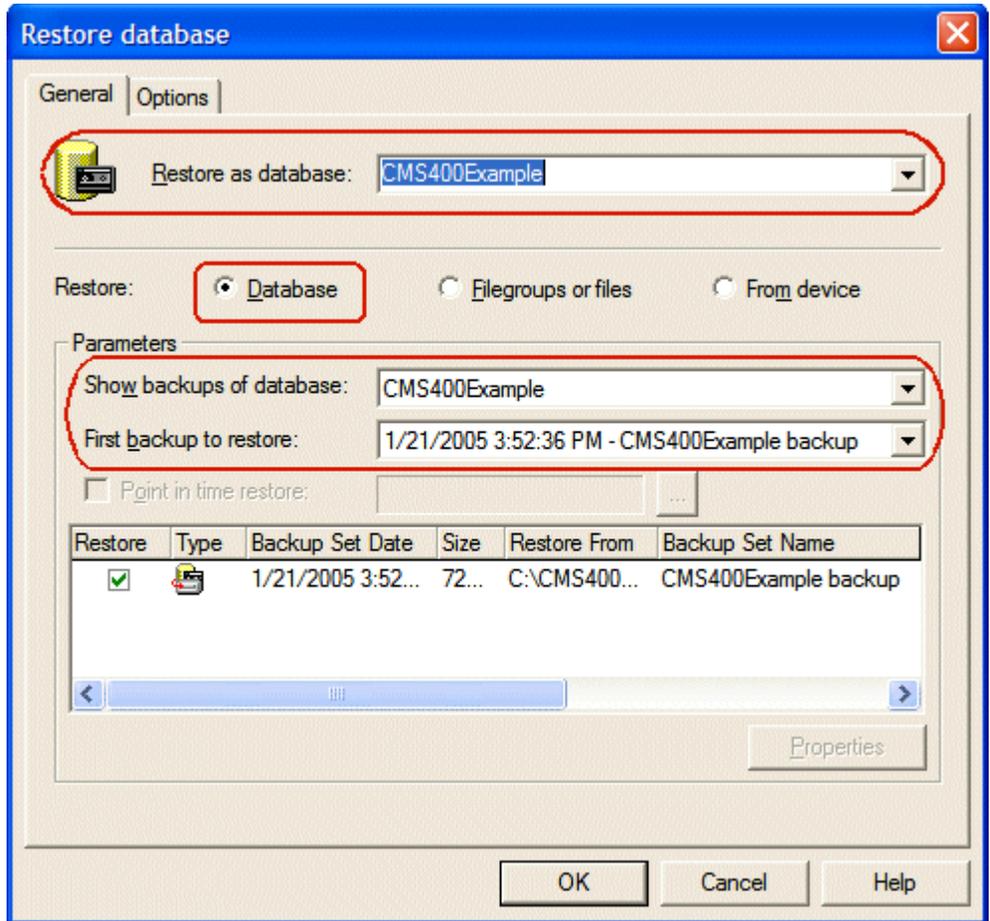


3. Click the server you want to restore the database to.
4. Right click on **Databases > All Tasks > Restore Databases**.

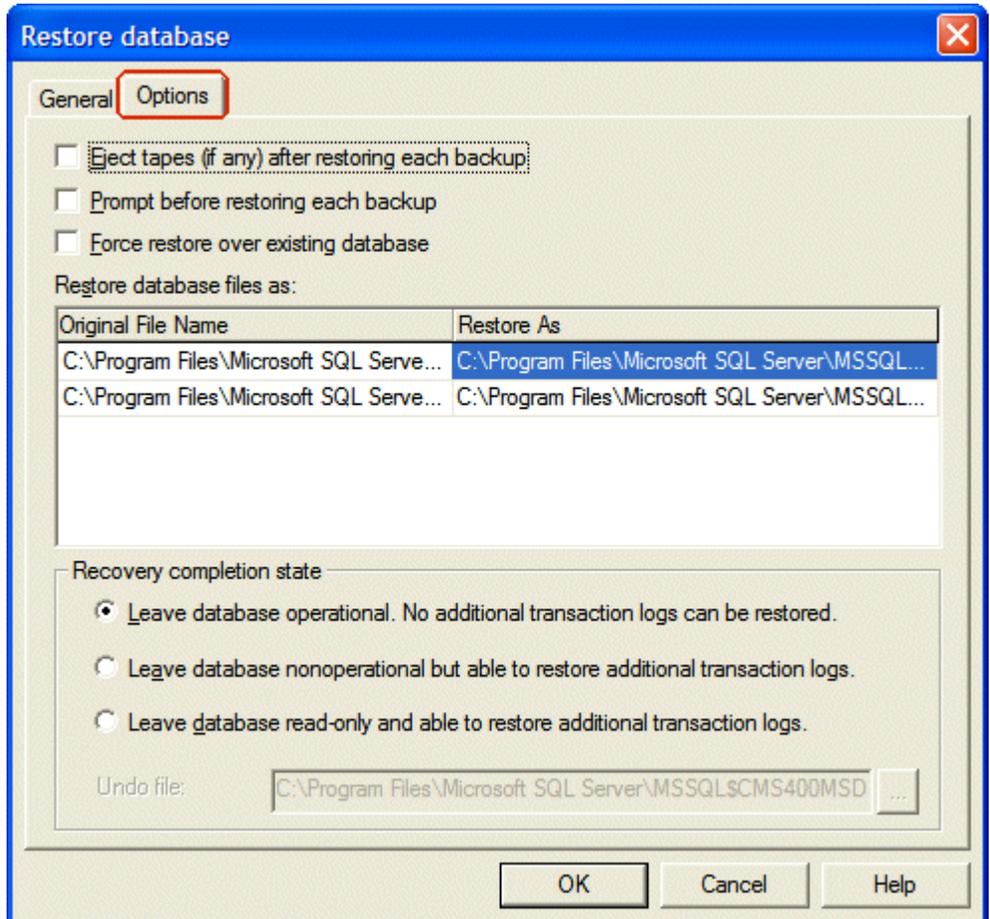


5. In the **Restore as database** field, type the name you want the database to be restored as.
6. Choose the **Database** radio button.

7. In **Parameters**, choose a backup to restore.

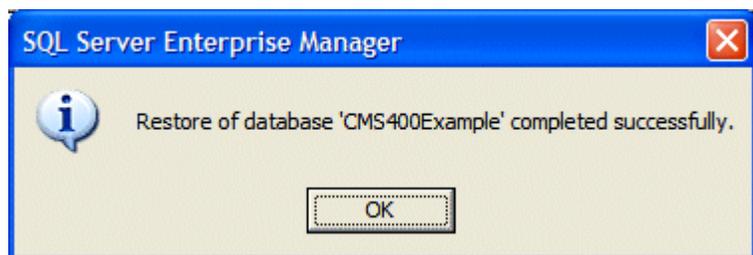


8. Set any options.



9. Click **OK**.

If the restore is successful, this window appears.



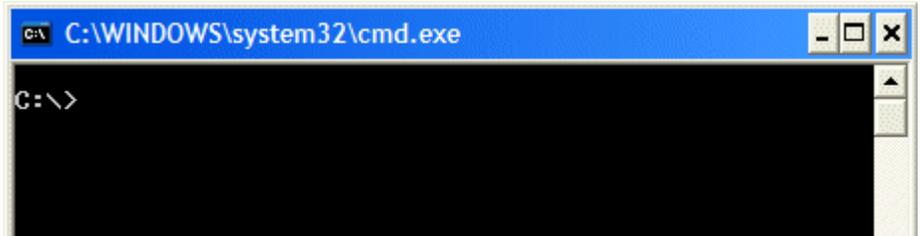
Backing Up an MSDE2000 Database

Below are examples of syntax to back up your database and create a log of your backup. You may need to modify them or add switches based on the configuration of your database. To find a list of switches and their definitions, type **osql -?** at the prompt.

NOTE Switches used by OSQL are case sensitive.

To backup an MSDE2000 database, follow these steps.

1. Open a command window.



2. Add the following line after the prompt.

```
osql -d CMS300Example -E -n -Q "BACKUP DATABASE CMS300Example TO DISK = 'c:\CMS400Example.bak'"
```

3. Press <Enter>.

4. To make a log of the backup, add the following line after the prompt.

```
osql -d CMS300Example -E -n -Q "BACKUP LOG CMS300Example TO DISK = 'c:\CMS400Example_log.bak'"
```

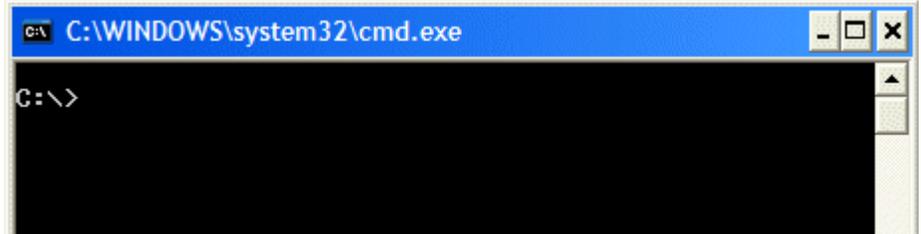
5. Press <Enter>.

Restore an MSDE2000 Database

Below is an example of syntax to restore your database. You may need to modify it or add switches based on the configuration of your database. To find a list of switches and their definitions, type **osql -?** at the prompt.

To restore an MSDE2000 database, follow these steps.

1. Open a command window.



2. Add the following line after the prompt.

```
osql -d master -E -n -Q "RESTORE DATABASE CMS300Example FROM DISK = 'c:\CMS300Example.bak'"
```

3. Press <Enter>.

Updating Application Messages

Ektron CMS300 provides language support for French and German. If you are upgrading from a previous version and using your old database, the translated strings are not included. The installation includes a utility that populates your old database with the translated strings.

This section explains how to use the language upgrade utility.

Upgrading Ektron CMS300

Before you can use the language upgrade utility, you must upgrade your version of Ektron CMS300. For information on this, see ["Performing the Upgrade" on page 7](#). During the upgrade, if you opted to keep your previous database, proceed with this chapter.

Using the Language Update Utility

To use the language update utility, follow these steps.

1. Click the Windows Start button then follow this path: **Programs > Ektron > CMS300 > Utilities > CMS String Update Utility**. (If this path does not work, click the LangUpdate.exe file, located under `C:\Program Files\Ektron\CMS300\Utilities` folder.)
2. Double click the langupdate.exe file.
3. Follow the directions beginning with ["The Language Update utility opens."](#) on page 14.

Updating Your Setup File

After upgrading Ektron CMS300, you must update your setup files. This is because, by default, the DSN in the new setup file points to a new database. To use your existing database, update the setup files.

NOTE The pre-existing database *must* have been updated before you begin this procedure. See "Upgrading Your Database" on page 17 and "Updating Application Messages" on page 28 for more information.

To update these files:

1. Open the file(s):
 - CMS300Sample/CMS300Scripts/setup.asp
 - CMS300Sample/CMS300Scripts/setup.aspx
 - CMS300Sample/CMS300Scripts/setup.php
 - CMS300Sample/CMS300Scripts/setup.cfm

NOTE If you update any setup file other than setup.asp, you must make the same changes to setup.asp.

2. Locate the line that begins with `DSN=" "`
3. Within the quotation marks, enter the DSN of your existing Ektron CMS300.
4. Save and close the file(s).

You are ready to use your updated Web site.

Installing Ektron CMS300

Before You Install

Before you install **Ektron CMS300**, make sure your system meets the system requirements.

System Requirements

Server Requirements

Recommended Hardware Configuration	<ul style="list-style-type: none"> • Microsoft® Windows® Server 2003 • Intel® Pentium 4 Hyper-Threaded or Intel® Xeon™ processor Processor (with 800MHz Bus) • 1 GB RAM or higher • RAID Array for Hard Drives • MS SQL Server (on separate server)
Operating System	<ul style="list-style-type: none"> • Microsoft Windows Server 2003 (recommended) • Microsoft Windows 2000/XP Professional • Microsoft Windows NT Server, SP6
Web Application Server	<ul style="list-style-type: none"> • Microsoft Active Server Pages (ASP) 2.0 or Higher required <p>Optional Web Application Servers:</p> <ul style="list-style-type: none"> • Microsoft ASP .NET Framework 1.1 • Macromedia ColdFusion 4.0.1 or higher (including ColdFusion MX) • PHP
Web Server	<ul style="list-style-type: none"> • Microsoft IIS 4.0 or higher

Database	<ul style="list-style-type: none"> • Microsoft Access • Microsoft SQL Server 2000 (recommended) • Microsoft SQL Server 7.0 • Microsoft SQL Server Desktop Engine (MSDE) 2000 • Oracle 9i • MySQL
----------	--

Client Requirements

Operating System	<ul style="list-style-type: none"> • Any IBM-PC compatible system • suggested: 166 MHz or faster with at least 64MB RAM • Macintosh OS X (Using Dreamweaver Extension, Terminal Services, or Virtual PC)
Browser for editing	<ul style="list-style-type: none"> • Microsoft Internet Explorer 5.0 or higher • Netscape 4.7x, 6.1 and higher • Firefox 1.0 or higher • Apple Safari
Browser for viewing	<ul style="list-style-type: none"> • All browsers

Optional Requirements

Web Development Tools	Visual Studio.NET, Allaire HomeSite, Macromedia/Allaire ColdFusion Studio, Macromedia Dreamweaver, Microsoft FrontPage 2000, NotePad
-----------------------	--

Preparing for Installation

Prior to installing Ektron CMS300, perform the following steps.

1. Install Microsoft Data Access Component (MDAC) drivers version 2.1 or greater.

NOTE You do not need to install MDAC 2.1 drivers if you have Windows 98 Second Edition or greater or any Microsoft Office application is installed on your machine.

2. Install a web server (such as the Microsoft® Personal Web Server or Internet Information Server).
3. Install and configure your Web Application Server.

Installing Microsoft Data Access Component (MDAC) Drivers

Install MDAC drivers version 2.1 or higher. We recommend the latest available from Microsoft.

To find out which drivers are installed on your machine, download the Component Checker tool from Microsoft. See www.microsoft.com/Data/download.htm.

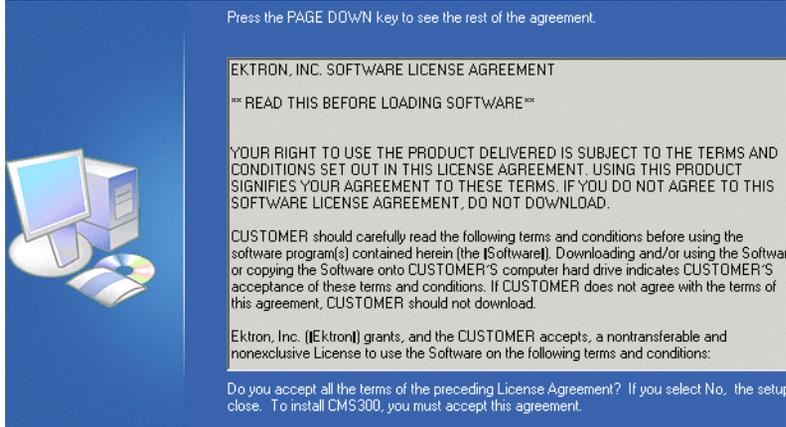
After You Install...

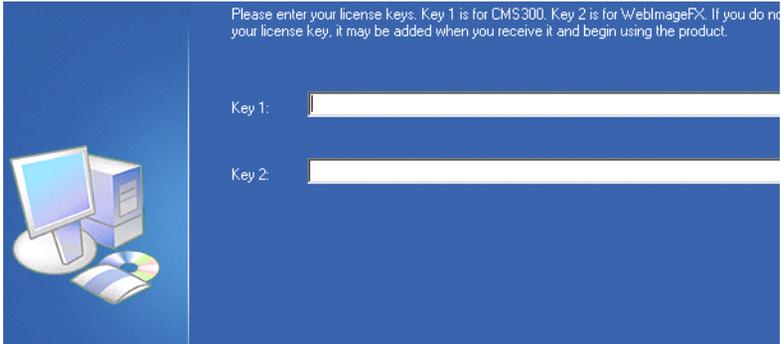
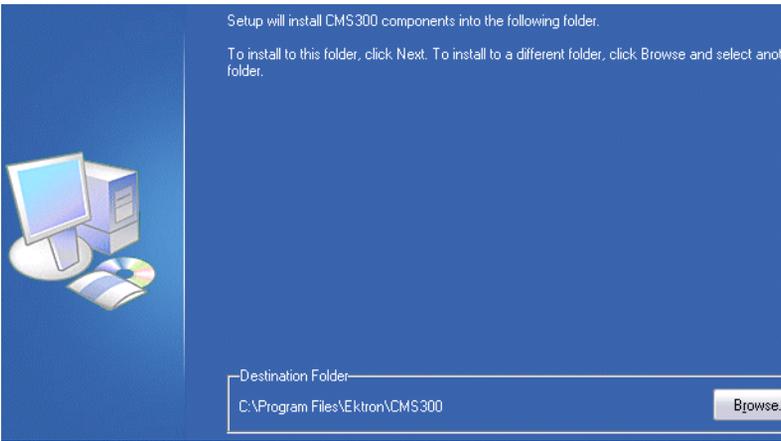
Ektron strongly recommends configuring a secure socket layer (SSL), especially if you are using Active Directory Integration, to encrypt passwords that would otherwise be sent to the Ektron CMS300 server as clear text. See "SSL Support" on page 81 for more information.

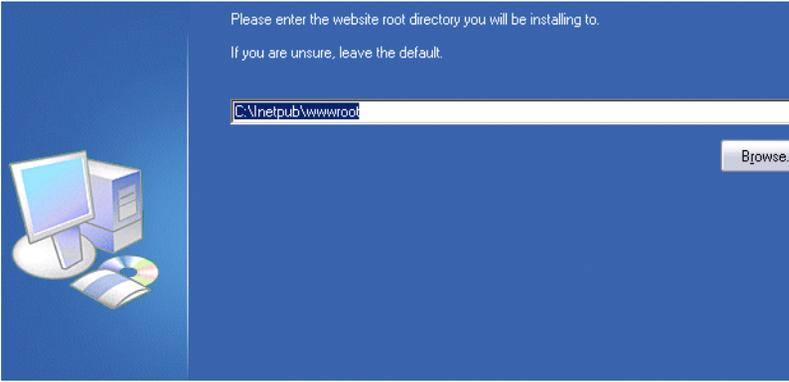
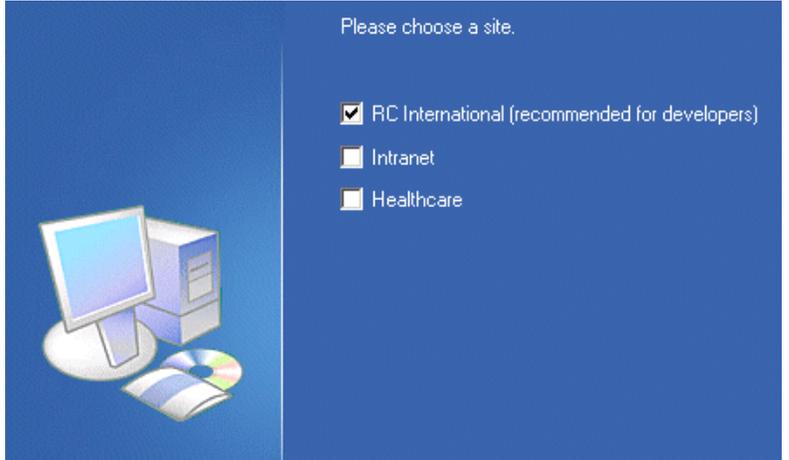
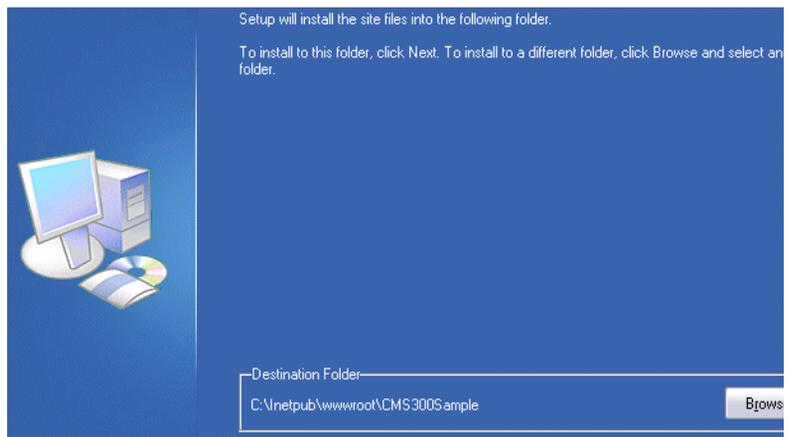
Also, if you want to enable support for multiple languages, see the Ektron CMS300 Administrator manual section "Multi-Language Support" > "Working with non-English Content" > "Enabling Support for Multiple Language Content."

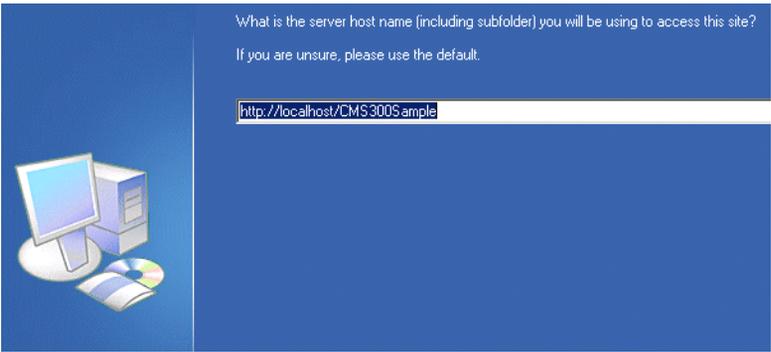
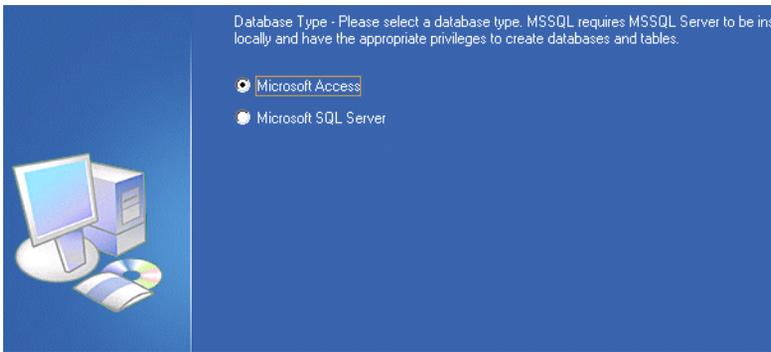
Performing the Install

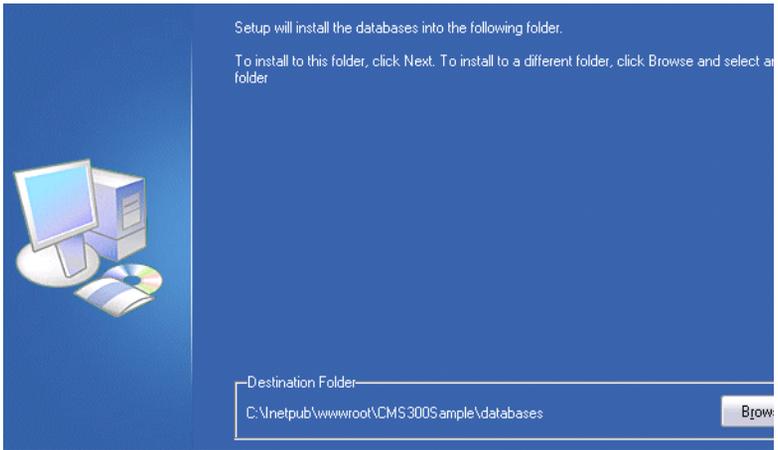
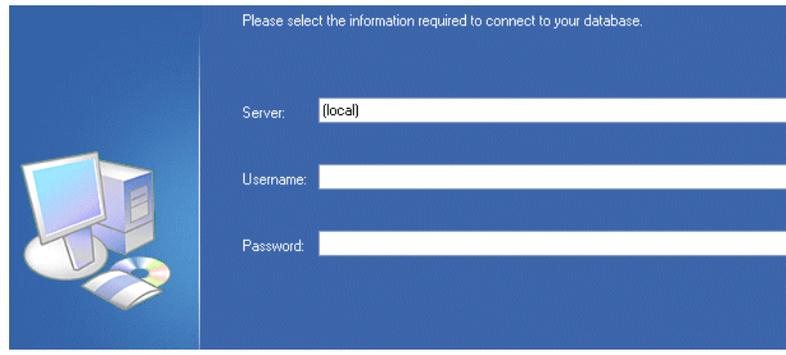
Running Ektron CMS300 Setup

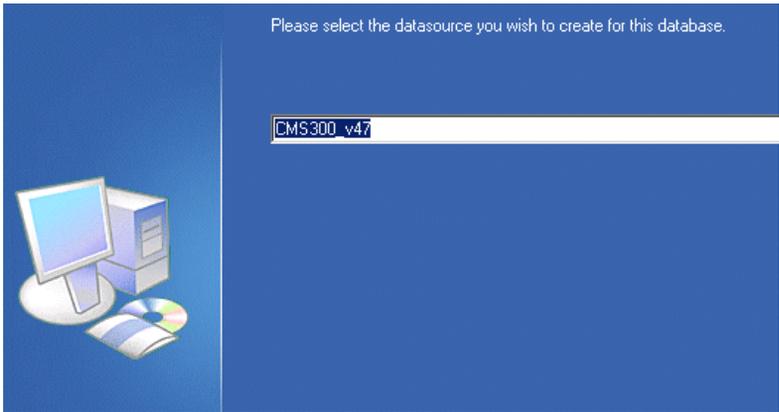
Step	Setup Screen
1. Double click the executable file that was downloaded from the Ektron Web site.	
2. The following screen appears. Click Next to proceed.	
<p>3. The next screen displays the Ektron License Agreement. Please read it.</p> <ul style="list-style-type: none"> • Click Yes to accept the agreement and continue. • Click No if you do not accept the terms of the agreement. <p><u>Note: Clicking No ends the setup program.</u></p>	

Step	Setup Screen
<p>4. At the license key screen, enter your license key(s) for Ektron CMS300 and Ektron WebImageFX (if purchased) into the respective fields.</p> <p>Click Next to proceed.</p> <hr/> <p>If you do not have a license key, click Next to continue. When the installation is complete, refer to the Ektron CMS300 Administrator Manual for information about inserting a license key via the Administrator Workarea.</p> <hr/>	
<p>5. At the application path screen, you are prompted to specify the destination location for the Ektron CMS300 components and utilities.</p> <p>If desired, click the Browse button to specify a new location.</p> <p>Click Next to proceed.</p>	

Step	Setup Screen
<p>6. At the choose destination location screen, specify the Web directory where you want to install the Ektron CMS300 files.</p> <p>Click Next to proceed.</p>	
<p>7. At the choose sample sites screen, select the sample Web sites that you want to install.</p> <p>Click Next to proceed.</p>	
<p>8. Specify where the site files will be installed on the server.</p> <p>To change the directory, click the browse button and locate the folder you want to install the files to.</p> <p>Click Next to proceed.</p>	

Step	Setup Screen
<p>9. At the Host screen, specify the host name. It is used to define the URL that will be entered to access your Ektron CMS300 Web site. It is also used to configure variables during the installation.</p> <p>The host name can be any of the following:</p> <ul style="list-style-type: none"> ● An IP address (123.456.7.890) ● A server name (WebServer1234) ● A domain name (www.ektron.com). <p>Click Next to proceed.</p>	 <p>What is the server host name (including subfolder) you will be using to access this site? If you are unsure, please use the default.</p> <p><code>http://localhost/CMS300Sample</code></p>
<p>10. At the database type screen, select the type of database you want to set up for your Ektron CMS300 Web site.</p> <p>Click Next to proceed.</p> <p>For information about using MySQL or Oracle as your Ektron CMS300 database, see "Ektron CMS300 Databases" on page 48.</p>	 <p>Database Type - Please select a database type. MSSQL requires MSSQL Server to be installed locally and have the appropriate privileges to create databases and tables.</p> <p><input checked="" type="radio"/> Microsoft Access</p> <p><input type="radio"/> Microsoft SQL Server</p>

Step	Setup Screen
<p>11. At the next screen, specify information for the database.</p> <ul style="list-style-type: none"> If you chose MS Access as your database type, specify where the database will be installed. <p>Click the Browse button to specify a different location for the database.</p> <p>Click Next to proceed.</p> <ul style="list-style-type: none"> If you chose MS-SQL as your database type, specify the following: <ul style="list-style-type: none"> MS-SQL Server Name Username (if required) to access the MS-SQL Server Password (if required) of the username for the MS-SQL Server <p>Click Next to proceed.</p>	 

Step	Setup Screen
<p>12. At the DSN screen, specify a DSN that will be used to connect to the database.</p> <p>Click Next to proceed.</p> <hr/> <p>Note: When the DSN is setup, the database type is added to the end of the DSN you specify. For example, CMS300_v47_Access or CMS300_v47_MSSQL.</p> <hr/> <p>Note: For information about setting up an OLE DB connection, see "DSN-less Connection" on page 86</p>	
<p>13. At the select program folder, specify the program folder in the Windows Start menu you would like to add the Ektron CMS300 information to.</p> <p>Click Next to proceed.</p>	
<p>14. The installation checks to see if parent pathing is enabled in IIS. If not, the following message appears:</p> <p>It appears that Microsoft IIS does not have Parent Pathing enabled. This is required for this setup. Would you like setup to automatically enable this for your local site?</p> <p>Yes is the default response. If it is selected, Parent Pathing is enabled. If it fails, a warning appears.</p> <p>Setup Error: Setup could not enable Parent Pathing in Microsoft IIS. You will need to do this manually.</p> <p>If you select No, the following message appears:</p> <p>Please remember to setup Parent Pathing in Microsoft IIS before using the product."</p>	

Step	Setup Screen
	<p>15. The setup program installs all necessary files.</p> <hr/> <p>During this process, the installation grants the system user group, Everyone, write permissions to the following system folders:</p> <ul style="list-style-type: none">- \CMS300Sample\UploadedImages- \CMS300Sample\UploadedFiles- \CMS300Sample\Databases <p>After completing the installation, you should further configure your permissions based on your network security model before using Ektron CMS300.</p> <hr/>
	<p>16. When completed, a completion message is displayed.</p> <p>To immediately access the Ektron CMS300 Sample Web site when you click the Finish button, check off the displayed box.</p> <p>Click Finish to complete the installation.</p>

Ektron CMS300 Hosting Example

To use Ektron CMS300 as a hosting solution, first install Ektron CMS300 according to the “Installing Ektron CMS300” chapter. When that is complete, create separate directories for each hosted web site. The process is described below.

NOTE The following examples use a MS-Access database. If you are using MS-SQL, MySQL, or Oracle databases, the steps are similar.

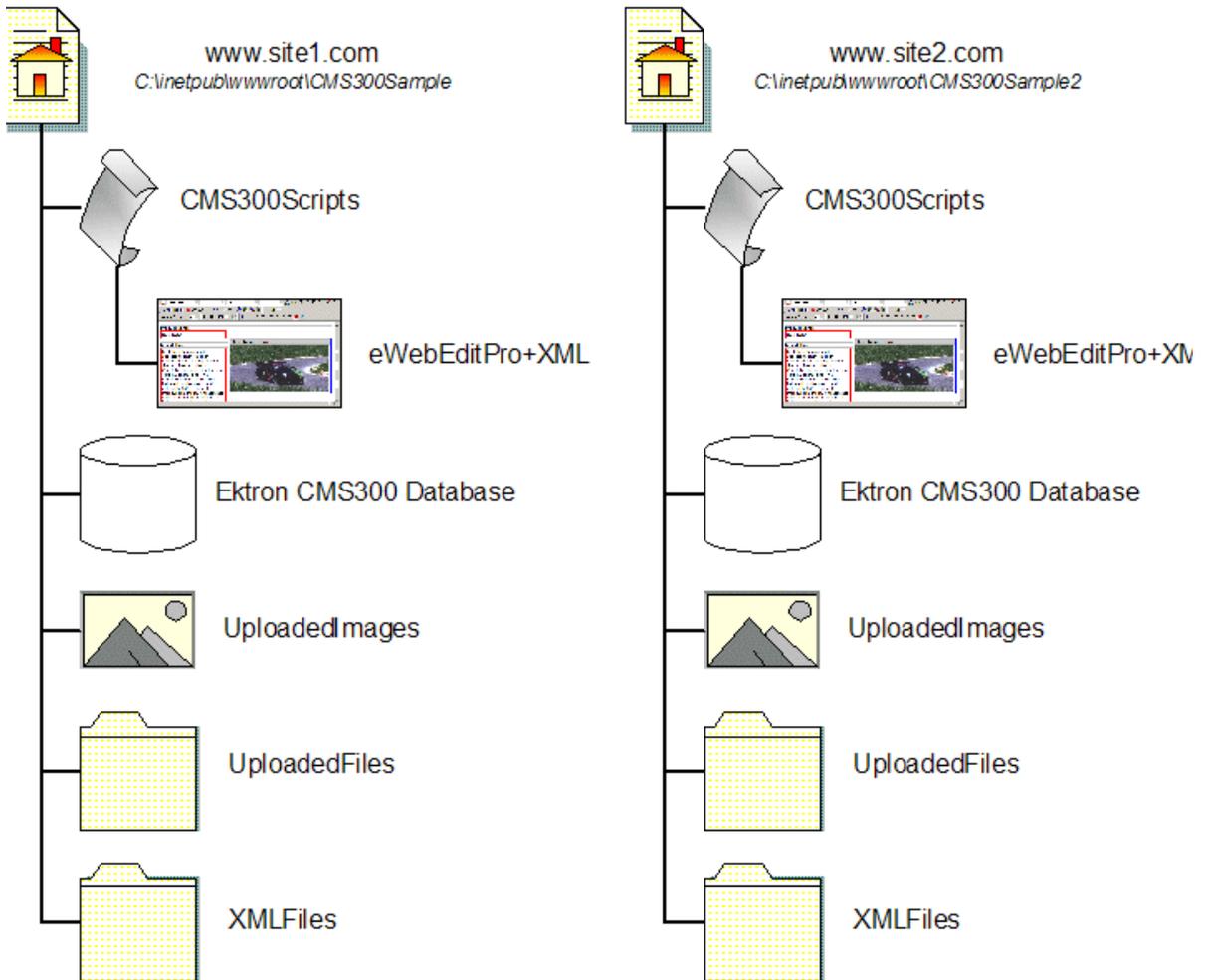
Install Ektron CMS300

Begin by installing Ektron CMS300, as described in “[Running Ektron CMS300 Setup](#)” on page 33.

Setting up Directories

After you run the install, create new Web enabled directories for each Web site to be hosted with Ektron CMS300.

1. Go to the `\inetpub\wwwroot` directory.
2. Create a folder for each site to be hosted. Name each folder uniquely.
3. Copy the contents of the `CMS300Sample` directory into each folder.

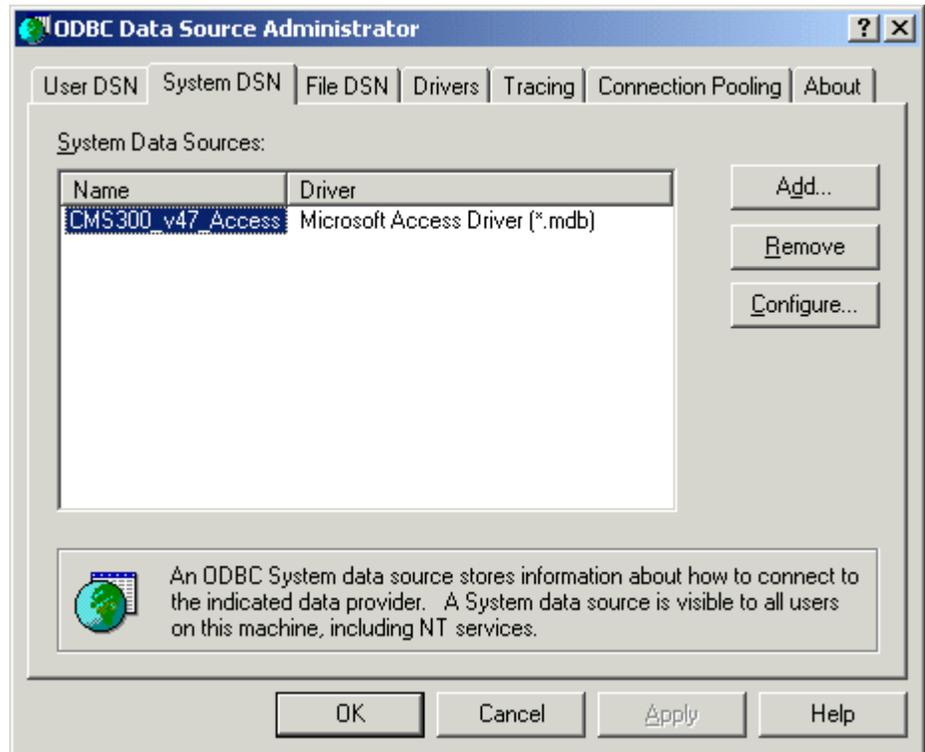


Creating DSNs

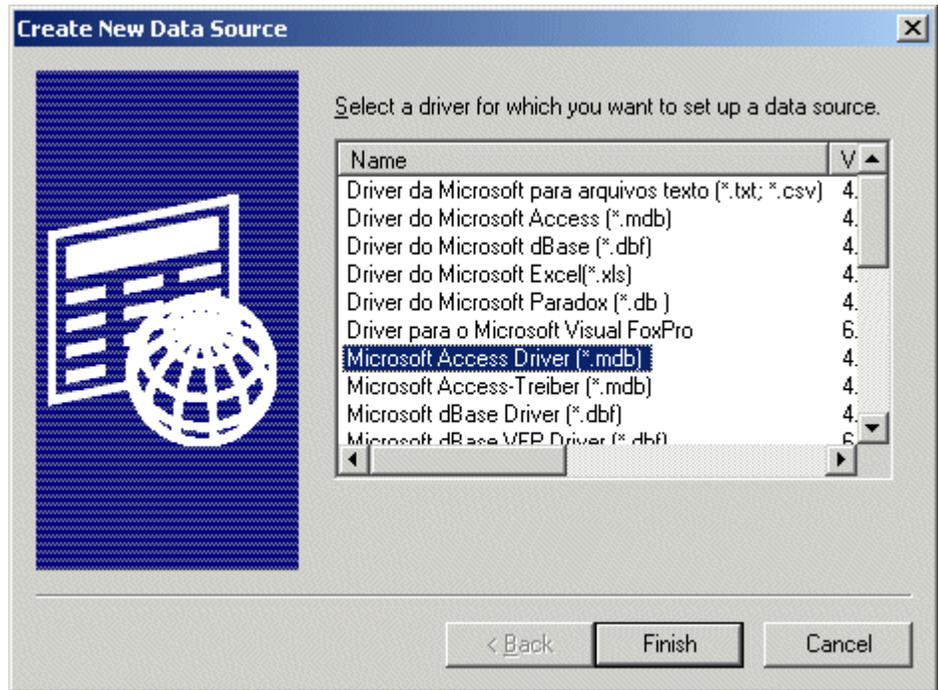
When finished copying data into the directories, create a unique DSN for each site.

NOTE For information about using an OLE DB connection instead of an ODBC, see "DSN-less Connection" on page 86.

1. Follow the path **Start > Programs > Administrative Tools > Data Sources (ODBC)**.
2. Click the **System DSN** tab.



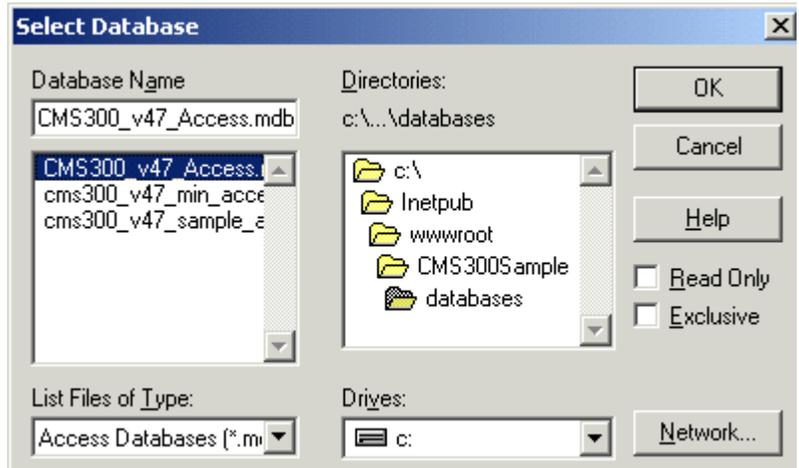
3. Click the **Add** button to add a driver for the database.
4. Select **Microsoft Access Driver (*.mdb)**.



5. Click **Finish**.
6. Enter a **Data Source Name**.



7. Click the **Select** button.
8. Navigate to the correct database, then click **OK**.



9. Click **OK** on the ODBC Microsoft Access Setup window.
- Repeat these steps for each Web Site the server will host. Then, click **OK**.

Updating Site_Scripts_Path.xxx

Overview

All Ektron CMS300 templates require an `include` statement that points to the `ApplicationAPI.xxx` file. This lets the standard methods within the template function properly.

Ektron recommends creating a file in your Ektron CMS300 root directory that specifies this include file. Then, use that file in each template.

The `Site_Scripts_Path.xxx` file is an example of this. It is called by all templates in the Ektron CMS300 sample site. By examining this file, you will notice it calls the correct `applicationAPI.xxx` file.

When configuring your Web site, you have three options:

- Update `Site_Scripts_Path.xxx`
- Create a new file

- Insert an `include` to `ApplicationAPI.xxx` in all templates

NOTE Ektron does not recommend using the third option. If changes are made to the location of the file `applicationapi.xxx`, all templates would have to be updated instead changing one file.

Each option is explained in the following section.

Updating Site_Scripts_Path.xxx

During the site creation process, if you copied this file into your new site's root directory, update the path within the file to reflect the changes. To do that, follow these steps.

1. Locate the file, `Site_Scripts_Path.xxx`, in your new Web site's root folder.
2. Open the file for editing with your editing tool.
3. The contents of the file are displayed.
4. Update the path within the quotation marks to reflect the new site path for your Web site. For example:

```
<!-- #include virtual="/NewSite1/cms300scripts/applicationAPI.xxx" -->
```

5. Save and close the file.
6. Repeat these steps for each new site you set up.

Creating a New File

Instead of using the default file, `site_scripts_path.xxx`, you may create your own unique file and call the `applicationAPI.xxx` file through that. To configure this file properly, perform the following steps:

1. Open any text editor (for example, NotePad).
2. Enter the following text:

```
<!-- #include virtual= "[filepath]" -->
```

Where the file path is the relative location to the file `ApplicationAPI.xxx`.

3. Save the file to the root directory of the new site.

Updating Setup.xxx

You need to update code in the setup.asp file to assign each Web site the proper DSN and site path.

NOTE If you update another setup file (such as setup.cfm), you also need to make the same changes to the setup.asp file.

1. Go to the file:

C:\inetpub\wwwroot\NewSite1\CMS300scripts\setup.asp, and open it with any web development tool.

- Change DSN="CMS300_v47_Access" to DSN="*your new DSN*"
- Change sitepath="/CMS300Sample/" to sitepath="*/your new sitepath*"

An example for this is:

```

DSN = "CMS300_Site2"

' Designate the database type below
' Valid values are "mysql", "sql", "access", "Oracle"
DBType = "access"

DateFormat="dd-mmm-yyyy hh:mm AM/PM"

sitePath = "/CMS300Sample2/"

buildNumber = ""

DBusername=""

DBpassword=""

Version = ""

UseSSL = false

SSL_Port = 443

ADEnabled = true

AUTH_Protocol = "LDAP"

```

2. Save the settings, and close the window.

Repeat these steps for each Web site you are hosting.

What's Next?

After you create the DSNs for each site and configure the setup.asp files, you are ready to run each Web site from your server.

Ektron CMS300 Databases

Ektron CMS300 is compatible with the following types of databases:

- [Microsoft Access](#)
- [Oracle 9i](#)
- [Microsoft SQL Server \(7.0 and 2000\)](#)
- Microsoft SQL Server Desktop Engine (MSDE) 2000
- [MySQL](#)

You can easily change databases for your Ektron CMS300 Web site via utilities that Ektron provides in the installation. This chapter explains the databases supported by Ektron CMS300, and how to convert to an MS-SQL, MySQL, or Oracle database.

Microsoft Access Databases

Ektron CMS300 contains databases a sample Microsoft Access database, which contains sample data to familiarize you with the use and integration of Ektron CMS300.

CMS300_v47_Access.mdb

Ektron CMS300's initial database is a Microsoft Access database. This database is used on the sample Web site. It contains the following:

- Two users - one administrator, one editor
- Sample content
- Sample images
- Fonts

NOTE You do not need Access installed on your system to use the sample database. However, you do need the MDAC and Jet Drivers listed in the system requirements.

Setting Up an MS-SQL Database

Ektron CMS300 can use an MS SQL database. Although the product doesn't come with an MS SQL database ready, you can convert the supplied Access database to an MS SQL database by using the sql script and data mover included in the Ektron CMS300 installation. To create an MS-SQL database, run the cms200-300_mssql_v47.sql script and complete a few other tasks. All this is described below.

Creating An Empty SQL Database

First, create an MS SQL database by following these steps.

1. From the Windows start menu, open MS-SQL Enterprise Manager.
2. Navigate through the `Console Root` folder and select the server that you want to add the database to.
3. **Right click** the database folder, and select **New Database...**
4. The Database Properties dialog box is displayed.
5. Enter a name for the database (for example, `CMS300_SQL`).
6. Click **OK**.
7. The page is refreshed, and the new database appears on the right.
8. Close Enterprise Manager.

Running the SQL Script

The .sql script provided with Ektron CMS300 creates all the necessary tables in the newly created MS-SQL database. The script, cms200-300_mssql_v47.sql, resides in the `c:\Program Files\Ektron\CMS300\Utilities` directory. To access and run it, follow these steps.

1. From Windows Start menu, open your MS-SQL Query Analyzer.
2. The MS-SQL Query Analyzer opens and the Connect to SQL Server dialog box is displayed.
3. Select the server that you used to create the Ektron CMS300 database on, and enter the type of Authentication that you are using to connect to the SQL Server.
4. Click **OK**.
5. The Connect to SQL Server dialog box closes, and you are logged in.
6. Select the new database that was created earlier (CMS300_SQL) from the drop down list at the top of the screen.
7. Load the sql script by selecting **Open File** from the toolbar or the File menu.
8. The Open Query File dialog box is displayed.
9. Browse for the file cms200-300_mssql_v47.sql. If you ran the default installation, you can find the script in the `C:\ProgramFiles\Ektron\CMS300\Utilities` directory.
10. Select the.sql script and click **Open**.
11. The Open Query File dialog box closes, and the script is loaded into the query field.
12. Click the green arrow on the toolbar, press <F5>, or select the execute command from the Query menu to execute the script.
13. The script executes, and a confirmation message that **the command(s) completed successfully** is displayed.
14. Close the SQL Query Analyzer.

You now have a blank SQL database for Ektron CMS300.

Creating New DSN

Because you will use an MS-SQL database, you need to create a new DSN that points to this database. To do this, access the ODBC Manager and point the DSN to the new database.

NOTE For information about creating a DSN-less connection to the MS-SQL database, see "DSN-less Connection" on page 86.

1. Access the ODBC Manager from the Control Panel.
2. The ODBC Data Source Administrator snap-in is displayed.
3. Click the **System DSN** tab.
4. A list of system data sources appears.
5. Click **Add**.
6. The Create New Data Source window appears.
7. Select the driver that best suits your version of MS-SQL server and click **Finish**.
8. The Create a New Data Source to SQL Server window opens.
9. Specify a name, description, and choose the SQL Server to connect to. Then click **Next >**.
10. The next screen appears.
11. Enter the necessary information about the authentication for the DSN, then click **Next >**.
12. The next screen appears.
13. Change the default database to the one that you created earlier. Make any other adjustments on this screen if necessary. Then click **Next >**.
14. The next screen appears.
15. Choose whichever options you would like for the DSN, then click **Finish**.
16. The ODBC Microsoft SQL Server Setup window displays a summary of your settings.
17. Click **Test Data Source** to verify the data source.
18. If the DSN is good, you receive a message that the test completed successfully. If not, edit the DSN and make sure that everything is set up properly.
19. To finish, click the **OK** button at the bottom of the screen, and close the ODBC Manager.

After you create the database, the script has run, and the ODBC connection is made, you are ready to run the data mover. It moves content from the default Access database to the new MS-SQL database.

Moving the Data

The data mover moves everything in the current Access database to the MS-SQL database. To move the data, perform the following steps.

1. Double click the **dbmover.exe** file, which is located in the `C:\Program Files\CMS300\utilities` directory.
The **Ektron CMS300** Data Mover Utility opens.
2. In the source DSN section, select the source database from the drop down list.
3. Enter a username and password needed to access the DSN if required in the specified fields.
4. Select the type of database the selected DSN is.
5. In the destination DSN section, select the destination DSN from the drop down list.
6. Enter a username and password needed to access the DSN if required.
7. Select the type of database the destination DSN is.
8. When complete, click the **Update** button to move the data.
A message is displayed when the content is successfully moved.

Modifying Setup.xxx

After you complete the steps described so far, update your Setup.XXX files to reflect the changes. Here is a list of changes that need to be made.

- Specify MS-SQL as the DBType
- Specify a new DSN
- If required, enter a username and password required to access the database.

This section explains these changes.

Updating Setup.xxx Files

To update the setup.xxx files, perform the following steps:

1. Of the following files, open for editing the one that corresponds to your database:
 - CMS300sample/CMS300scripts/setup.asp
 - CMS300sample/CMS300scripts/setup.aspx
 - CMS300sample/CMS300scripts/setup.php
 - CMS300sample/CMS300scripts/setup.cfm

NOTE Setup.asp is used for demonstration purposes. The contents of Setup.ASPX/PHP/CFM are almost identical.

2. Use the following table to make the necessary modifications to the Setup.xxx file.

Line	Description
DSN	Replace with the DSN that points to the MS-SQL database. See Also: "Creating New DSN" on page 51
DBType	Replace the current DBType with DBType="sql"
Username	If required, specify the username needed to connect to the DSN.
Password	If required, specify the password for the username given.

3. Save and close the file.

NOTE Although your Web site may not use other platforms, Ektron recommends making the same changes to all Setup.XXX files.

What's Next?

Now that you have configured Ektron CMS300 to use an MS-SQL Database, you can use your Ektron CMS300 Web site.

Setting Up a MySQL Database

As mentioned before, Ektron CMS300 is compatible with a MySQL database. To configure Ektron CMS300 to use a MySQL database, you must perform a few basic tasks. All this is described below.

Requirements

- Windows NT/2000
- Stable version of MySQL (3.23 or higher recommended)
- MySQL ODBC driver (3.51 or higher recommended)
- Ektron CMS300 v1.6 or higher (earlier version does *not* work)

NOTE The latest versions of MySQL databases and drivers can be found at this Web site: <http://www.mysql.org>.

Connecting to MySQL

1. Locate and open the DOS command prompt on your Windows machine.

NOTE If your DOS prompt opens with a prompt for a drive different from the one to which MySQL is installed, change to the correct drive. Type the correct drive followed by a colon: **D:\> C:**

2. From the prompt for the drive in which MySQL is installed, use the **cd** command to switch to the directory where MySQL is installed.

```
C:\> cd mysql\bin
```

This takes you to a prompt for the correct directory.

3. From here, start MySQL by typing **mysql** at the command prompt.

```
C:\mysql\bin>mysql
```

The MySQL Monitor Welcome Screen appears, providing a connection id and information about the server version of MySQL that you have.

After connecting to MySQL, you can create the database that Ektron CMS300 will use.

Creating the Database

Let's create a database in MySQL named CMS300_MySql.

NOTE The database does not have to be named CMS300. If you prefer to name it something else, just remember that name. You will need it when we run the script to build the tables.

1. At the MySQL prompt, enter the following to create the database named CMS300_MySql.
mysql> create database CMS300_MySql;
2. MySQL should respond by stating something like:
Query OK, 1 row affected <0.03 sec>.
3. To make sure the database was successfully created, type **show databases** at the mysql prompt.
mysql> show databases;
This command prints a list of MySQL databases. Make sure CMS300_MySql appears on this list.

NOTE If the newly created database does not display, run the create statement again.

4. Attempt a connection to the new database using the connect command.
mysql> connect CMS300_MySql;
A successful connection is greeted with a connection id.
5. After you make a connection, type **exit** to get out of MySQL.
mysql>exit;

After you create the database in MySQL, you can build the tables using the script provided by Ektron.

Building the Ektron CMS300 Tables

To build the CMS300 tables, run the script provided by Ektron named **CMS300_mysql_v47.sql**.

NOTE You cannot run the script from the mysql prompt. This is why we exited from the MySQL monitor in the last step.

1. At the command prompt, type:

- **mysql**
- the database name
- a less than sign (<)
- the location of the SQL script

NOTE You can also drag and drop the file so you do not have to type it. Do not put a semicolon at the end of this command.

Here is an example of how the line might look:

```
C:\mysql\bin>mysql CMS300_MySql< "c:\program
files\ektron\CMS300\utilities\CMS300_mysql_v47.sql
```

If the script ran correctly, MySQL gives you no feedback. It returns to the prompt from which you ran the script. If MySQL prints a bunch of information, you can assume something went wrong.

2. To see if the script ran correctly, access the database and request the list of tables created. Use the following commands to do this:

```
C:\mysql\bin>mysql ↵
mysql> connect database name; ↵
mysql> show tables; ↵
```

If the script ran correctly, MySQL outputs a list of the tables that were created.

After the tables are created in the MySQL database, you are ready to move the content from the existing database to this one. Before you can do that, you must create a DSN for the new MySQL database.

Creating a DSN for the MySQL Database

Both databases (the Access 2000 and MySQL) needs a data source set up. To create the second data source, you need a utility to connect to a MySQL database through an ODBC connection. It can be found at:

<http://www.mysql.com/downloads/api-myodbc.html>

Use the MySQL driver installed from the MySQL-ODBC utility when creating this System DSN. In the example below, we choose **CMS300_MySql** as the data source name for our MySQL database. The following steps describe the process.

1. Access your ODBC Datasource Administrator console by following the path in Windows:
Start > Programs > Administrative Tools > Data Sources (ODBC)
2. The ODBC Data Source Administrator snap-in appears.
3. Click the **System DSN** tab.
4. A list of your system data sources are displayed.
5. Click **Add...**
6. The Create New Data Source window opens.
7. Choose **MySQL ODBC 3.51 Driver** from the list of available drivers then click **Finish**.
8. The MySQL ODBC DSN Configuration window appears.
9. Enter the following information into the displayed fields:
 - Datasource Name
 - Database Name
 - Username and Password (if required)
 - Host Name

NOTE For demonstration purposes, we will name the DSN **CMS300_MySQL**, and point it to the database we created earlier called **CMS300_MySql**.

10. Click **Test Data Source** to test the connection. If the information is correct, a success message appears.
11. Click **OK**.

NOTE If you receive an error, check your connection information. If problems persist, refer to your [MySQL Documentation](#) for troubleshooting.

12. At the DSN Configuration window, click **OK** to save and close the changes.

With the creation of the DSN for the Ektron CMS300 MySQL database complete, you are ready to move the content from the default MS Access database to this one.

Moving Data into the MySQL Database

The next step in setting up a MySQL database is to run the data mover that also gets installed with Ektron CMS300. The data mover moves everything in the current Access database to the MySQL database.

To move the data:

1. Double-click the `C:\Program Files\Utilities\dbmover.exe` file to open it.
2. The **Ektron CMS300** Data Mover Utility opens.
3. Choose the Source DSN from the drop down list.
4. Enter a username and password for the source DSN in the proper fields if necessary.
5. Choose **Access** as the DB Type for the source DSN.
6. From the lower drop down list, choose the Destination DSN for the database to which the content will be moved.
7. Enter a username and password for the destination DSN in the proper fields if necessary.
8. Choose the DB type for the Destination DSN.
9. After you enter necessary information for the CMS Data Mover, click **Update** to initiate the move.

NOTE If the data did not populate or you received an error, please review your data sources and their connection information.

Modifying Setup.xxx

After performing the steps described so far, you need to update your Setup.XXX files to reflect the changes. Here is a list of changes to be made:

- Specify MySQL as the DBType
- Specify new DSN
- If required, enter a username and password required to access the database.

This section explains how to make these changes.

Updating Setup.xxx Files

To update the setup.xxx files, perform the following steps:

1. Open the following files for editing:
 - CMS300sample/CMS300scripts/setup.asp
 - CMS300sample/CMS300scripts/setup.aspx
 - CMS300sample/CMS300scripts/setup.php
 - CMS300sample/CMS300scripts/setup.cfm

NOTE [Setup.asp is used for demonstration purposes. The contents of Setup.ASPX/PHP/CFM are almost identical.](#)

2. Use the following table to make the necessary modifications to the Setup.xxx file.

Line	Description	More Information
DSN	Replace with the DSN that points to the MySQL database.	"Creating a DSN for the MySQL Database" on page 58
DBType	Replace the current DBType with DBType="mysql"	
Username	If required, specify the username needed to connect to the DSN.	
Password	If required, specify the password for the username given.	

3. Save and close the setup.xxx file.

NOTE

Although you may not use other platforms on your Web site, Ektron recommends making the change described above to all Setup.XXX files.

What's Next?

After configuring Ektron CMS300 to use an MySQL Database, you can use your Ektron CMS300 Web site!

Setting Up an Oracle 9i Database

Ektron CMS300 can be configured to use an Oracle 9i database. To properly configure Ektron CMS300 and Oracle9i, perform these steps.

1. ["Creating Necessary Tables" on page 63](#)
2. ["Creating New DSN" on page 65](#)
3. ["Modifying Setup.xxx" on page 68](#)

The following sections explain the steps.

Before You Begin...

Before you begin, read this section to understand the methods and test configuration used for this sample.

Test Configuration

The test machine used in this section is configured as follows:

- Microsoft Windows 2000 Server, Service Pack 3
- Oracle 9i Database (Release 9.2.0.1.0)
- SQL*Plus: Release 9.2.0.1.0
- Oracle 9i ODBC Driver

While this configuration is only a suggested one, it was used by Ektron to successfully use an Oracle database for Ektron CMS300.

Configuration Procedure

This section provides one approach for setting up and configuring an Oracle database for Ektron CMS300. As an Oracle administrator, you may prefer another method that is more appropriate for your needs.

Case Sensitivity

Ektron highly recommends configuring the Oracle database to be case insensitive. Not doing so may result in the creation of duplicate content titles, as well as other problems.

Creating Necessary Tables

The .sql script provided with Ektron CMS300 creates the necessary tables in your Oracle database. The script is in the `c:\Program Files\Ektron\CMS300\Utilities\` directory as `cms200-300_oracle_v47.sql`.

Building Tables in Your Oracle Database

To access the script and execute it properly, follow these steps:

1. Open SQL Plus Worksheet by following the path in the Windows Start menu:
Start > Programs > Oracle - OraHome92 > Application Development > SQL Plus Worksheet
2. The Oracle Enterprise Manager Login box is displayed.
3. Choose the option to connect directly to a database, and use the following table to help you complete this login box.

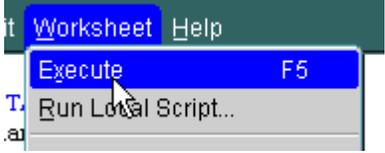
Field	Description
Username	Enter your Oracle Enterprise Manager administrator name for the Oracle Management Server. <i>Note that you are logging in as an administrator of network resources being serviced by a Management Server, not into a database as a database user.</i>
Password	Enter your administrator password for the Oracle Enterprise Manager system.
Service	Type in or select the name of the node from which the Oracle Management Server is running.

4. Click **OK** to connect.
5. The SQL Plus Worksheet interface is displayed.

6. Follow the path **File > Open** to open the Ektron CMS300 Oracle SQL script.
7. The Open Local Script File box opens.
8. Locate and click the script cms200-300_oracle_v47.sql, then click **Open**.

NOTE By default, this script is installed to Program Files/Ektron/CMS300/Utilities.

9. The script is loaded into the SQL Plus Worksheet.
10. Execute this script by:

	Pressing <F5>
	Clicking Execute .
	Following the path Worksheet > Execute

11. Upon completion of the script, all necessary tables for the database are added.

All the required tables are now added to your Oracle database.

Testing the Script

Once the script has been executed, perform the following steps to ensure that the tables have been added to your Oracle database properly.

1. Access the Oracle Enterprise Manager by following this path in the Windows Start Menu:
Start > Programs > Oracle - OraHome92 > Enterprise Manager Console.
2. The Oracle Enterprise Manager Console Login box appears.
3. Choose **Launch Standalone** and click **OK**.

4. The Oracle Enterprise Manager, Standalone window is displayed on the screen.
5. In the folder tree on the left side of the console, expand the database folder, then expand the service the Ektron CMS300 sql script was applied to.
6. A Database Connect Information window is displayed in the console.
7. Enter your Oracle Username and Password into the displayed fields, then click **OK**.
8. You are now connected to the service, and the folder tree expands with a list of information about the service.
9. To locate the tables that were added, follow the path in the folder tree:

Schema > [Username] > Tables

A list of tables added during the execution of the sql script appear on the right side of the console. Be sure that all 51 tables were added.

Creating New DSN

Because you are now using an Oracle database, you need to create a new DSN that points to it. To do this, go into the ODBC Manager and point the DSN to the new ODBC database.

NOTE For information about creating a DSN-less connection to the Oracle database for Ektron CMS300, see "DSN-less Connection" on page 86.

To create a DSN for your Oracle Database, perform the following procedure.

1. Access the ODBC Datasource Administrator.
2. Click the **System DSN** tab at the top of the console.
3. A list of all the system datasources is displayed.
4. Click **Add**.
5. The Create New Datasource window is displayed.
6. Choose the driver that best suits your needs.
7. Click **Finish**.
8. The Oracle ODBC Driver Configuration window appears.

9. Using the following table, enter the necessary information into the fields.

Field	Enter
Datasource Name	A name for this datasource.
Description	An extended description for the DSN.
TNS Service Name	(or select from the list) the proper TNS Service for your DSN.
User ID	A Username with access permissions for the Oracle Database.

NOTE With the exception of **Description**, the fields in the table above are required for a successful connection. You may set other advanced settings for the DSN, but this manual only describes basic settings.

10. Click **Test Connection** on the right side of the console to ensure that you can connect to the database.
11. The ODBC Driver Connect window is displayed.
12. Ensure the service name and Username are correct, then enter the password for the specified user in the password field,
13. Click **OK**.

If connected successfully, a confirmation message is displayed.

NOTE A message other than **Connection Successful** may be due to an invalid username, password, connection, or service. Be sure that all your information is correct, then try again.

14. Click **OK** on the testing connection window to close it.
The Oracle ODBC Driver Configuration page is now active again.
15. Close the Oracle ODBC Driver Configuration window by clicking **OK**.
16. Close the ODBC Datasource Administrator window by clicking **OK**.

Moving the Data

The next step in setting up an Oracle database is to run the data mover that gets installed with Ektron CMS300. The data mover moves everything in the default Access database to the Oracle database.

To move the data:

1. Double click the dbmover.exe file, located in the `Program Files\Ektron\CMS300\utilities` directory.
2. The **Ektron CMS300 Data Mover Utility** opens.
3. Use the following tables to enter the correct information into the proper fields.

Source Database Information	
Field	Description
DSN	Type in, or choose from the list above, the DSN for the source database from which content will be extracted.
User:	If required, enter a username for the DSN to connect to the database.
Pass:	Enter the password for the username given.
Type:	From the list, choose the type of database the source database is.
Service:	If the source database type is Oracle, type in the name of the node from which the Oracle Management Server is running.

Destination Database Information	
Field	Description
DSN	Type in, or choose from the list above, the DSN for the destination database to which content will be moved.
User:	If required, enter a username for the DSN to connect to the database.

Destination Database Information	
Field	Description
Pass:	Enter the password for the username given.
Type:	From the list, choose the type of database the destination database is.
Service:	If the source database type is Oracle, type in the name of the node from which the Oracle Management Server is running

4. Click the **Update** button to move the data from one database to another.
5. A message appears when the content is successfully moved.

NOTE [if you do not see a success message, your information is incorrect. Recheck all data and retry.](#)

Modifying Setup.xxx

After completing the steps described above, update your Setup.XXX files as follows:

- Specify Oracle as the DBType
- Specify DSN
- Enter username and password needed to access the Oracle Database
- Specify the Oracle Service being used by Ektron CMS300

This section explains how to make these changes.

Updating Setup.xxx Files

To update the setup.xxx files, perform the following steps:

1. Open the following files for editing:
 - CMS300sample\CMS300scripts/setup.asp
 - CMS300sample\CMS300scripts/setup.aspx

- CMS300sample/CMS300scripts/setup.php
- CMS300sample/CMS300scripts/setup.cfm

NOTE Setup.asp is used for demonstration purposes. The contents of Setup.ASPX/PHP/CFM are almost identical.

2. Use the following table to change the Setup.xxx file.

Line	Description	More Information
DSN	Replace with the DSN that points to the Oracle database.	"Creating New DSN" on page 65
DBType	Replace the current DBType with: DBType="Oracle"	
Username	Specify the username needed to connect to the DSN.	"Username" on page 63
Password	Specify the password for the username given.	"Password" on page 63
OracleSvr	Enter the proper Oracle service.	"Service" on page 63

3. After making the changes to the setup.xxx file, save and close it.

NOTE Although you may not use other platforms on your Web site, Ektron recommends changing *all* Setup.XXX files.

What's Next?

Now that you have configured Ektron CMS300 to use an Oracle database, you can use your Ektron CMS300 Web site.

Configuring Ektron CMS300

This chapter contains extra information about how to further configure your Ektron CMS300 application. The topics that are discussed include:

- ["Configuring E-Mail Notifications" on page 71](#)
- ["SSL Support" on page 81](#)
- ["DSN-less Connection" on page 86](#)

Configuring E-Mail Notifications

An email is sent to notify users when a task (such as approving a content block or submitting a form) was performed or needs to be performed. This section explains the steps needed to use Microsoft's SMTP service to enable e-mail notification in Ektron CMS300.

CDOSYS

To process email, **Ektron CMS300** uses the CDOSYS model. Using the Simple Mail Transport Protocol (SMTP) and the Network News Transfer Protocol (NNTP) standards, CDOSYS enables applications based on Windows XP, Windows 2000, or Windows 2003 to efficiently route e-mail and USENET-style news posts across multiple platforms.

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

NOTE If the SMTP Server does not find CDOSYS installed on the system that is processing email, it looks for CDONTS and tries to use that as a mail server protocol.

Set up SMTP Server

For CDOSYS to work, set up the SMTP server on your local system (to which you installed **Ektron CMS300**) or a remote system that will send and receive emails.

NOTE To access an SMTP server on a local or remote system, consult the system administrator who manages email in your organization. This administrator may not be the same as the Ektron CMS300 administrator.

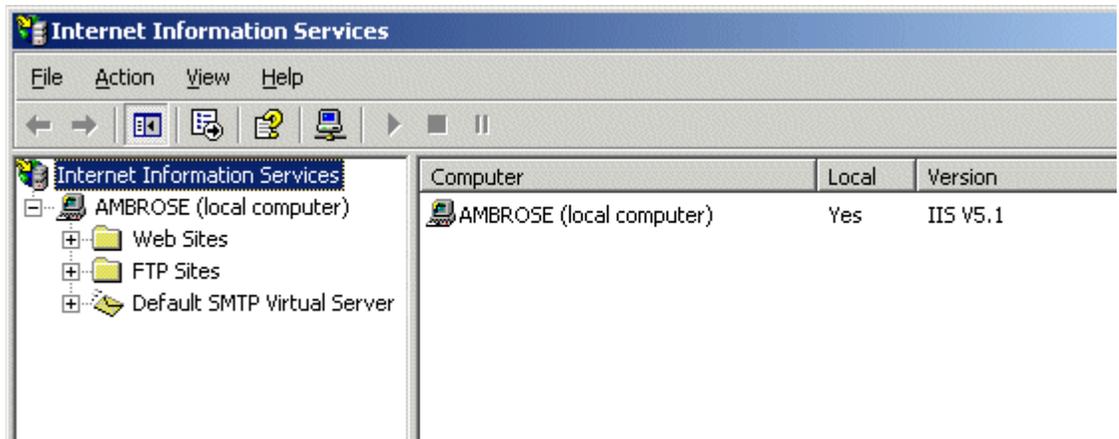
After the SMTP server is set up, configure it as described in "Verification for Relay" on page 72.

Verification for Relay

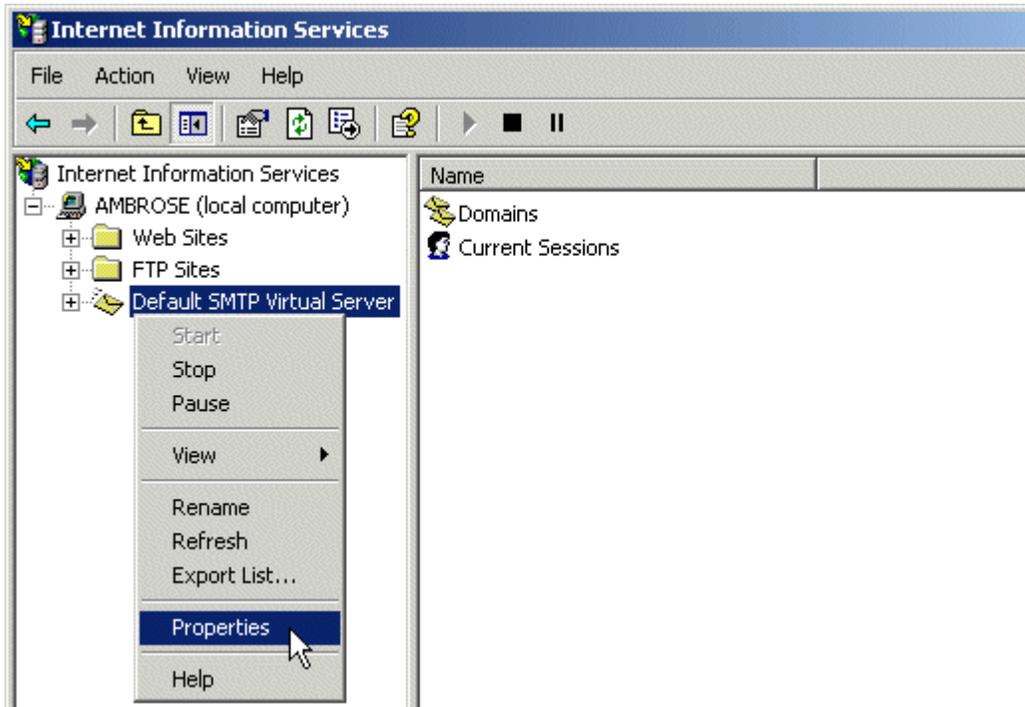
To verify that your Ektron CMS300 Web server's IP address supports relay through your SMTP server, follow these steps.

NOTE The WWW and SMTP components of IIS must be installed on the Web server to which Ektron CMS300 is installed.

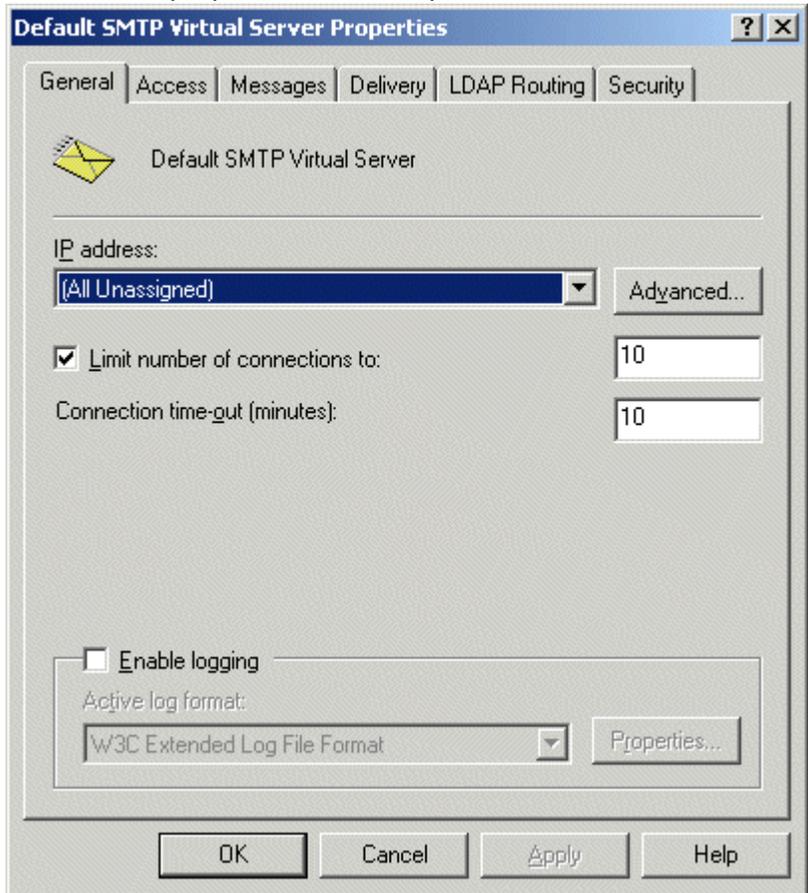
1. On your SMTP server, access your Internet Services Manager in the Administrative Tools.



2. In the IIS Management Console, select the SMTP virtual server, and then click **Properties** on the Action menu.

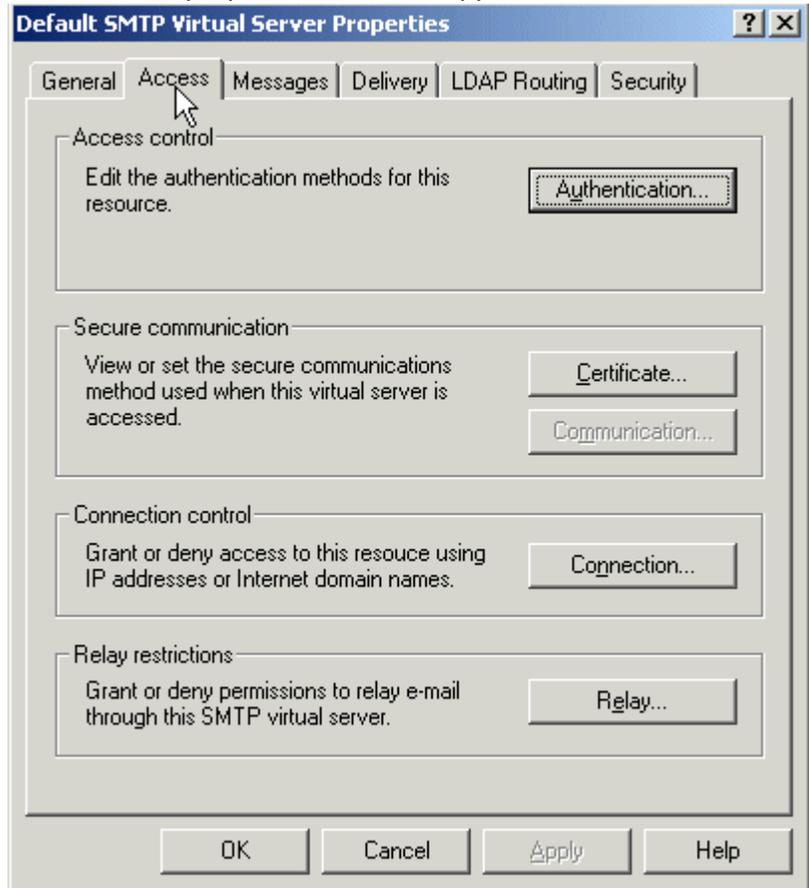


3. The SMTP properties window opens.



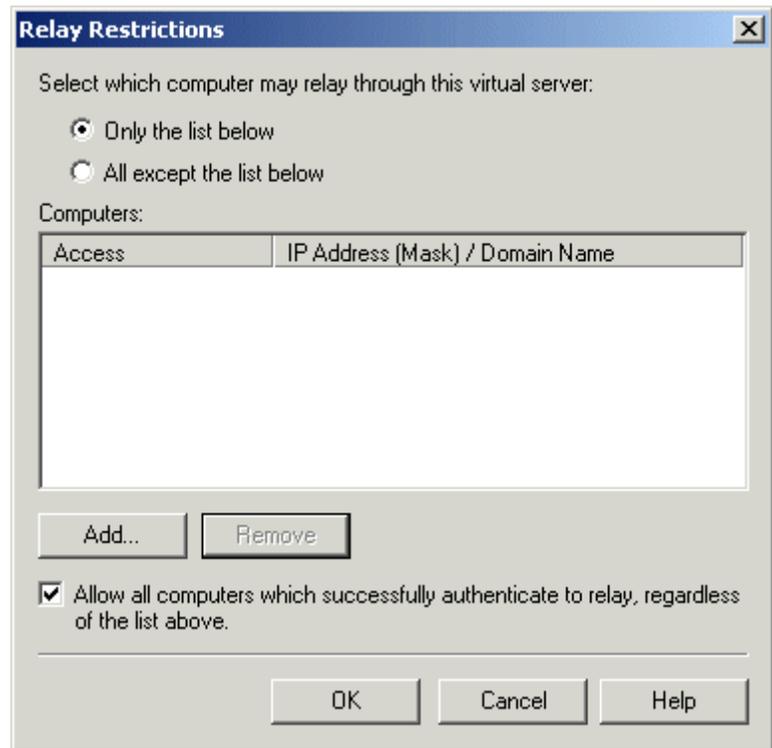
4. Click the **Access** tab.

5. The access properties windows appears.



6. In the Relay Restrictions section, click the **Relay** button.

- The Relay Restrictions window opens. Set or remove relay restrictions.



NOTE For more information, see “Setting or Removing Relay Restrictions from a Virtual Server” from this Web page: http://www.microsoft.com/windows2000/en/advanced/help/moc04_57.htm

Customizing Ektron CMS300 to Work with CDOSYS

Before using CDOSYS with SMTP to process email, make the following changes to Setup.XXX file.

NOTE If your server platform is not ASP, Ektron recommends making the same changes to setup.asp after changing the setup file for your platform (for example, setup.cfm for ColdFusion).

- Open `webroot\CMS300sample\CMS300scripts/setup.xxx` for editing.
- Navigate to the section that says

' CDOSYS required for use of SMTP. Can be local or remote.

```

SMTPServer = "localhost

SMTPPort = 25

SMTPUser = " "

SMTPPass = " "

```

- Using the following table, complete the information in the setup file.

Specify	See this section
SMTP Server name	"SMTPServer" on page 77
SMTP Port number	"SMTPPort" on page 78
SMTP username	"SMTPUser" on page 78
SMTP password	"SMTPPass" on page 78

SMTPServer

Find out how the SMTP server is set up in your work environment. There are two ways to set it up.

- Locally** - To set up the SMTP server on your local system, install IIS on your local system. See your System Administrator for details.

A local SMTP server can be any of these:

```

SMTPServer= "localhost"
SMTPServer= "127.0.0.1"
SMTPServer= "myname"

```

- Remotely** - You set up SMTP server on a remote system. See your System Administrator for details.

The SMTP server on a remote system can be something like this:

```

SMTPServer= "smtp.yourserver.com"
SMTP Sever= "yourserver.com"

```

SMTPPort

When setting up a mail server, you specify a port number used to retrieve email. In most cases, it is 25. If that is not the case, see your System Administrator for details.

For example: `SMTPPort = 25`

SMTPUser

The username used by the SMTP server to send and receive emails. You do not need a username when using a local SMTP server. However, when using a remote system for accessing email, you must provide an authenticated username before sending or receiving email. Often, the username is an email address, such as `SMTPUser = "yourname@companyname.com"`.

SMTPPass

A password is set up to allow the SMTP server to process email. By default, **Ektron CMS300** only accepts the password in an encrypted form.

To encrypt the password, Ektron provides a utility called **EncryptEmailPassword.exe**, which resides in the `C:\Program files\Ektron\CMS300\Utilities` folder.

Using the Encrypt Email Password Utility

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

1. Run EncryptEmailPassword.exe.
2. The Encrypt utility window appears.



3. In the **Text** field, enter your SMTP password.
4. Click the **Encrypt** button.
5. The tool displays an encrypted password in the **Encrypted** field.
6. Copy the encrypted password and paste it within the quotes of the `SMTPPass = ""` setting in the setup file.
7. Save and close the setup file.

NOTE After changing your platform's setup file as described below, make the same changes to the setup.asp file.

Allowing HTML in eMail

To enable **Ektron CMS300** to use HTML in the body of email, modify the setup.xxx file for each client. Within the setup file, find the line that begins with `SMTPServer =` and enter the name of your SMTP mail server. For example:

```
SMTPServer = "ekt-eng.intra.ektron.com"
```

WARNING! Localhost does not work.

This modification identifies the SMTP mail server, even if it is on your PC.

This change is needed for proper operation of both Instant email and Task notifications.

Error Messages

When submitting a form or a content block in an approval process, if you get an error message listed below, it is generated by the SMTP server on which you set up the mail system, *not* by **Ektron CMS300**.

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

What's Next?

After you set up the mail server, you can begin using **Ektron CMS300**. For e-mail notification to work properly in Ektron CMS300, the following criteria must be met.

- Valid system email address is provided
- Email notification is enabled in the **configuration>setup** screen
- Valid user email address is provided
- User email notification is enabled

For information about setting these in Ektron CMS300, refer to the **Ektron CMS300 Administrator Manual**.

SSL Support

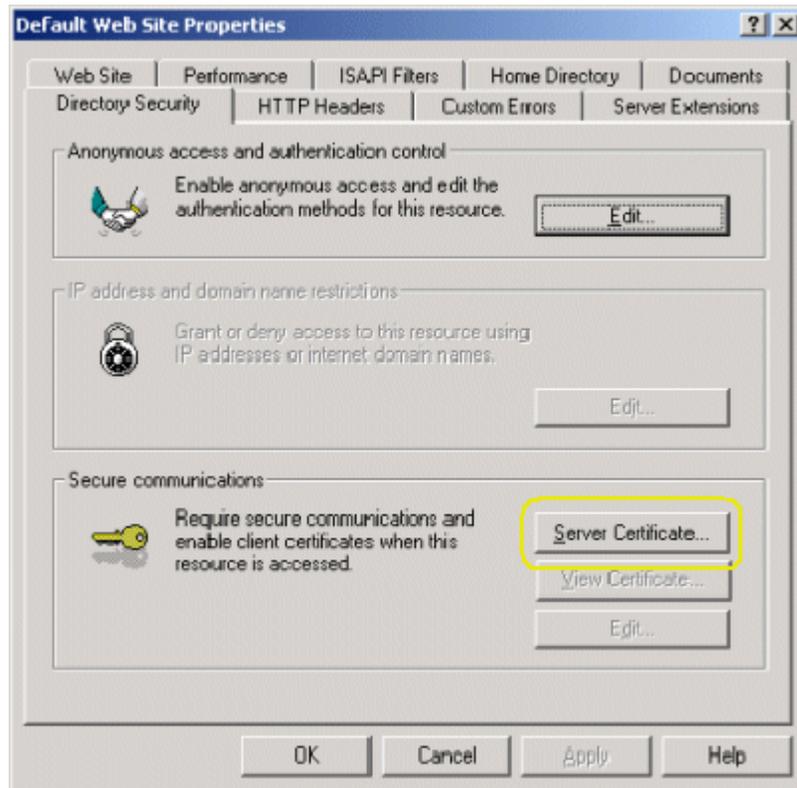
In Ektron CMS300, you can use SSL to encrypt the transmission of the username and password to the server during login.

When you set up the SSL certificate, and configure Ektron CMS300 to use it, the login page is launched in a Secure Socket Layer. This section explains how to set up SSL for Ektron CMS300.

Setting Up the Certificate

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

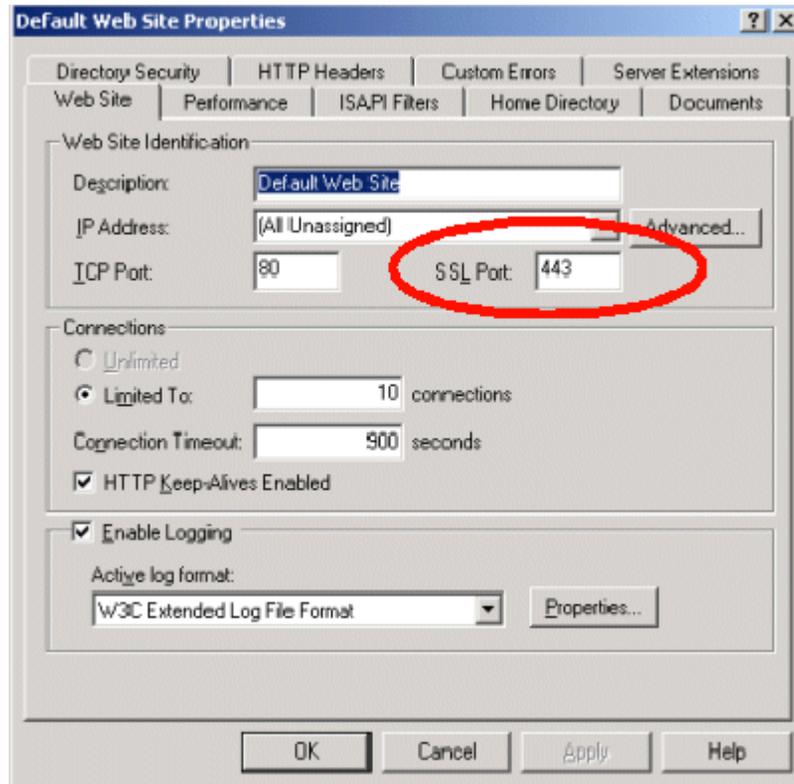
1. Access the Internet Information Server Administrator Console on your Web server.
2. Navigate to the computer and Web site to which Ektron CMS300 is installed.
3. Right click the Web site.
4. Click **Properties**.
5. Click the **Directory Security** tab.



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



7. Use the wizard to set up a certificate for your Web site.
8. Click the **Web Site** tab at the top of the Properties window.



9. Set the **SSL Port** that the Web server will use.

10. Click **OK**.

Having installed the certificate to the Web server, you can now configure Ektron CMS300 to use it.

Updating Ektron CMS300

To update Ektron CMS300 for SSL support, follow these steps.

NOTE After changing your platform's setup file as described below, make the same changes to the setup.asp file.

1. Open `webroot\CMS300sample\CMS300scripts/setup.xxx`. Choose the file extension that corresponds to your server platform. For example, `setup.cfm` for ColdFusion.
2. Find the line that starts with `Use SSL`.
3. Make the following changes to the file:

- UseSSL= **true**
 - SSL_Port = **443** (unless you specified another SSL port)
4. Save and close the file.
 5. You are set up to use the SSL support for Ektron CMS300.

WARNING!

If UseSSL is set to **True**, but the certificate is *not* installed to the Web Server, you cannot log in to Ektron CMS300.

DSN-less Connection

In addition to using an ODBC connection for a standard database connection, Ektron CMS300 lets you to create a DSN-less connection using OLE DB. If you are planning on using OLE DB, you have two options:

- Use a UDL file
- Use an OLE DB provider string

This section explains both options.

Before You Begin

Before you can access the Ektron CMS300 database via OLE DB, you must know

- The type of data you want to access
- The server that stores the data
- The database that stores the data

Creating a UDL File

Whether you are using a Provider string or a UDL file, you can use the UDL wizard to create the file or string. Once Ektron CMS300 is installed, you are ready to begin.

Windows 98/ME/NT

1. Right click the Desktop.
2. Select **New**.
3. Select **Microsoft Data Link** to create a .udl file.

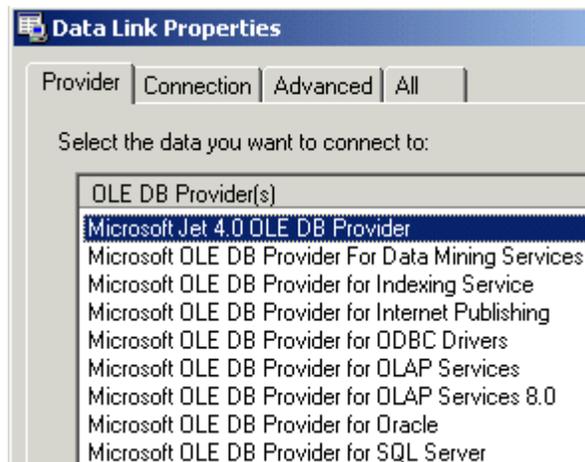
Windows 2000

1. Open **Windows Explorer** or **My Computer**.
2. Select the folder in which you want to save the .UDL file.
3. On the File menu, click **New** then click **Text Document**.
4. Right click the text file you created in step 3, then click **Rename**. Type the new file name using a **.udl** file extension. Press **Enter**. For example: *MyUDLfile.UDL*
5. You may get a warning that changing the file extension may cause files to become unusable. This is fine. Click **OK**.

Configuring The UDL File

After you create the UDL file, configure it to use the proper database and settings.

1. Double click the UDL file to bring up the Data Link Properties Dialog Box.
2. When the Data Link Properties dialog opens, click the **Provider** tab



3. Select the driver you want to use.
4. Click **Next >>** to move to the **Connection** tab.
5. Enter the connection properties.

NOTE Each driver requires different settings. All drivers require a user name and password.

6. Click **Test Connection** to verify your connection is working correctly. Change accordingly if you get an error.
 7. Select the **Advanced** tab only if you require advanced settings.
 8. When done, click the **OK** button to save and close the UDL file.
- Now that you have created and configured a UDL file, you have two options:

- ["Configuring Ektron CMS300 for the UDL File" on page 88](#)
- ["Configuring Ektron CMS300 for the Provider String" on page 89](#)

Configuring Ektron CMS300 for the UDL File

After you create and configure the UDL file, follow these steps to access that file.

1. Using Windows Explorer, navigate to the directory to which Ektron CMS300 for ASP was installed. By default, the directory is `webroot\CMS300Sample`.
2. Save the UDL file under the CMS300Sample directory.
3. Open the file(s):
 - `CMS300sample\CMS300scripts/setup.asp`
 - `CMS300sample\CMS300scripts/setup.aspx`
 - `CMS300sample\CMS300scripts/setup.php`
 - `CMS300sample\CMS300scripts/setup.cfm`
4. At the line where it says `DSN="CMS300sample_Access"`, change this to `DSN="Filename=" & <Path To UDL File> & "\ " & UDLFileName & ".UDL;"`

An example of this is below.

```
DSN = "File
name=C:\inetpub\wwwroot\CMS300Sample\MyUDLFile.udl"
```

NOTE If your server platform is not ASP, Ektron recommends making the same changes to `setup.asp` after changing the setup file for your platform (for example, `setup.cfm` for ColdFusion).

Configuring Ektron CMS300 for the Provider String

Converting UDL File to a Provider String

After creating the UDL file, you can convert the information into a string that can be used in Ektron CMS300.

1. Right click the UDL file you created earlier.
2. Click **Rename** from the list of options.
3. Rename the file MyUDLFile.txt.
4. You may get a warning explaining that changing file extensions may cause files to become unusable. This is fine, click **OK**.
5. Double click the file. Something like the following appears.

```
[oledb]
```

```
;Everything after this line is an OLE DB initstring
```

```
Provider=Microsoft.Jet.OLEDB.4.0;DataSource=C:\Inetpub\wwwroot\CMS300Sample\database\CMS300Sample_Access.mdb;Persist Security Info=False
```

6. The following line is the connection string from the file:

```
Provider=Microsoft.Jet.OLEDB.4.0;DataSource=C:\Inetpub\wwwroot\CMS300Sample\database\CMS300Sample_Access.mdb;Persist Security Info=False
```

This is used when configuring Ektron CMS300.

Configuring Ektron CMS300 to use the Provider String

With the provider string, you can configure Ektron CMS300 to use it.

1. Using Windows Explorer, navigate to the directory to which Ektron CMS300 was installed. By default, the directory is `webroot\CMS300Sample`.
2. Save the.txt file under the CMS300Sample directory.
3. Open the file(s):
 - CMS300sample\CMS300scripts/setup.asp
 - CMS300sample\CMS300scripts/setup.aspx
 - CMS300sample\CMS300scripts/setup.php
 - CMS300sample\CMS300scripts/setup.cfm

4. At the line that says `DSN="CMS300_v47_Access"`, change this to `DSN="Provider= <string>"`.

An example of this may be

```
DSN = "Provider=Microsoft.Jet.OLEDB.4.0;DataSource=C:\Inetpub\wwwroot\
CMS300Sample\database\CMS300_v47_Access.mdb;Persist Security Info=False"
```

NOTE If your server platform is not ASP, Ektron recommends making the same changes to `setup.asp` after changing the setup file for your platform (for example, `setup.cfm` for ColdFusion).

Customizing Ektron CMS300

The following chapter contains information about customizing Ektron CMS300. The following topics are explained.

- "Language SDK" on page 91
- "Customizing Automatic email" on page 91
- "Branding Ektron CMS300" on page 96

NOTE Another type of customization involves enabling support for multiple languages. This is documented in the Ektron CMS300 Administrator manual section Multi-Language Support > Working with non-English Content > Enabling Support for Multiple Language Content.

Language SDK

Ektron CMS300 includes a unique tool for translating its screens and messages to over 120 languages. After translating the text strings, you make the language active on the Web site. This action translates all English strings to the selected language.

To learn more about using **Ektron CMS300's** Language Software Development Kit (SDK), see "Language SDK" in the **Ektron CMS300 Administrator's Manual**.

Customizing Automatic email

Ektron CMS300 can send email notification to users, informing them that actions have either taken place or are requested of them. For example, a content contributor receives an email that his content was published to a Web site.

These emails are stored in and received from the `app_messages` table in the database. In that table, each email consists of one string for the subject and one for the body. Ektron CMS300 does

not currently support HTML emails, however the messages are fully customizable.

The body of an email often includes variables, which are between the @ symbols. Ektron CMS300 replaces these variables with specific information for that instance of the email. For example, **@appContentTitle@** in the following sentence is replaced with the email's title.

Before	The content " @appContentTitle@ " was deleted.
After	The content "Home Page Content" was deleted.

These emails can be customized. The variables can be taken out or moved around. Text can be added, rewritten, or reorganized.

See Also: "[Variables](#)" on page 93

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

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

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

Using the Language SDK to Customize Email

Ektron CMS300 provides an SDK to convert Ektron CMS300 to different languages. The SDK provides a means for creating versions of English strings in different languages. This SDK can also be used to change English email notification messages. By default, the language SDK files are located in `C:\Program Files\Ektron\CMS300\utilities\language_SDK`. The files are:

- lang.asp
- lang_englishdisplay.asp
- lang_entry.asp

- langfill.htm
- lang_top.asp

Copy these files into the CMS300 sample folder.

WARNING! Remember to remove these files from the Web site when you are done.

To translate the message variables to a language of your choice, follow these steps.

1. Browse to <http://www.YourSite.com/CMS300Sample/lang.asp>.
2. From the dropdown box at the top of the screen, choose **English (US)**.
3. The left frame displays all messages in the database.
4. Click the title of the email message you want to translate.
5. The right frame displays an input box, which displays the English message.
6. In this box, translate the message into the desired language.
7. Click the Update button.

NOTE [All Ektron CMS300 messages can be updated here, not only email.](#)

To learn more about using **Ektron CMS300's** Language Software Development Kit (SDK), see "Language SDK" in the **Ektron CMS300 Administrator's Manual**.

Variables

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

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

Variable	Inserts
@appDeclinerFirstName@	First name of user who declined content block
@appDeclinerLastName@	Last name of user who declined content block
@appSubmitterFirstName@	First name of user who submitted content block
@appSubmitterLastName@	Last name of user who submitted content block
@appFolderPath@	Location of content block in folder tree in Ektron CMS300 Workarea
@appContentLink@	Link to content block on Web site Note: You must be logged in to see changes
@appSubmitterDateTime@	Date and time content block was submitted
@appApprovalList@	Current approval list content block must pass through
@AppComment@	Comments for content block

List of Ektron CMS300 Emails

Notify Approval Process Complete

There are four emails for notifying users that the approval process is complete.

Deletion of Content Approved

Message Title: email subject: content deletion approved.

Message Text: Deletion of content has been approved.

Message Title: email body: content deletion approved.

Message Text: The deletion of the content “@appContentTitle@” has been approved. The content deletion will occur on: @appDeletionDateTime@.

Immediate Deletion of Content

Message Title: email subject: content has been deleted.

Message Text: Content has been deleted.

Message Title: email body: content has been deleted.

Message Text: The deletion of the content “@appContentTitle@” has been approved. The content was deleted immediately.

Approved Content Awaiting Go Live Date

Message Title: email subject: content changes approved.

Message Text: Content changes have been approved.

Message Title: email body: content changes approved.

Message Text: The changes to the content “@appContentTitle@” have been approved. The content changes will occur on: @appChangeDateTime@.

Approved Content Published Immediately

Message Title: email subject: content has been changed.

Message Text: Content changes have been made.

Message Title: email body: content has been changed.

Message Text: The changes to the content “@appContentTitle@” have been approved. The content changes went live immediately.

Decline Approval Request

Message Title: email subject: approval request declined.

Message Text: Content approval request declined.

Message Title: email body: approval request declined.

Message Text: Your submitted approval request for the content “@appContentTitle@” has been declined by “@appDeclinerFirstName@ @appDeclinerLastName@”.

Send Approval Message

Message Title: email subject: request for approval.

Message Text: Request for content approval.

Message Title: email body: request for approval.

Message Text: The content “@appContentTitle@” has been submitted for your approval by “@appSubmitterFirstName@ @appSubmitterLastName@”.@appCRLF@@appCRLF@To locate the content, the folder path in your workarea is: @appFolderPath@.@appCRLF@@appCRLF@The following link will take you to the submitted content block on the Web site: @appContentLink@.@appCRLF@@appCRLF@Please Note: You must login and select the preview icon to view the changes.@appCRLF@@appCRLF@The content was submitted for approval on: @appSubmittedDateTime@.@appCRLF@@appCRLF@Approvals: @appApprovalList@@appCRLF@@appCRLF@Comment: @appComment@.

Branding Ektron CMS300

Ektron CMS300 can be branded by a Web Developer. Through the use of a style sheet and replacing Ektron CMS300’s default graphics, the application can take on a different look that is fully customizable. Developers can incorporate a company logo, institute company colors, and control the look and feel of the application to create a personalized, web-based, content management solution.

Style Sheet

Ektron CMS300’s style sheet, `global.css`, is located in the `/csslib` folder under the `CMS300scripts` directory.

Using widely accepted style sheet classes and class attributes, you can modify the application, including colors, spacing, fonts,

etc. Also, if you later upgrade or re-install **Ektron CMS300**, you can reuse this file and retain your changes.

Class Explanation

General Classes

Class	Description
.titlebar	Located at the top of every page in the application, this class is used for page explanations or location explanation. While navigating through Ektron CMS300, this page header or titlebar tells the user where they are (for example, Viewing content in content.asp).
.titlebar-error	Very similar to titlebar, this class is used to display error messages.
.input-box-text	In front of every input box is text explaining its purpose. This class controls that text.
.title-header	This class is used under the titlebar when information is going to be listed. This is used to control the column headers.
.info	Any important information that should stand out gets the info class. An example of this class can be seen in the content page when showing the attributes of the content block.
.info-header	Very similar to the info class. This is used for information that should stand out but starts a new section on a page. An example is the word "metadata" or "summary" on the content block properties page.
.toolbar	This class controls the background of the toolbar. <u>NOTE: Do not change this class unless you are changing all icons.</u>
.appname	Under the application logo are the words Content Management . This class controls the look of these words. This class should match the titlebar class to maintain consistency.

Calendar Classes

Class	Controls
.cal-link	Text used for the days of the week
.cal-header	Table rows, cells and links. The top row of the calendar is controlled by the TR. The TD version controls the text defining the active month. The Anchor class controls the month before and after. Also, cells that aren't used in the month receive their color from this class.
.cal-header2	The color used behind the days of the week.
.cal-day-link	The active (that is, selected) day.
.cal-day-link2	All days in the month that are not active.
.cal-submit	The buttons at the bottom of the calendar.

Workarea Classes

Class	Controls
.workarea	The background color for the workarea.

History Classes

Class	Description
.history-list	This class is used for two attributes. The TD controls the active date or the version that is presently published. The Anchor class is for the other versions of the content block.

Login Classes

Class	Controls
.login	The background color of the login and logout screen.

Folder Control Classes

Class	Controls
.folder	<p>The font attributes of the folder control.</p> <hr/> <p>NOTE: The font size cannot be controlled by the style sheet. It is set by the browser.</p> <hr/>

Library Classes

Class	Controls
.library	The background color of the three panels in the library.

Images

Application Images

To change the look **Ektron CMS300** via a logo, you must change two images.

- **workarea_logo.gif** - the logo of the application. It presently displays the Ektron CMS300 logo. It resides in the `\cms300scripts\images\application` directory.
By changing this image, the application can be branded to display any other graphic or logo. You must use the same size attributes of 155 pixels wide by 77 pixels high. Alternate size attributes will cause the application to look wrong.
- **navigation_edit.gif**. This also resides in the application folder. This image is used for the left bar in the edit content, edit metadata, edit summary, and add content work areas. This image can also be changed but must retain the same size attributes of 128 pixels wide by 500 pixels high.

A third image, **workarea_back.gif**, makes up the blue/gray background at the top of the workarea. The size attributes are 50 pixels wide by 77 pixels high. This image cannot be less than 50 pixels wide as Netscape and FireFox will not repeat it correctly.

Language Images

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

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

There are approximately six images in each language folder. an Adobe Photoshop file, workarea_top.psd, can be found under `\cms300scripts\images\English` folder. You can modify these images as needed.

Moving Content from Staging to Production Server

Overview

Before **Ektron CMS300**, HTML files were deployed to a Web site in a three-stage process.

1. An author updates content on a staging server, which has a copy of the Web site.
2. A reviewer checks and possibly modifies the content.
3. The approved content is moved to a production server, which hosts the live Web site.

An Ektron Content Management System (CMS) provides a *virtual staging server*, which lets authors work directly on a production server yet prevents site visitors from viewing modifications until they are approved.

Here's how it works. An author edits one or more content blocks and submits them for approval. Authorized reviewers preview the changes and decide to publish or reject them. Reviewers can also edit the content then publish. All of this can occur on a single server, which acts as a virtual staging and a production server.

Ektron CMS300 also supports the traditional model of separate staging and production servers. This section describes options for managing servers and suggests best practices for a successful deployment.

Best Practice

Ektron's suggested best practice is a combination approach, using both a virtual and a physical staging server.

- Use a *virtual staging server* for the majority of your Web updates. Ektron takes this approach with its site, www.ektron.com.

Most of the time, authoring occurs on the production server, which acts as a virtual staging server. The CMS workflow controls how content is updated to live site, so content will only go live when it's ready.

- When the Web site is undergoing a significant architectural change, use a *physical staging server*. An example of such a change would be one or more new templates. For more information, see ["Managing an Architectural Change" on page 102](#)

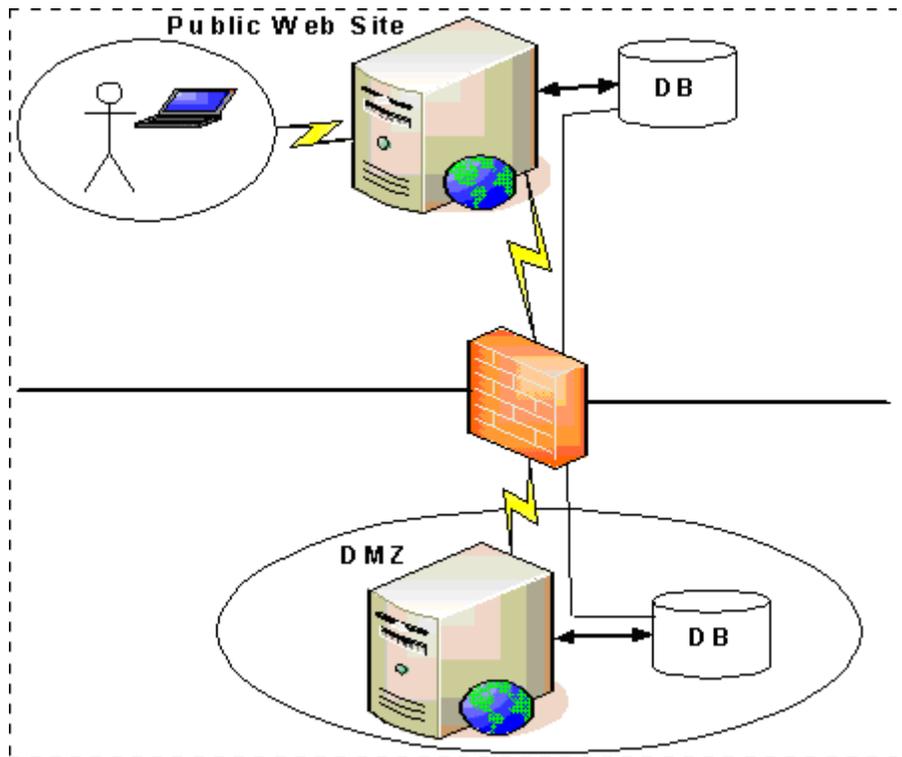
Managing an Architectural Change

Sometimes, the changes to your site are so substantial that the use of separate staging and production servers is warranted. Examples would be the release of new templates, or a redesign of the site.

When making such a change, follow these guidelines.

1. Copy the staging server content to the production server.
2. Disable authoring on the production server. At this point, changes are permitted on the staging server only.
3. Test the new architecture on the staging server. Modify as needed until you are satisfied with the results.
4. Move the updated files from the staging to the production server. For more information on moving files from the staging to the production server, see ["Deploying Separate Staging and Production Servers" on page 103](#)
5. Enable authoring on the production server.

Deploying Separate Staging and Production Servers



Ektron CMS300 can support multiple servers. For example, as illustrated above, you can have a staging server inside the DMZ, and a production server outside the DMZ to host the public Web site.

Several methods are available for moving information between servers.

- ["Basic Deployment" on page 104](#)
- ["SQL Replication and CMS Load Balancing" on page 104](#)
- ["Deploying with MS Application Center" on page 104](#)

Basic Deployment

This scheme provides the most rudimentary methods for transferring data from a staging to a production server.

To move the database, back it up on the staging server and restore it on the production server.

To move the non-database files (library assets, .dlls, etc.), use FTP to transfer from the staging to the production server.

SQL Replication and CMS Load Balancing

To move the database, use database replication techniques to copy changes from the staging to the production server.

To move the non-database files from the staging to the production server, enable load balancing support in the CMS. When used properly, load balancing is an extremely efficient and time saving tool for your Ektron CMS300 driven Web site. Instead of uploading an image or file on each Web server that makes up your Web site, you only need to upload once. The load balancing feature replicates the image or file in each directory specified by Ektron CMS300. For more information, see the "Load Balancing" chapter of the **Ektron CMS300** Administrator Manual.

Deploying with MS Application Center

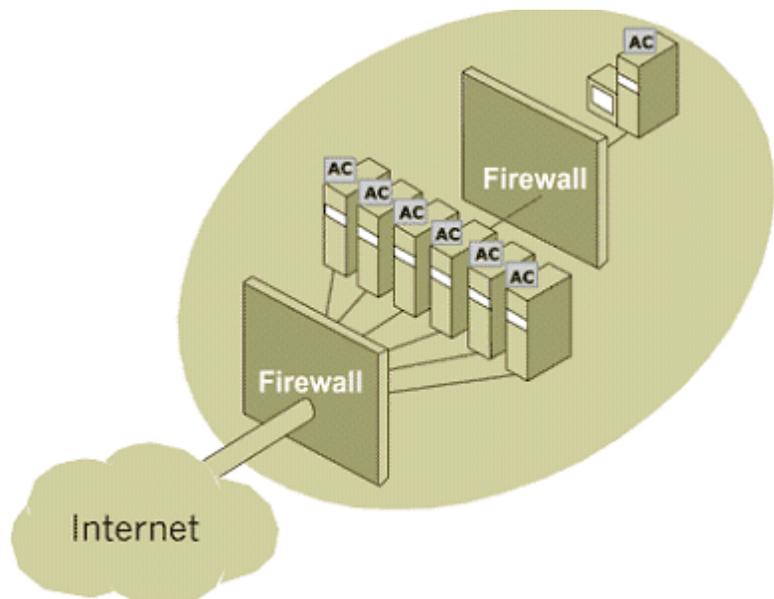
Application Center 2000 is Microsoft's deployment and management tool for high-availability Web applications built on the Microsoft Windows® 2000 and Windows Server™ 2003 operating systems. Application Center 2000 makes managing groups of servers as simple as managing a single computer. It was designed to replicate content from one server to many.

You can move Ektron CMS files, templates, assets (uploaded images & files), DLLs, registry entries, and even DSNs from one server to another using Microsoft's Application Center. Use SQL Server to move the database content. This strategy lets you move a staging version to a production server with a click of a button.

Application Center 2000 divides Web site content and code into *applications* that can be updated independently. These applications can consist of any combination of HTML and ASP files, COM+ components, .NET components, Windows registry

settings, and Internet Information Services (IIS) settings. Each server in the cluster hosts a copy of the application, which Application Center keeps synchronized.

Microsoft Application Center 2000 is deployed on each server in a cluster. In a typical development environment, Application Center is also deployed to a staging server that is not a member of the cluster. This staging server acts as the drop-off point for Web content and application developers. With Application Center, you can move content and configuration settings from the staging server to the cluster with an easy, point-and-click interface.



Application Center can deploy content to foreign clusters, so that network administrators can easily move content and applications from a staging server to a production cluster of multiple servers. The staging server does not need to be a member of the production cluster. For more information, see ["Deploying Ektron CMS300 via MS Application Center"](#) on page 117.

Migrating Your Site to Ektron CMS300

Overview

This chapter explains the steps needed to migrate your Web site to a site using Ektron CMS300. This chapter answers the following questions:

- What do I need to copy to my Web site?
- How do I set up and deploy my templates?

This chapter assumes you installed Ektron CMS300 and have read the Ektron CMS300 Administrator Manual so that you have an understanding of basic concepts, some of which are mentioned here.

Initial Steps

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

Installation

Ektron CMS300 requires a physical installation of the product. If you do not have physical access to the machine, someone with access to the machine must run the install.

NOTE For additional information about installing Ektron CMS300, see ["Installing Ektron CMS300" on page 30](#).

The back end of Ektron CMS300 consists of COM objects and a layer of ASP. The COM objects must be registered on the system. Fortunately, the install does this.

If you do not have physical access to the machine, have someone with access run the install or manually register the COM objects.

Verify Installation

After you install Ektron CMS300, verify that it is properly installed by using the sample site. By default, the sample site is located at the following address on the machine to which Ektron CMS300 is installed:

`http://localhost/CMS300Sample/index.asp`

If you can browse the sample site, and it is working properly, CMS is properly installed.

Best Practices

Ektron recommends keeping a working version of the sample site. This can be used to help you debug problems later on. For instance, if you begin to encounter errors on your site, you can refer to the sample site to see if those same errors occur. If they do, that may indicate a problem with the installation. If they do not, an external factor is causing the problem.

Setting up Your New Site

This section explains tasks that you need to perform when setting up your Ektron CMS300 site.

What to Copy to Your Site

First, you need the application core files, which represent the display layer for the application. These files help the workarea, library and content functions operate properly. The files are kept in the `CMS300Sample/CMS300Scripts` directory.

Copy the `/CMS300Scripts` folder into your site's folder.

NOTE If you are using ColdFusion, copy the `CMS300Sample/Application.cfm` file as well. If you already have an `application.cfm` in your site, just copy the include line from our `application.cfm` and put it in yours. This include line points to the `setup.cfm` in the `scripts` folder.

Setting up the Database

Since all content is stored in a database, you need to create one. Ektron CMS300 supports the following database types:

- Microsoft Access
- Microsoft SQL (7.0 and greater)
- MySQL
- Oracle (9i)

The installation creates a sample Access database and the scripts needed to create tables in the other databases. Additional information about creating databases for Ektron CMS300 is found in ["Ektron CMS300 Databases" on page 48](#).

Best Practices

If you plan on using Ektron CMS300 in an Internet environment or large Intranet, it is *strongly* recommend that you use MS SQL as your database. MS-SQL is more secure and robust than Access and is not subject to data corruption as Access is. MySQL and Oracle would work fine as well.

The installation includes a database mover to help you move content from one database type to another. For instance, if you begin development in MS Access and now want to use an MS SQL database, the database mover moves information between the databases.

If you want to use a DSN-less connection instead of ODBC, refer to ["DSN-less Connection" on page 86](#).

Modifying Application Parameters

After you install and create your Ektron CMS300 database, you need to modify the application parameters. These settings are found in the setup file that corresponds to your scripting environment. For instance, if you are using ASP, modify setup.asp; for ColdFusion, modify setup.cfm. These files are located in the / CMS300Scripts folder.

NOTE If your server platform is not ASP, Ektron recommends making the same changes to setup.asp after changing the setup file for your platform (for example, setup.cfm for ColdFusion).

Edit that file and modify the following settings

Setting	Type in...
DSN	The datasource name you created for your database.
dbtype	The type of database you are using. <u>Note: When using an Oracle database, the DBType="Oracle"</u>
dbusername/ dbpassword	The username and password, if your database requires one.
OracleSvr	Oracle service information.
SitePath	The relative path from web root to the scripts folder.

NOTE If you are using SSL, the settings you need to modify are explained in "SSL Support" on page 81.

Creating a Login Page

Now that everything is set up, you can create a login page. You can either copy the one from the sample site or create your own. The easiest way to create a login page is to use the Dreamweaver/ UltraDev extension supplied in the installation. That extension lets you add the login tag through the WYSIWYG interface.

(See "Dreamweaver Extension Support" in the Ektron CMS300 Developer's Reference Manual for additional information.)

If you do not have Dreamweaver/UltraDev, a list of content tags can be found in the Ektron CMS300 Developer's Reference Manual.

Logging In

To log into your Ektron CMS300 Web site, perform the following steps:

1. Browse to the login page you created and click the login button.
2. A login dialog box prompts for a username and password.
3. Enter the default username, **admin**, and password, **admin**, and click **Login**.
4. You are logged into Ektron CMS300

NOTE If you get a message that the application is locked, log in using the built-in account. The username and password is **builtin/builtin**. You get this message if your license key is invalid or hasn't been entered yet.

Modifying Configuration Settings

After logging in to the Ektron CMS300 Web site, access the Workarea by clicking the Workarea button. From there, you can modify the configuration settings.

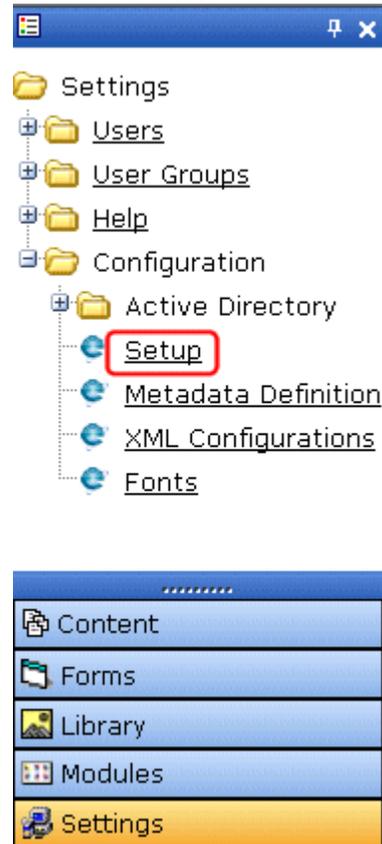
Setting up Active Directory

If plan to use Active Directory, configure this now. The settings for Active Directory can be found under the configuration folder.

Refer to “Active Directory Integration” in the Ektron CMS300 Administrator Manual for further information.

Modifying the Setup Screen

The Ektron CMS300 setup section is located under the Configuration folder.



The setup section allows you to configure items such as your license key, style sheet support, max content sizes and default language. To learn more about modifying the setup screen, see the **Ektron CMS300 Administrator** manual section “Introduction to Ektron CMS300” > “Modifying the Application Setup Screen.”

Setting up Meta Data

Ektron CMS300 includes extensive metadata support. Metadata definitions are in the Configuration folder in the workarea. You can have as many metadata definitions as needed. If your Web site supports multiple languages, you need to set up metadata for each supported language.

To learn more about working with metadata, see the **Ektron CMS300 Administrator** manual section “Managing Content” > “Metadata.”

Setting up XML Configurations (Ektron CMS300 only)

You can also set up your XML configurations. The XML files (such as schemas and XSL transforms) are created outside of Ektron CMS300, using tools such as XML Spy. These XML configurations are then associated with content blocks and content folders.

To learn more about setting up XML configurations, see the **Ektron CMS300** Administrator manual section “Special Features” > “Managing XML.”

Creating Ektron CMS300 Users

If you are not using the Active Directory support, you need to manually add users. The number of allowed users is determined by your license key. For instance, if you purchased a 10-user license, you can only enter 10 users in the system.

NOTE [If you exceed the licensed amount, you may get locked out.](#)

To learn more about setting up users, see the **Ektron CMS300** Administrator manual section “Managing Users & User Groups.”

Creating User Groups

Every user must belong to a group. When you first add a user, he/she is automatically added to the Everyone group. You can create more user groups to suit your needs. There is no limit to the number of user groups.

You might group users by function (for example, all marketing users in a marketing group) or by permission type (for example, all editors in an editors group, and all publishers in a publishers group).

To learn more about setting up user groups, see the **Ektron CMS300** Administrator manual section “Managing Users & User Groups.”

Configuring Content Folders

After creating users and user groups, create folders to organize content blocks, and assign permissions and workflow to the content in them. You can create as many folders as you want, and each folder level can go as deep as you want.

Best Practices

It is best to keep your folder structure simple so it is easy for your users to navigate.

The folder structure should make sense to the users who will navigate it. Maybe you'll have 6 or so top level folders, and each folder may go 4 or so deep.

This folder structure is replicated under the library folder.

As you create a folder, assign a default template and style sheet. The default template is used when a new content block is created and Ektron CMS300 creates a Quicklink that points to the new content block. If you do not provide a default template, it is inherited from the parent folder.

You can also add the permissions and approval process as you create the folder structure. Permissions can be given to a particular user or a user group. The same goes for the approval process.

Best Practices

Limit permissions to the Everyone group, because every user has permission to that content. Similarly, the Everyone group should probably not have approval permissions, because that means that everyone can publish content.

To learn more about setting up folders, see the **Ektron CMS300 Administrator** manual section “Managing Content Folders.”

Creating Your Templates

Now you can create your templates. Templates contain the “look and feel” of the site. Masthead, navigation, footer graphics, and content blocks are all part of the template.

The easiest way to create templates is to use Dreamweaver/ UltraDev. The installation includes a custom extension that lets you add Ektron CMS300 custom tags through the WYSIWYG interface. If you do not have Dreamweaver/UltraDev, a list of tags can be found in the Developer's Manual. Refer to "Dreamweaver Extension Support" in the Ektron CMS300 Developer Reference Manual for additional information.

Guidelines for Creating a Template

- Begin the template file with an include statement that references `site_scripts_path.asp`, the file that calls custom Ektron functions and allows the page to function properly.
- If you are not using Dreamweaver, create a simple file that corresponds to your Web Server platform. For example, `contact-ektron.php`. Place it in the folder that holds your Web site files.
- A list of functions is available in the **Ektron CMS300 Developer Manual**.
- Add as many content functions as you want to a template. However, you can only insert one dynamic tag per template.

Here is an example of a simple page (no headers or footers) that calls a static content block whose id is 1.

```
<!-- #include file="site_scripts_path.asp" -->

<html>

    <head>

        <title> Login Page </title>

    </head>

    <body>

        <tr>

            <td>

                <% ecmContentBlock(1) %>

            </td>

        </tr>

    </body>

</html>
```

```
</body>
```

```
</html>
```

You can embellish and build up your templates based on this model.

Best Practices

Since dynamic templates have URL parameters to them, it is best to make each landing page and other important pages static tags. This makes it easier for you to remember if you need to provide that link to someone. For instance, each main landing page off your main navigation could use a static tag. Then, as you go deeper into that section, those pages use a dynamic tag.

Migrating/Creating Content

At this point, you can begin to create/migrate your content. If you are migrating content from an existing site, add a new content block in a content folder, and cut and paste the content into the Ektron CMS300 editor.

NOTE Images and files must be uploaded and inserted into the content separately.

Deployment

Deployment from development to production is as simple as moving the files over. To properly deploy your new Ektron CMS300 Web site, perform the following steps.

1. Register the Ektron CMS300 COM objects on your production machine.

NOTE If you performed the installation program on your production server, the objects are registered automatically.

2. Copy all assets (templates, images, files, etc.) from your development box to your production machine.

3. Move the database.

You can either

- point your data source on the production machine to the same database you were using

or

- make a copy of the database, move it to your production box and make a data source to that

Setting Up a Multilingual Web Site

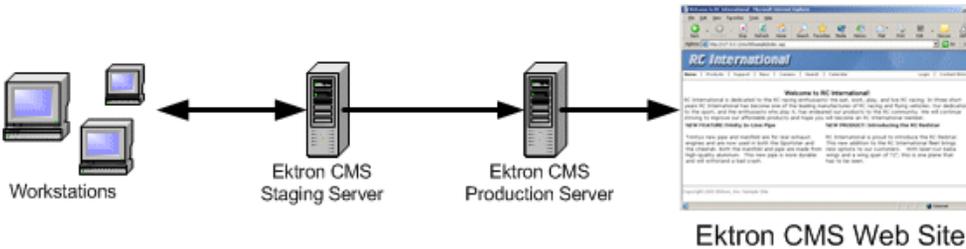
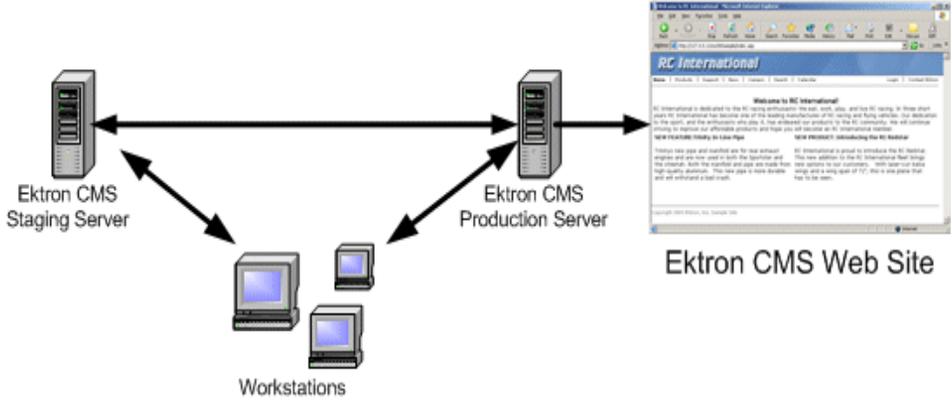
Beginning with Release 4.7, **Ektron CMS300** supports content blocks in several languages. To learn what is involved in converting your site to support several languages, see the **Ektron CMS300** Administrator manual section “Multi-Language Support” > “Working with Multi-Language Content” > “Setting Up a Multi-Language Web Site.”

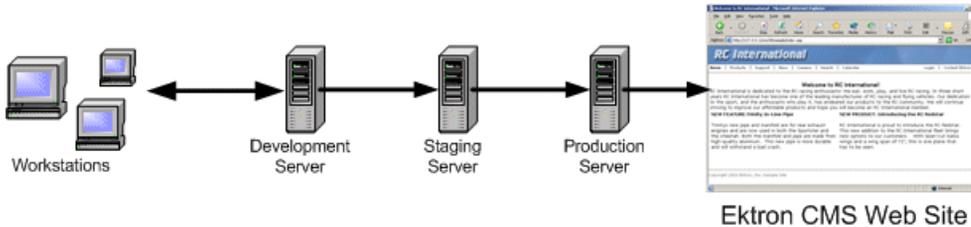
Deploying Ektron CMS300 via MS Application Center

Overview

By default, Ektron CMS300 is installed directly on a production server, and a virtual staging server manages changes to the Web site's content and assets. This model works for most users, but other methods can be used for staging.

Three major uses of staging are listed below.

Description	Flowchart
<p>A staging to production model. No changes are made on the production server.</p>	 <p>The diagram illustrates a staging-to-production model. On the left, three workstation icons are labeled 'Workstations'. A double-headed arrow connects them to a server icon labeled 'Ektron CMS Staging Server'. A single-headed arrow points from the 'Ektron CMS Staging Server' to another server icon labeled 'Ektron CMS Production Server'. A final single-headed arrow points from the 'Ektron CMS Production Server' to a screenshot of the 'Ektron CMS Web Site'.</p>
<p>A staging to production model. Changes are made to both servers then merged.</p>	 <p>The diagram illustrates a bidirectional staging model. In the center, three workstation icons are labeled 'Workstations'. Two server icons are positioned above them: 'Ektron CMS Staging Server' on the left and 'Ektron CMS Production Server' on the right. Double-headed arrows connect each server to the 'Workstations'. A double-headed arrow also connects the two servers. A single-headed arrow points from the 'Ektron CMS Production Server' to a screenshot of the 'Ektron CMS Web Site'.</p>

Description	Flowchart
<p>A development to staging to production model.</p>	 <p>The flowchart illustrates the deployment process. It starts with 'Workstations' (represented by three computer icons) on the left. A double-headed arrow connects the Workstations to the 'Development Server' (a server rack icon). A single-headed arrow points from the Development Server to the 'Staging Server' (another server rack icon). Another single-headed arrow points from the Staging Server to the 'Production Server' (a third server rack icon). Finally, a single-headed arrow points from the Production Server to a screenshot of the 'Ektron CMS Web Site' (a browser window showing a welcome message for 'IRC Internacional').</p>

This chapter explains how to deploy Ektron CMS300 in different models.

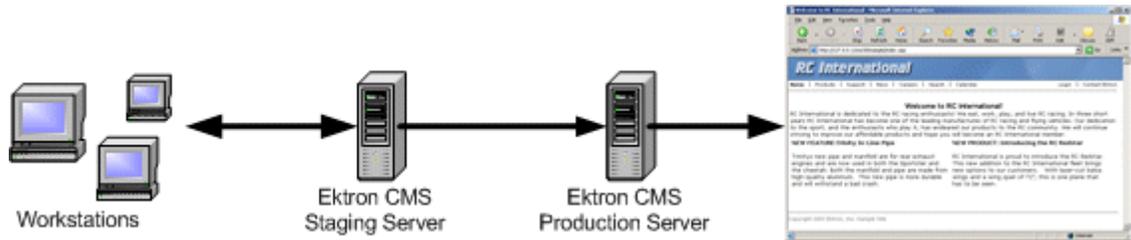
What is Deployment?

Deployment means moving the following from one server to another using Microsoft's Application Center:

- application files
- templates
- assets (that is, uploaded images and files)
- registry entries
- DSNs

Then, a SQL server can move the database content.

This model requires at least two servers: a staging server, and a production server that publishes files and data to the live Web site. Below is an example of this model.



In this example, Ektron CMS300 users changes content and files on the staging server. When desired, the necessary files are deployed using MS Application Center, and the data stored in the database is synchronized, using MS SQL Server, to the production server to be viewed by visitors.

Other Configurations

Several staging servers could be used to further stage Web site content. Reverse publishing may also be used to make a staging server match the production server.

Audience

Since the deployment model relies heavily on Microsoft Application Center and Microsoft SQL Server, you should have some knowledge of them. Although the basic steps needed to configure the deployment model are explained in this chapter, prior experience with these applications helps you make better decisions.

Requirements

The requirements include:

- Ektron CMS300
- Windows 2000 Server or Higher
- Microsoft SQL Server
- Microsoft Application Center

Prerequisites

Before you can perform the configuration, complete these tasks.

1. Obtain two similar server machines with the following configurations:
 - Pentium-compatible 400 MHz or higher processors
 - 256 MB Ram (minimum)

NOTE The more differences between the two machines (for example, RAM, speed, brand, etc.), the greater the chance problems may occur.

2. Install Windows 2000+ (or higher) Server operating system on both machines.
3. Enable IIS on both servers.
4. Install MS-SQL server on both servers.

NOTE Be sure the security is configured properly by using either Windows or SQL Server authentication. Refer to your MS-SQL documentation for more information.

5. Install Microsoft Application Center on both servers.

Once the prerequisites are met, you can configure staging and production servers to deploy Ektron CMS300.

Deployment Model Configuration

The following section explains how to configure servers for Ektron CMS300 deployment.

Configuration Overview

Here is an overview of the steps for configuring deployment.

1. Install Ektron CMS300 on the staging server.
2. Set up an MS-SQL database for Ektron CMS300.
3. Configure Application Center on the staging server.
4. Configure Application Center on the production server.
5. Deploy the Files.
6. Configure MS-SQL databases.

7. Synchronize the Databases.

Installing Ektron CMS300 on the Staging Server

First, install Ektron CMS300 on the staging server. (For more information, see ["Installing Ektron CMS300" on page 30.](#)) During the installation, you have the option of creating an MS-SQL database.

Setting Up an MS-SQL Database for Ektron CMS300

To create an MS-SQL database, follow these steps.

1. Create an empty MS-SQL database.
2. Run the Ektron CMS300 SQL script against the database to create the necessary tables.
3. Move content to the new database.
4. For more details on this procedure, see the readme.txt file in `C:\Program Files\Ektron\CMS300\Database.`

Modifying web.config

After completing the above steps, update your web.config file to reflect the changes. Below is a list of changes to be made.

Line	Value
ek_dbDatabase	Replace the current DBType with SQL
ek_dbUsername	If required, specify the username needed to connect to the DSN.
ek_dbPassword	If required, specify the password for the username given.

Configuring Staging Server's Application Center

After you install Ektron CMS300 and it functions properly with the MS-SQL database, configure Application Center on the staging server. To do so, follow these steps:

1. Connect to the staging server via Application Center.
 2. Create a new cluster including the staging server.
 3. Configure application settings on the staging server.
 4. Add the production server to the cluster.
 5. Push all files from the staging server to the production server.
- The following sections explain these actions.

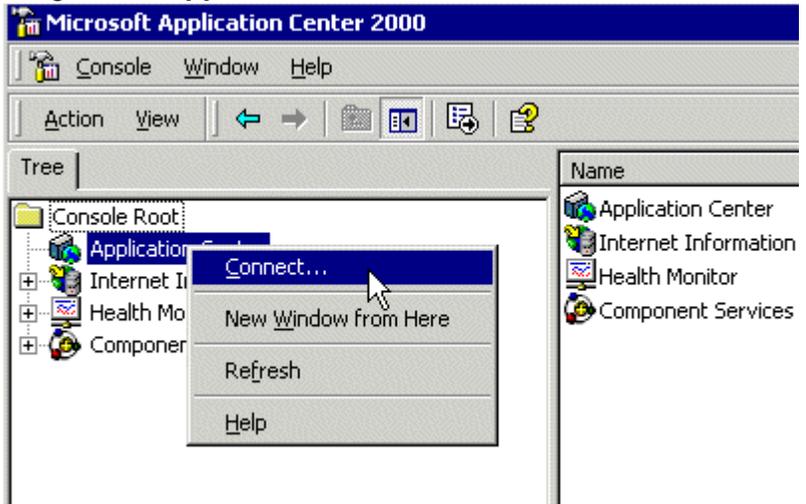
Connecting to the Staging Server's Application Center

To connect to Application Center on the staging server, follow these steps.

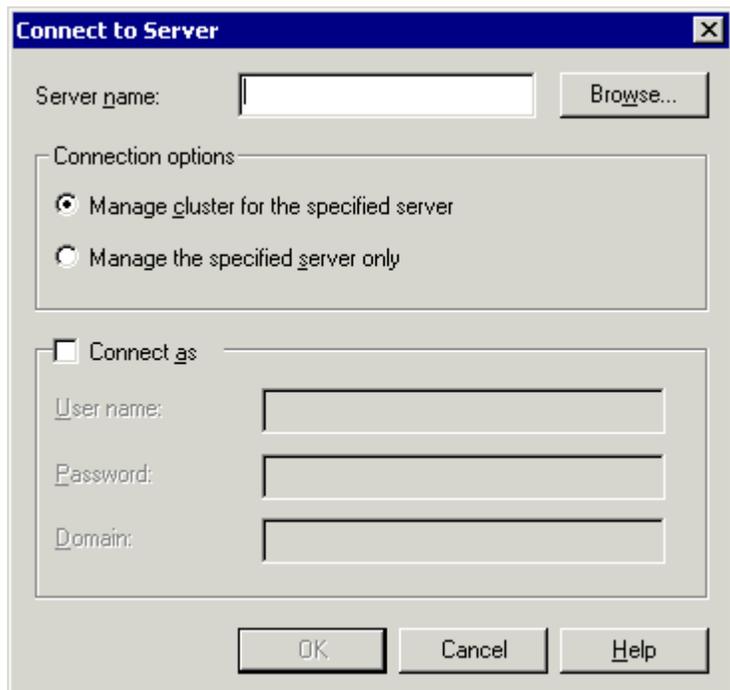
1. On the staging server, open Application Center.
2. The Application Center snap-in appears.



3. Right click **Application Center** and click **Connect...**



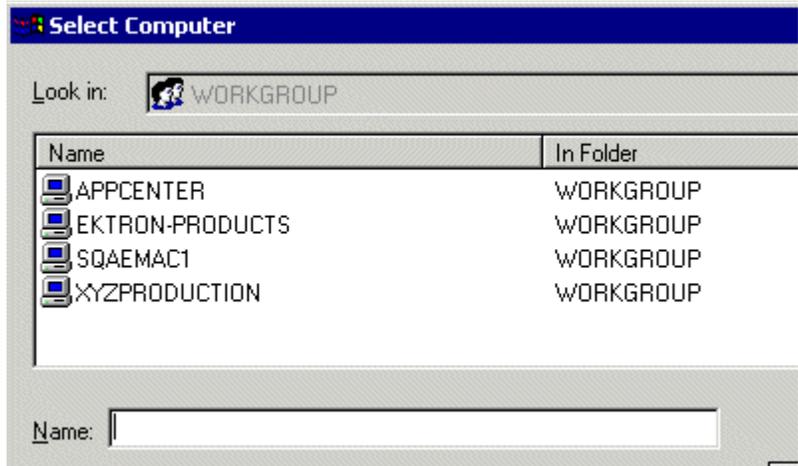
4. The Connect to Server dialog box appears.



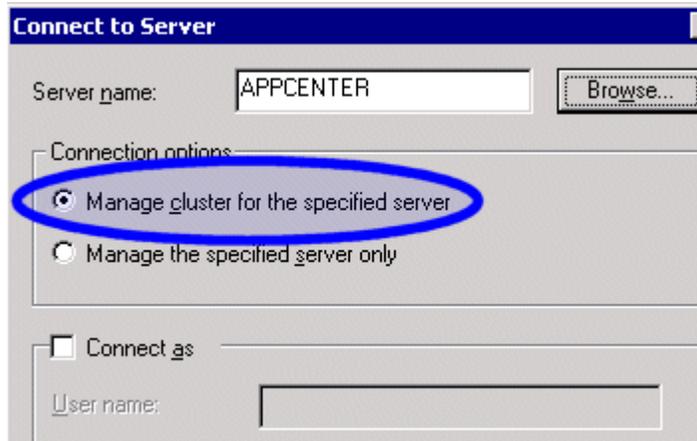
5. Click **Browse** to locate the server you want to connect to.

NOTE If you know the name of the server, you can type it into the Sever name field.

- The Select Computer screen appears with a list of available servers.



- Select the Ektron CMS300 staging server, then click **OK**.
- The select computer screen closes, and the Connect to Server screen contains the selected server's name.
- Choose **Manage cluster for the specified server**.



- If needed, check the **Connect As** box and enter the proper information.
- Click **OK** to submit the information and attempt to connect to Application Center.

12. If this is the first time you are connecting to the server, the New Server dialog box appears. Otherwise, proceed to step 15.

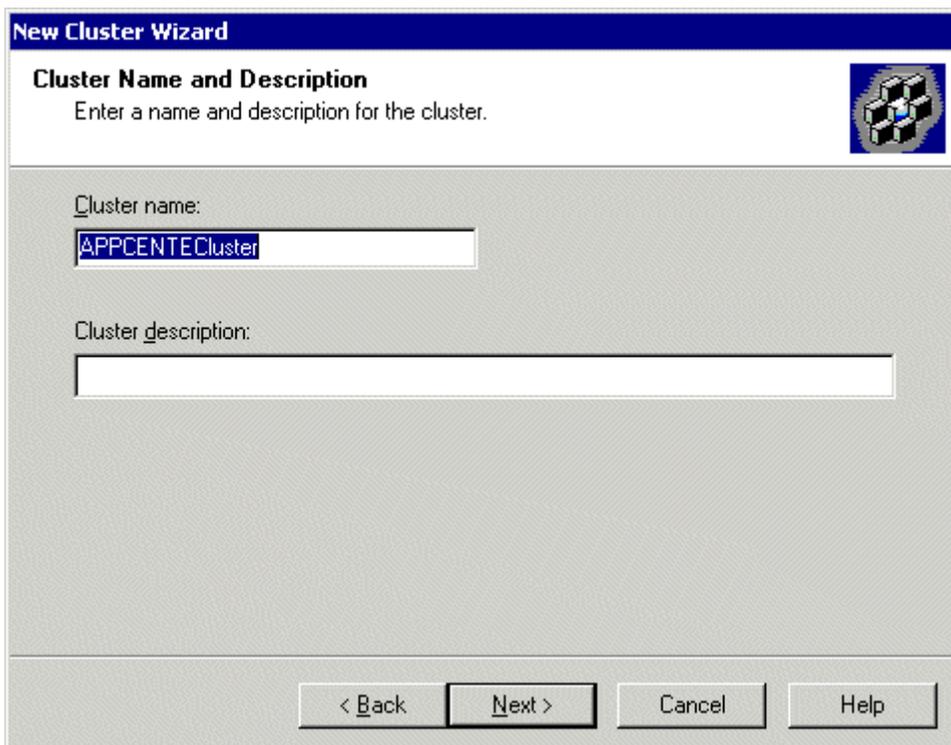


13. Choose **Create a new cluster** then click **OK**.
14. The New Cluster Wizard opens.



15. Click **Next**.

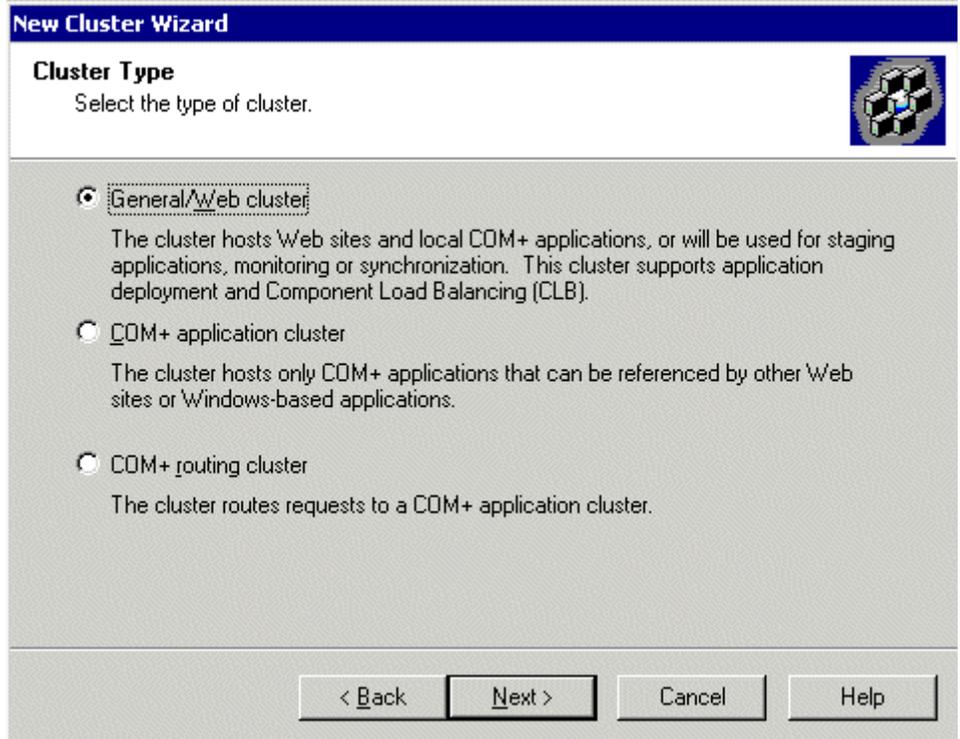
16. The wizard analyzes the server configuration and displays the Choose Name and Description screen.



The screenshot shows a Windows-style dialog box titled "New Cluster Wizard". The main heading is "Cluster Name and Description" with a sub-instruction "Enter a name and description for the cluster." and a cluster icon. There are two input fields: "Cluster name:" containing "APPCENTECluster" and "Cluster description:" which is empty. At the bottom are four buttons: "< Back", "Next >", "Cancel", and "Help".

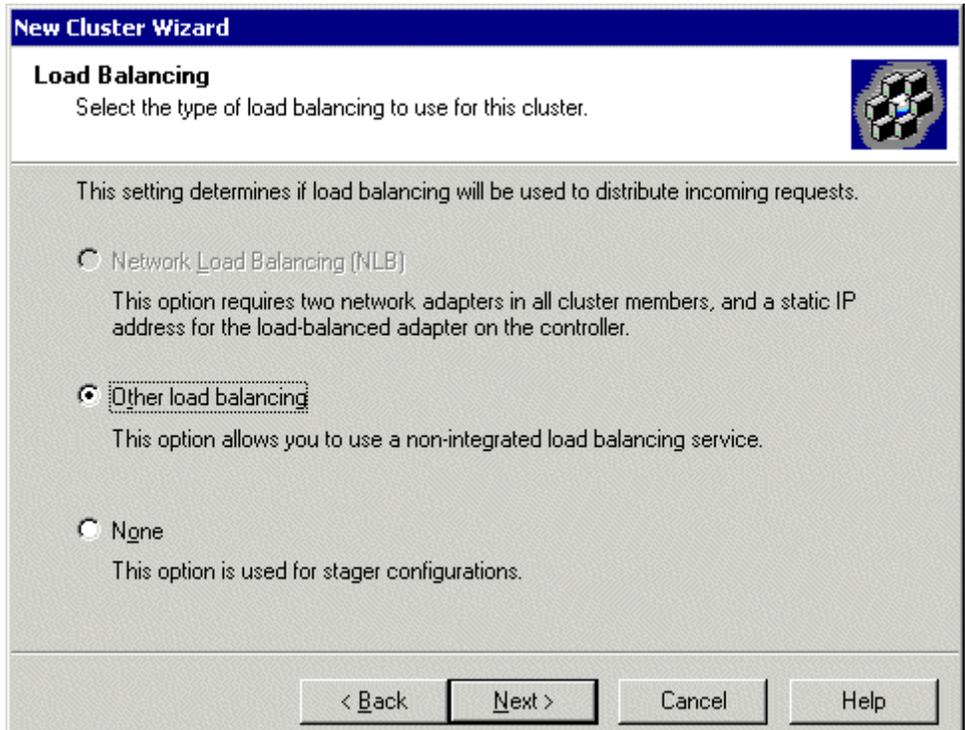
17. Give the new cluster a name and description, then click **Next**.

18. The Cluster Type screen appears.



19. Select **General/Web cluster** then click **Next**.

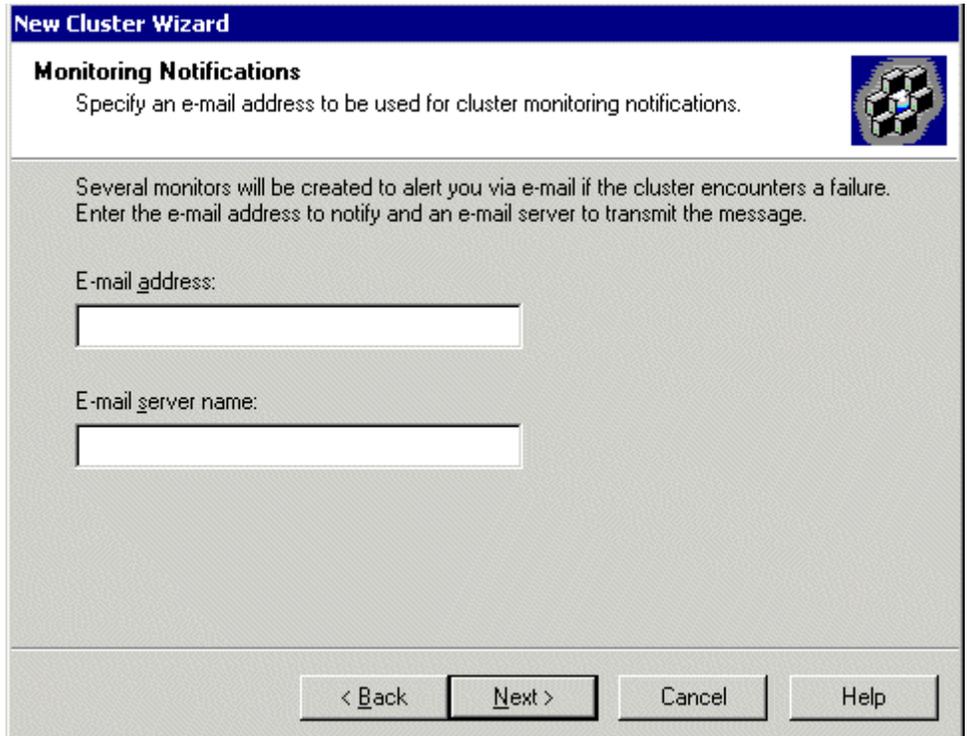
20. The Load Balancing screen appears.



21. Since load balancing is not required for the configuration, choose **None** and click **Next**.

NOTE If you are familiar with Load Balancing and Application Center, then you may choose another option.

22. The Monitoring Notifications screen appears.



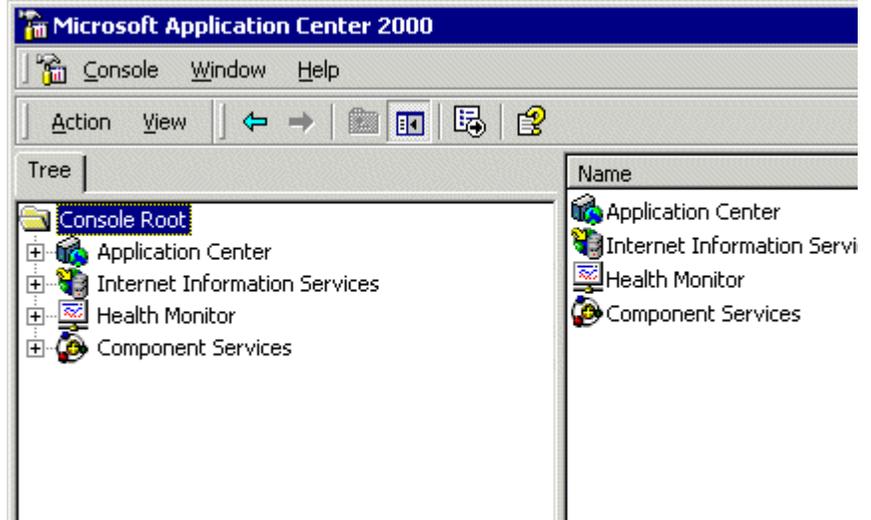
23. Enter a valid e-mail address and server name, then click **Next**.

24. The Completing the New Cluster Wizard screen appears.



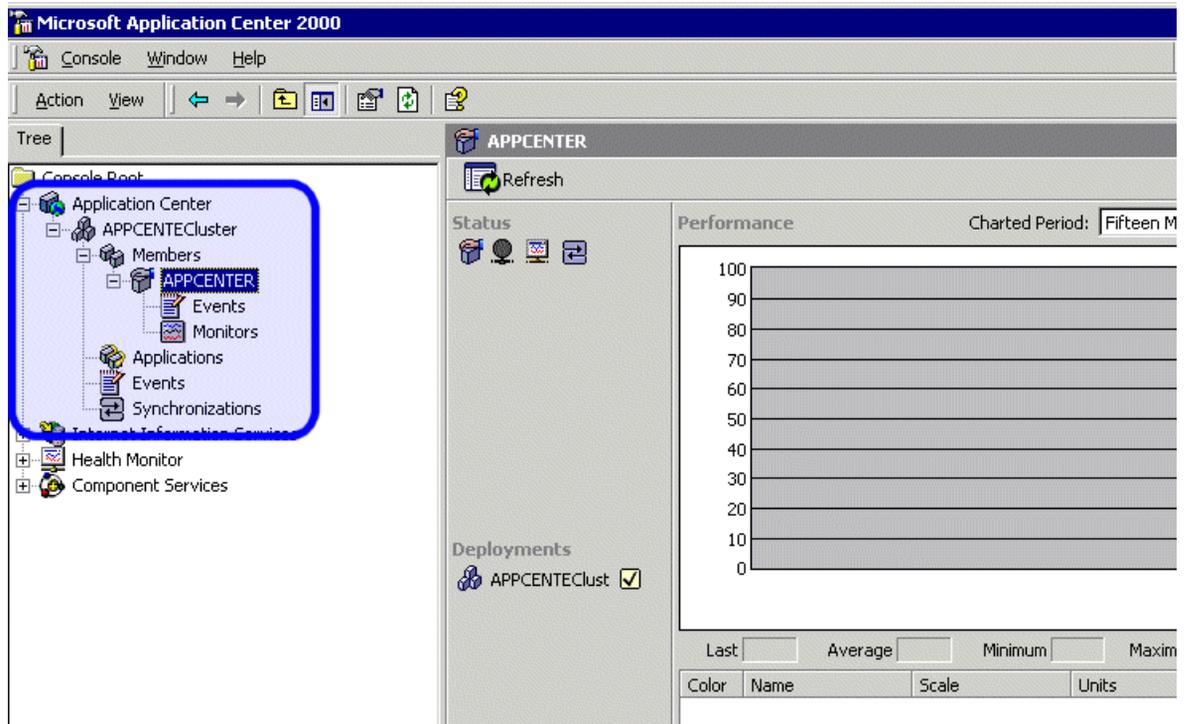
25. Click **Finish** to complete the wizard and connect to the Application Center.

26. The Application Center snap-in appears.



NOTE If you cannot connect, make sure all information is correct.

27. After expanding the Application Center tree, you should see a cluster with one member, the staging server.

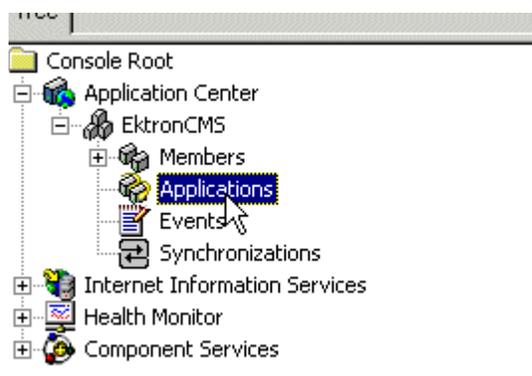


Now that you have connected to Application Center on the staging server, and created a cluster, you can configure the application settings for the cluster.

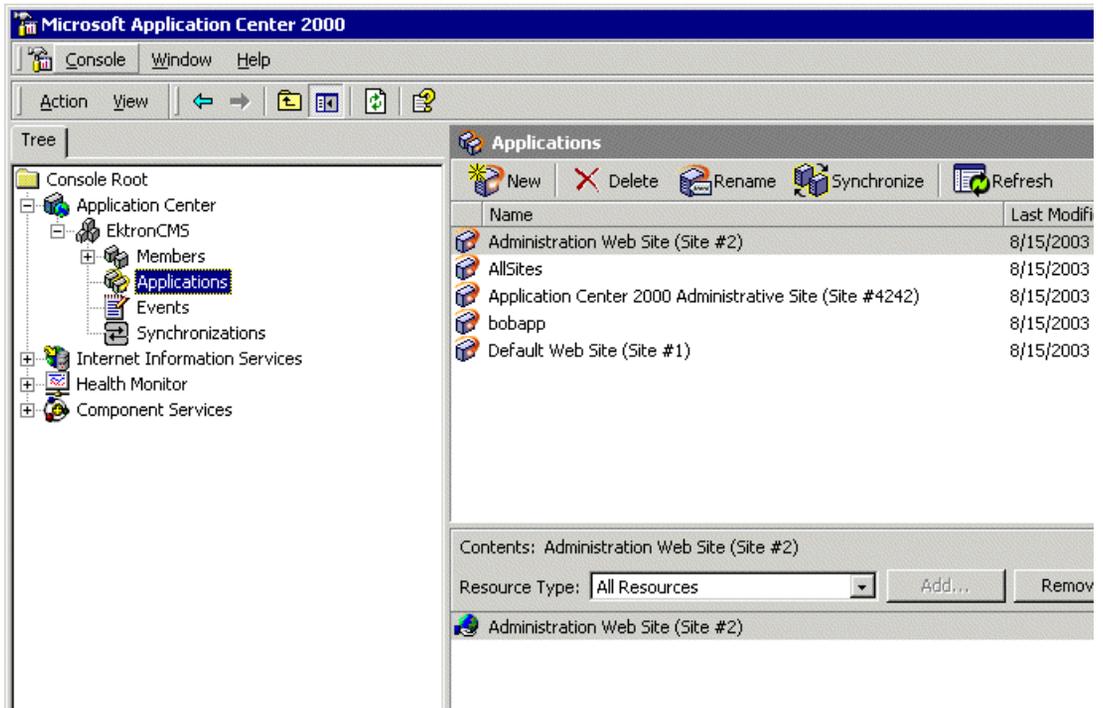
Configuring the Application Settings for the Cluster

To add Ektron CMS300 application information to the cluster, follow these steps.

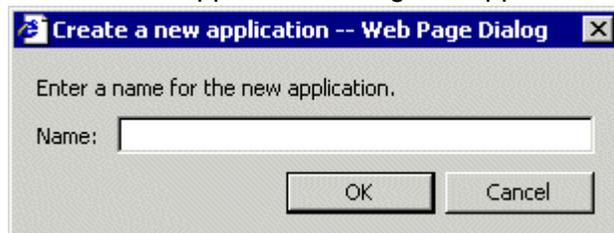
1. Connect to the cluster you created in "[Connecting to the Staging Server's Application Center](#)" on page 122.
2. Click **Applications** in the cluster tree.



- The applications page appears on the right side of the snap-in.



- Click New () in the toolbar at the top of the applications section.
- The Create a New Application dialog box appears.



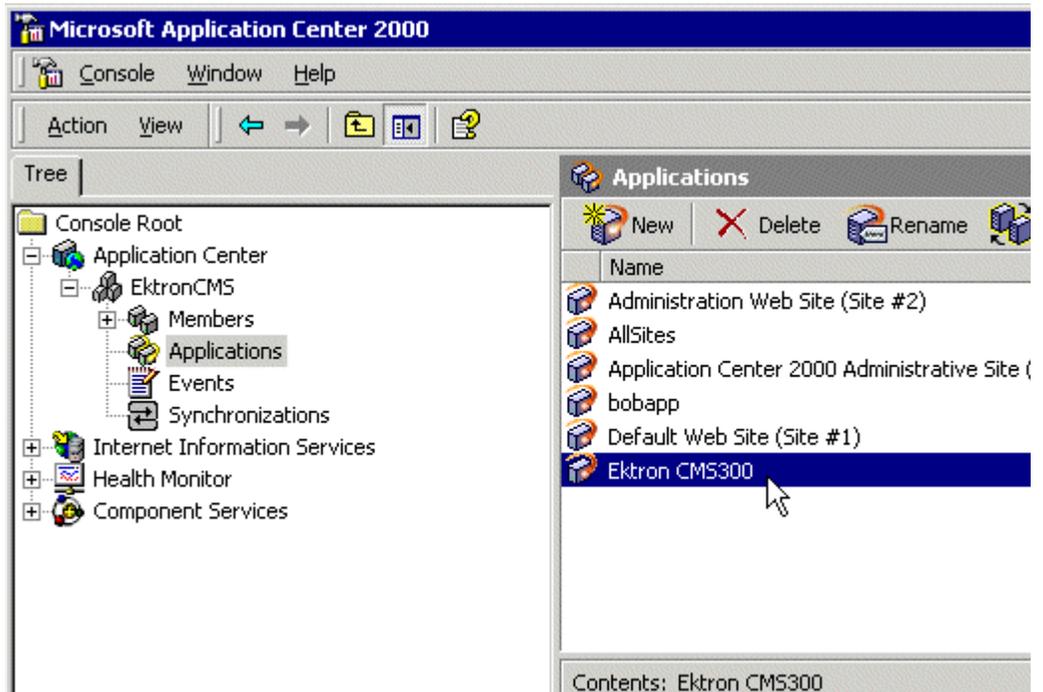
- Enter a name for the new application in the displayed field and click **OK**.

7. The dialog box closes, and the applications list is updated with the new application.



Now that the application is added, you must add resources to it.

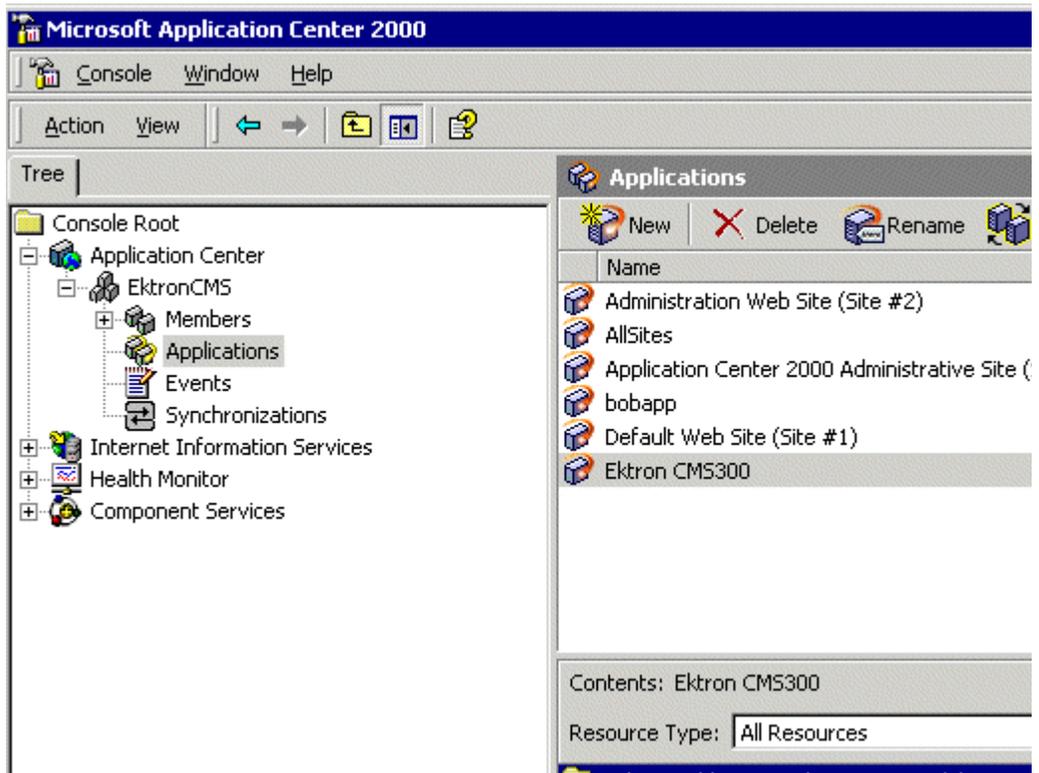
8. Click the Ektron CMS application that you created.
9. A list of resources assigned to the application appear in the lower right pane.



10. Use the following table to help you assign necessary resources to the application:

Resource Type	Folder Path	Description
Registry Keys	HKEY_LOCAL_MACHINE\SOFTWARE\Ektron	Registry keys for Ektron CMS300 to function properly.
File System Paths	C:\inetpub\wwwroot\CMS300Sample\	Location of your Ektron CMS300 Web site.
File System Paths	C:\Program Files\Ektron\CMS300	Location of the necessary components for Ektron CMS300.

Displayed here is the result of adding these resources to the application.

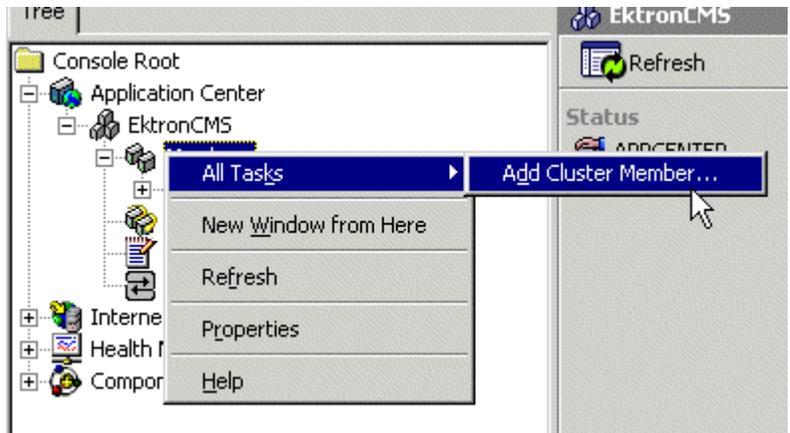


NOTE You can also add Registry keys, etc. here. The three resources listed above are required.

Adding the Production Server to the Cluster

The next step in configuring Application Center on your staging server is to add the production server to the cluster. To do so, follow these steps.

1. Connect to the cluster you created in "Connecting to the Staging Server's Application Center" on page 122.
2. Right click **Members** in the cluster tree.
3. Click **All Tasks > Add Cluster Member**.



4. The Add Cluster Member Wizard opens. Click **Next** to proceed.



- The Name and Credentials screen appears.

The screenshot shows the 'Add Cluster Member Wizard' dialog box with the 'Name and Credentials' step selected. The title bar reads 'Add Cluster Member Wizard'. Below the title bar, the text says 'Name and Credentials' and 'Enter the name of the server to add and provide credentials with administrative privileges on the server.' There is a small icon of a server rack to the right. Below this text are four input fields: 'Server name:' with a 'Browse...' button to its right, 'User name:', 'Password:', and 'Domain:'. At the bottom of the dialog are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- Click **Browse** to locate the server to add to the cluster.

NOTE

If you know the name of the server you want to connect to, enter the name of the server in the field and skip this step.

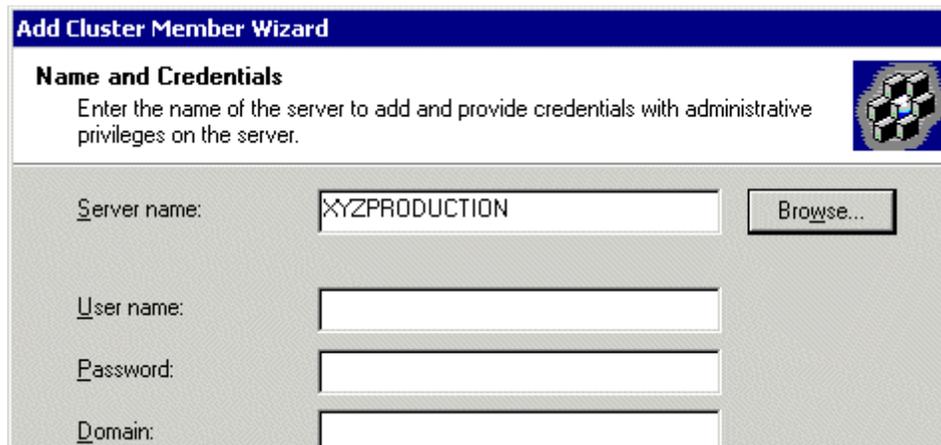
- The Select Computer screen appears.

The screenshot shows the 'Select Computer' dialog box. The title bar reads 'Select Computer'. Below the title bar, there is a 'Look in:' field with a folder icon and the text 'WORKGROUP'. Below this is a table with two columns: 'Name' and 'In Folder'. The table contains four rows of computer names, each with a computer icon to its left. At the bottom of the dialog is a 'Name:' input field.

Name	In Folder
APPCENTER	WORKGROUP
EKTRON-PRODUCTS	WORKGROUP
SQAEMAC1	WORKGROUP
XYZPRODUCTION	WORKGROUP

- Select the Ektron CMS300 **Production Server** from the list of available servers, then click **OK**.

- The select computer window closes, and the Name and Credentials screen appears with the selected computer in the Server Name field.



Add Cluster Member Wizard

Name and Credentials
Enter the name of the server to add and provide credentials with administrative privileges on the server.

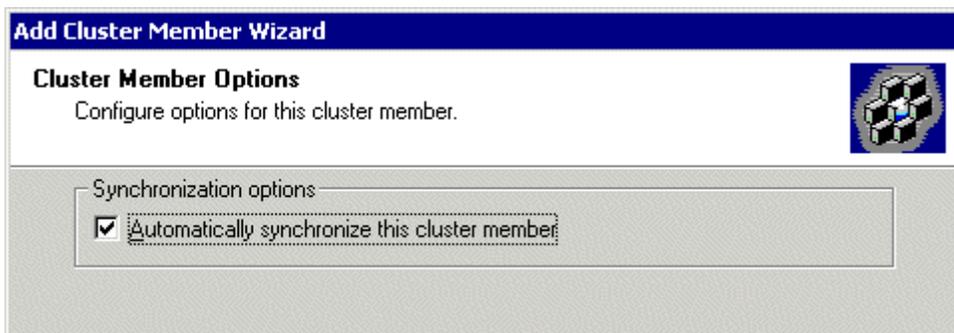
Server name:

User name:

Password:

Domain:

- Enter the required information needed to successfully connect to the server then click **Next**.
- Application Center analyzes the server configuration, and then displays the Cluster Member Options screen.



Add Cluster Member Wizard

Cluster Member Options
Configure options for this cluster member.

Synchronization options

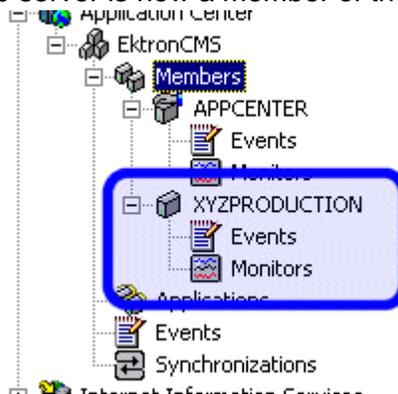
Automatically synchronize this cluster member

- Leave the default and click **Next**.

13. The Completing the Add Cluster Member Wizard page appears.



14. Click **Finish** to complete the wizard and add the server to the cluster. The server is now a member of the cluster.



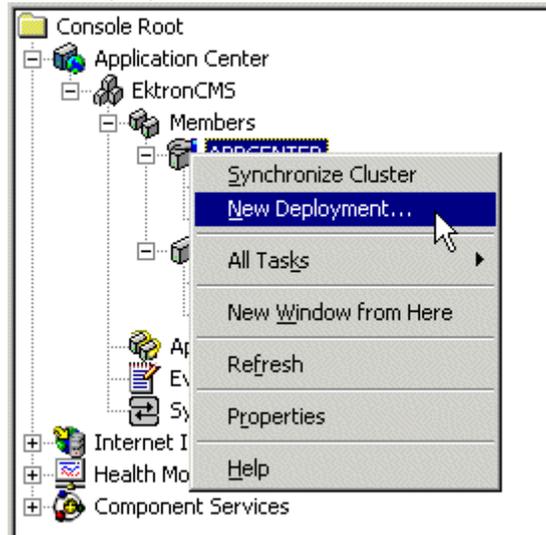
Now that the cluster is complete, you can now “push” files from the staging server to the production server.

Deploying the Files

Once the cluster has been configured properly, you can deploy Ektron CMS300 from the staging server to the production server.

To create a new deployment, follow these steps,

1. Connect to the cluster you created in "Connecting to the Staging Server's Application Center" on page 122.
2. Right click the cluster member acting as the cluster controller (which is the staging server) and click **New Deployment...**



3. The New Deployment Wizard opens.



4. Click **Next** to proceed.

5. The Deployment Target Options screen appears.

New Deployment Wizard

Deployment Target Options
Enter a name for this deployment and select its type.

Source server: appcenter

Deployment name: 04:55:29 PM 08/28/2003

Deploy content inside the current cluster
Deploy content to one or more cluster members within the current cluster.

Deploy content outside the current cluster
Deploy content to one or more Application Center clusters or members outside the current cluster.

< Back Next > Cancel Help

6. Enter a name for the deployment, or leave the default, choose the **Deploy content inside the current cluster** option, then click **Next**.

7. The Deployment Targets Within the Cluster screen appears.

New Deployment Wizard

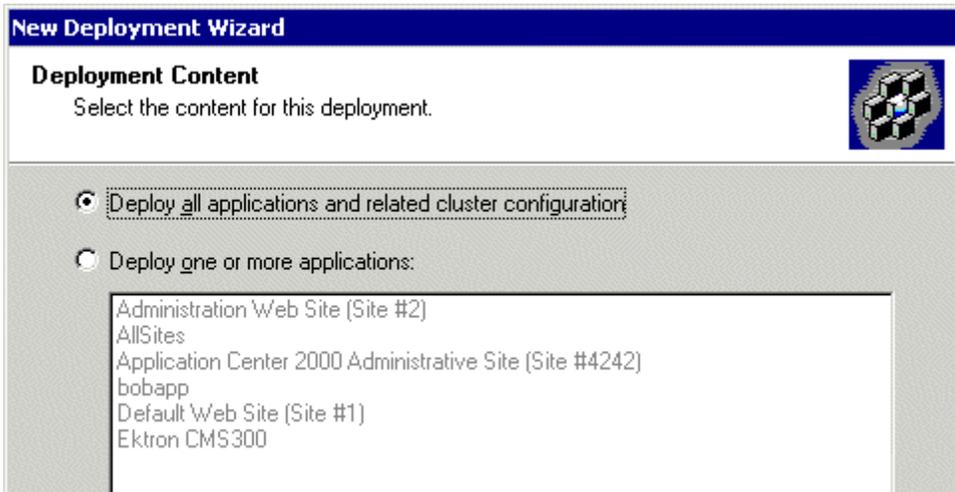
Deployment Targets Within the Cluster
Select one or more cluster members.

To deploy to one or more members, select each member. To deploy to the entire cluster from a member, select the controller. COM+ applications and ISAPI filters must be deployed manually throughout the cluster.

Targets:
XYZPRODUCTION

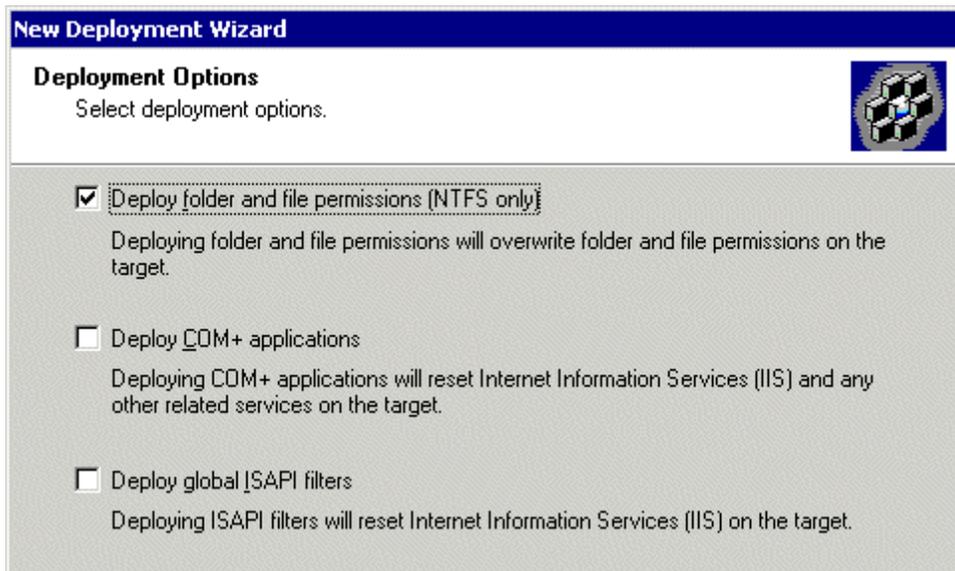
8. Select the targets to which to deploy the content, then click **Next**.

9. The Deployment Content page appears.



10. Either choose to **deploy All Applications** or choose the **One or More** option and select the Ektron CMS300 application from the list. Then click **Next**.

11. The Deployment Options screen appears.



12. Check off **Deploy Folder and File Permissions (NTFS Only)**, then click **Next**.

NOTE If desired, you can choose other options. However you must choose the first one.

13. The Completing the New Deployment Wizard screen appears.



14. Click **Finish** to complete the new deployment wizard.

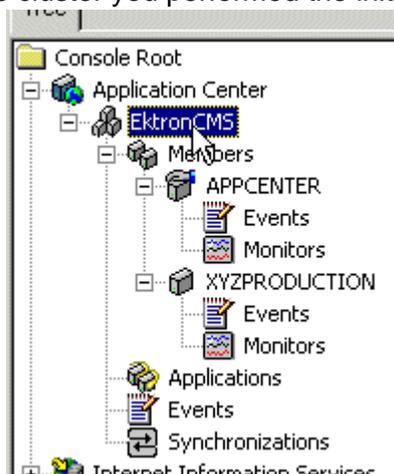
After you complete this initial deployment, all necessary files, registry keys, and DSNs have been copied to the production server in our cluster.

Viewing The Results

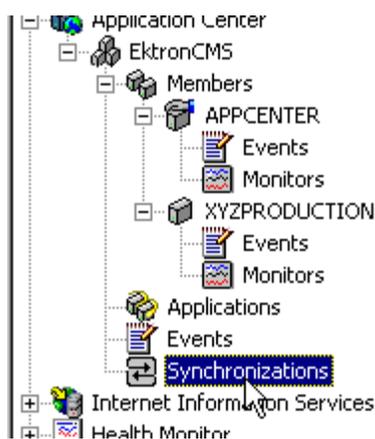
Each time an event occurs, a log is created in the Synchronizations section of Application Center.

To view the results of the initial deployment, follow these steps.

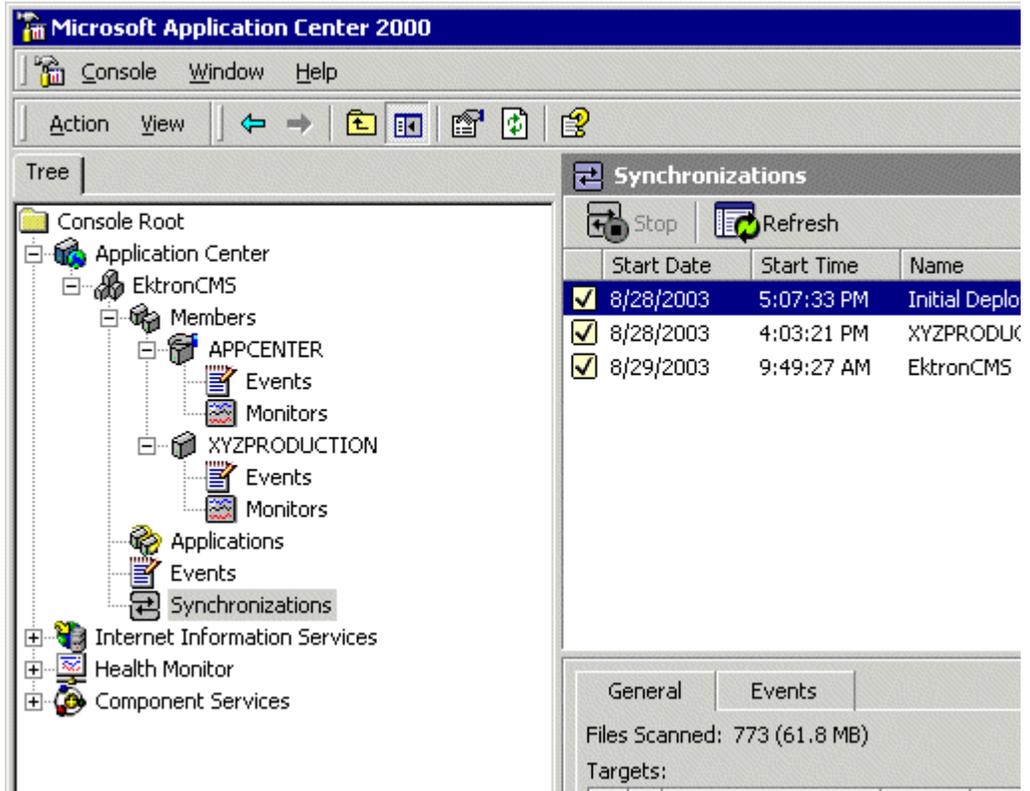
1. Connect to the cluster you performed the initial deployment on.



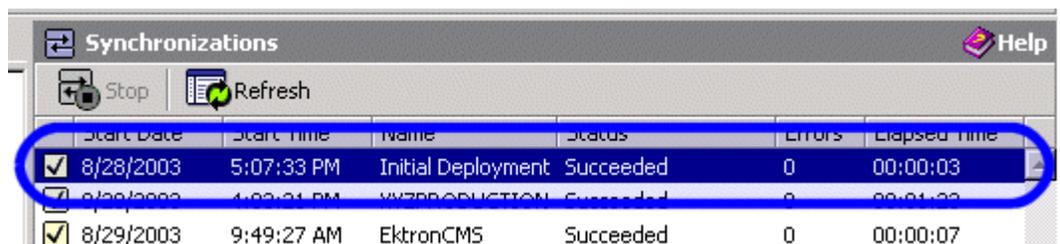
2. Click **Synchronizations** on the cluster tree.



- The synchronization information appears on the right side of the screen.



- The most recent record shows that the initial deployment task completed successfully.



Configuring the Production Server

Now that the staging server has been configured, and the initial deployment performed, you must perform these tasks to the Production server in the cluster:

- Create a blank MS-SQL database for Ektron CMS300
- Create a DSN for MS-SQL database

The following sections explain how to perform these tasks.

Before You Configure the Production Server

Before you configure the production server, be sure the following directories have been copied over during the initial deployment:

- C:\Inetpub\wwwroot\CMS300Sample
- C:\Program Files\Ektron\CMS300

Creating Blank MS-SQL Database

A blank MS-SQL database for Ektron CMS300 needs to be created on the production server. When the deployment configuration is complete, this database has a pull subscription to the database on the staging server.

For information about creating a blank database on the production server, follow the steps in "[Creating An Empty SQL Database](#)" on [page 50](#). In step 4, choose **Minimal**.

NOTE The database name does not have to match the database name of the staging server.

Configuring MS-SQL Database

The last step in setting up the deployment model is to configure the MS-SQL databases on the staging and production servers. In our model, the staging server's database publishes content to which the production server will subscribe.

To configure an MS-SQL database, follow these steps.

1. Register the production MS-SQL in the MS-SQL Enterprise Manager on the staging server (optional).

NOTE While this step is not required, it is recommended to make managing the databases easier.

2. Configure the staging server's database to be a publication database.
3. Configure the production server's database to subscribe to the staging server's database.

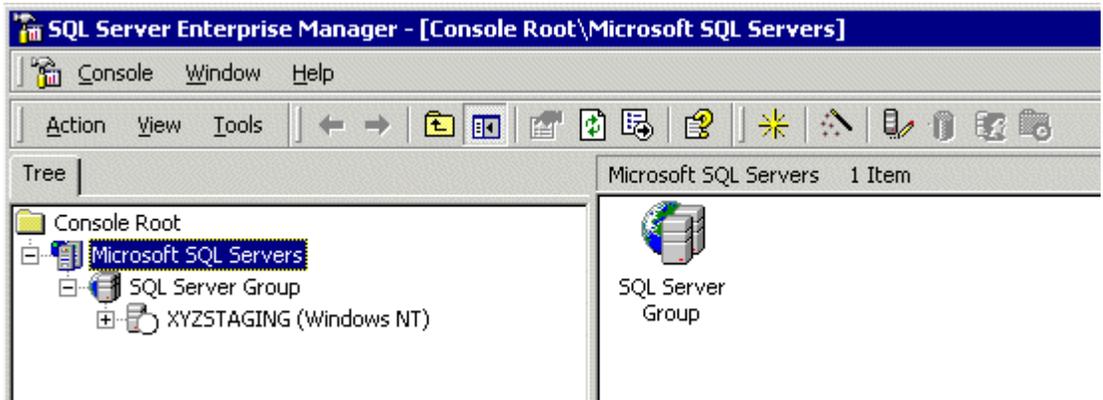
4. Perform an initial synchronization.

These steps are explained in the following sections.

Registering Production Server's MS-SQL Server

By registering the production server's MS-SQL server in the staging server's MS-SQL Enterprise Manager, you can perform tasks on both services from one area instead of accessing both machines. To do so, follow these steps.

1. On the staging server, access the MS-SQL Enterprise manager.



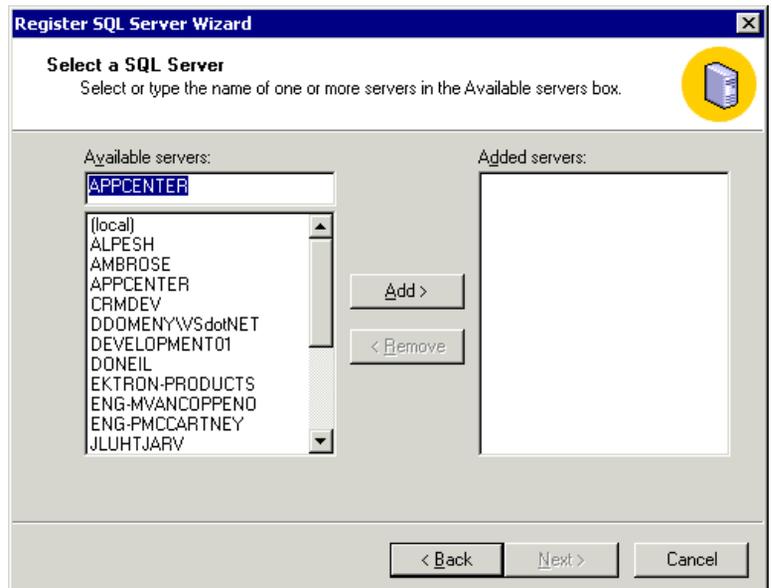
2. Right click **SQL Server Group** and click **New SQL Server Registration**.



3. The Register SQL Server Wizard opens.

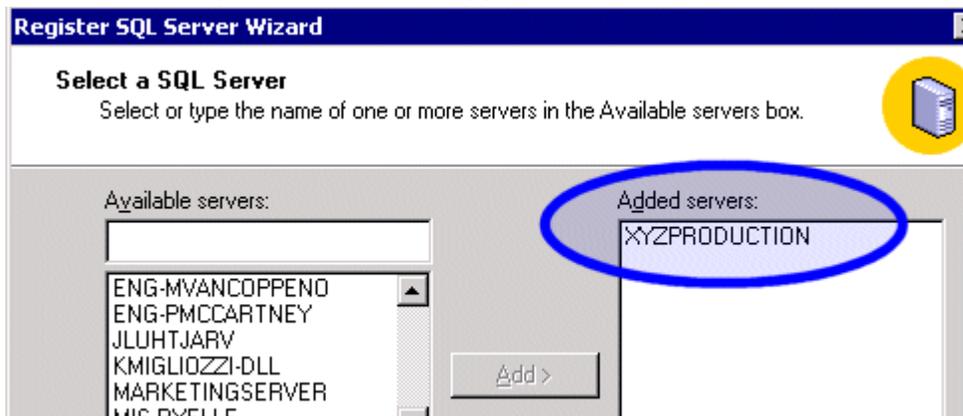


4. Click **Next**.
5. The Select SQL Server screen appears.



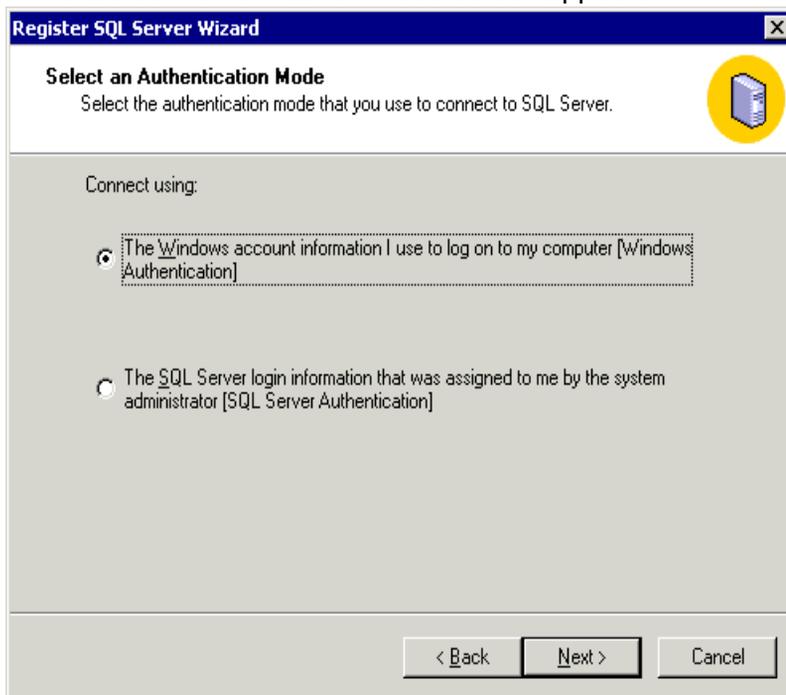
6. From the Available Servers list, select the production server. Then click **Add**.

7. The production server appears in the **Added Servers** column.



8. Click **Next**.

9. The Select Authentication Mode screen appears.



10. Choose the authentication mode you want to use. Then click **Next**.

NOTE This example uses SQL Server authentication. If you chose Windows Authentication, skip to step 14.

11. The Select Connection Option screen appears.

The screenshot shows the 'Register SQL Server Wizard' dialog box. The title bar reads 'Register SQL Server Wizard'. The main heading is 'Select Connection Option'. Below the heading is a descriptive text: 'When you connect using SQL Server account information you can store your login name and password or provide it each time you connect.' There are two radio button options: the first is 'Login automatically using my SQL Server account information.' which is selected, and the second is 'Prompt for the SQL Server account information when connecting.' Below the first option are two text input fields labeled 'Login name:' and 'Password:'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

12. Choose the type of connection you want. Then, click **Next**.

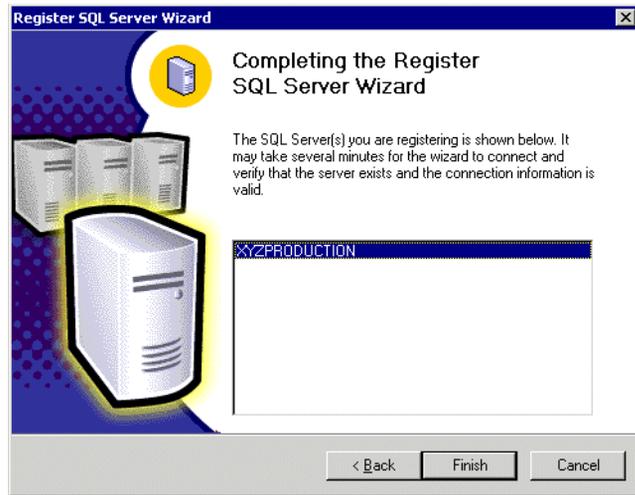
13. The Select SQL Group screen appears.

The screenshot shows the 'Register SQL Server Wizard' dialog box. The title bar reads 'Register SQL Server Wizard'. The main heading is 'Select SQL Server Group'. Below the heading is a descriptive text: 'Specify whether you want to add the SQL Server(s) you are registering to the default SQL Server group, another existing group, or a new SQL Server group.' There are two radio button options: the first is 'Add the SQL Server(s) to an existing SQL Server group' which is selected, and the second is 'Create a new top-level SQL Server group'. Below the first option is a 'Group name:' label followed by a dropdown menu showing 'SQL Server Group'. Below the second option is a 'Group name:' label followed by an empty text input field. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

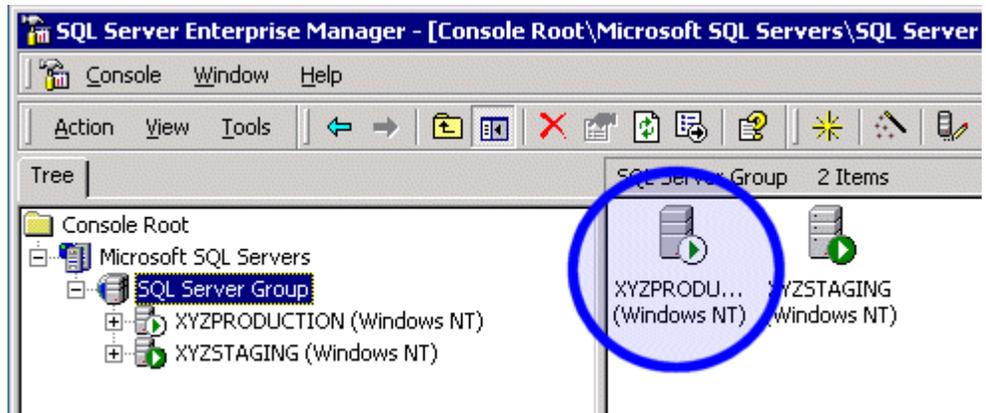
14. Choose the SQL Server group, or add a new one you want to register the new SQL server to. Then click **Next**.

NOTE This example adds the new SQL server to the default SQL Server group.

- The Completing the Register SQL Server Wizard screen appears.



- Click **Finish**.
- The SQL Server is registered and a confirmation message appears.
- Click **Close**.
- The confirmation closes, and the new SQL Server is registered to the SQL Enterprise Manager



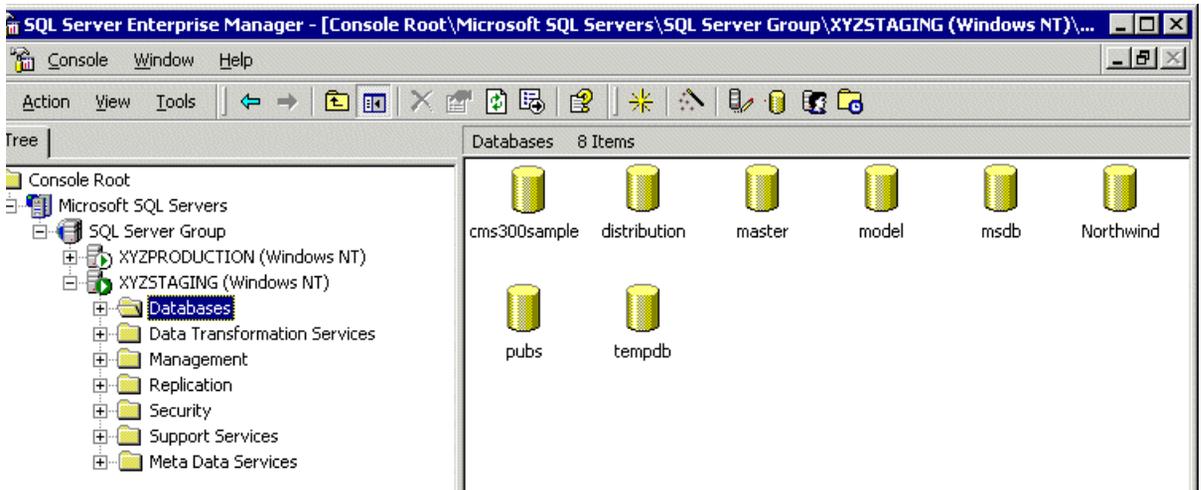
Now that the production server is registered, we can configure the two databases.

Configuring the Staging Server's Database

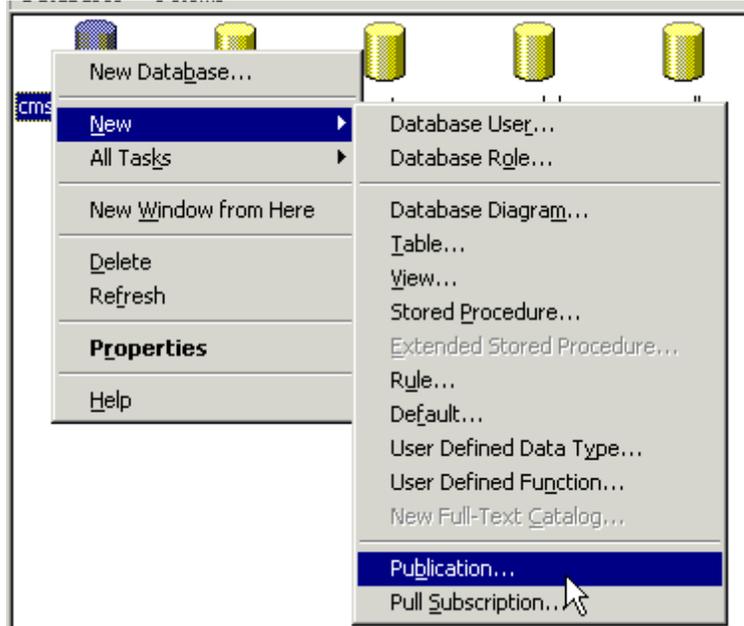
The staging server's database publishes all content in the Ektron CMS300 Web site. The production server's database pulls data from that database and stores it as well.

To configure the staging server's database to publish the data, follow these steps.

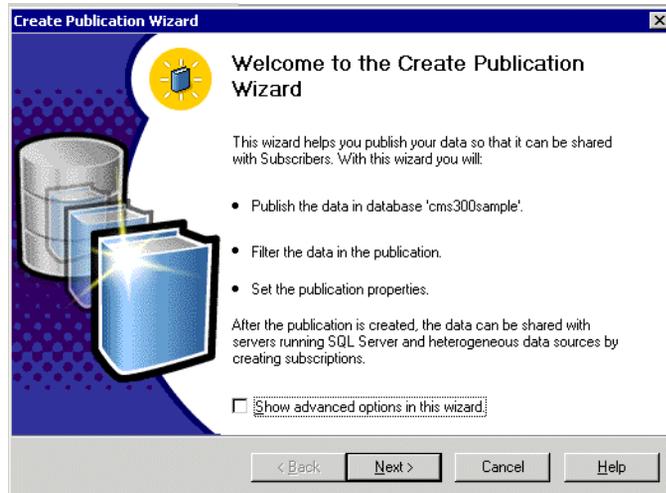
1. In the SQL Enterprise Manager on the staging server, connect to the staging server's SQL server and access the Databases folder.



- Right click the **CMS300Sample** database and click **New > Publication...**

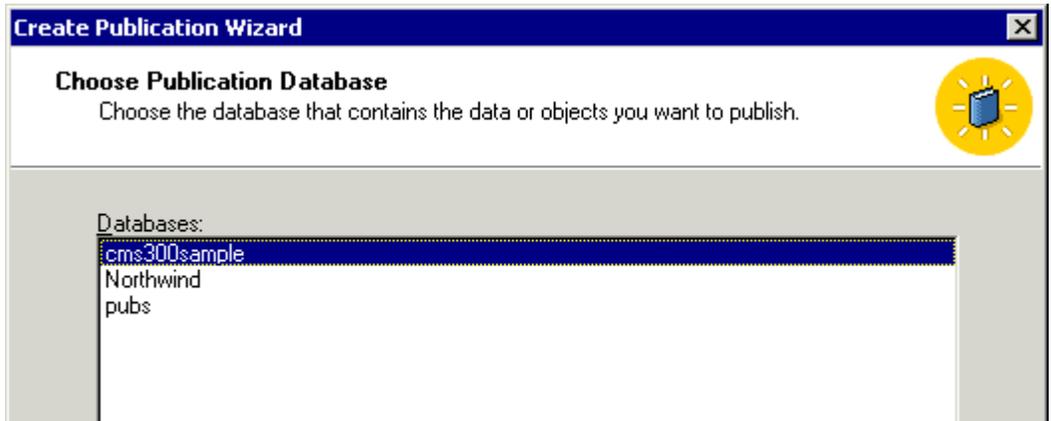


- The Create Publication Wizard opens.



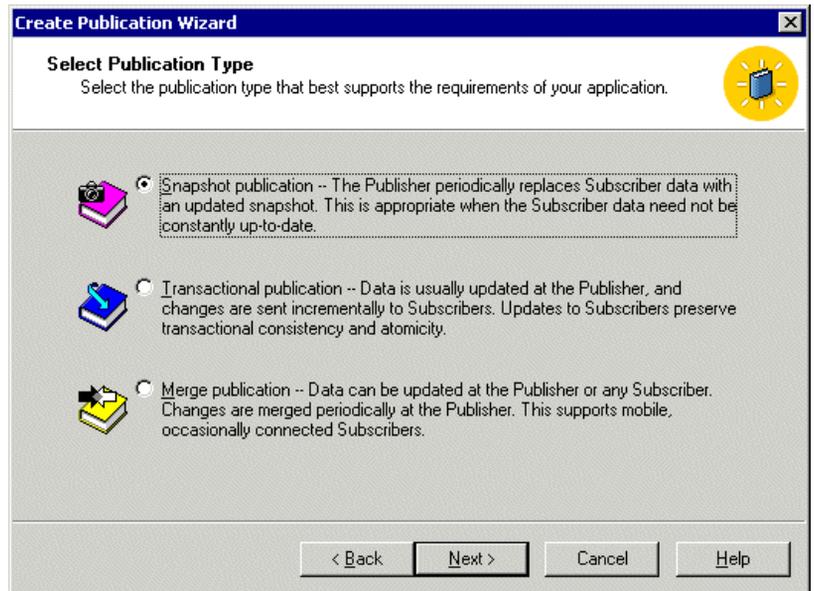
- Click **Next** to begin.

5. The Choose Publication Database screen appears.



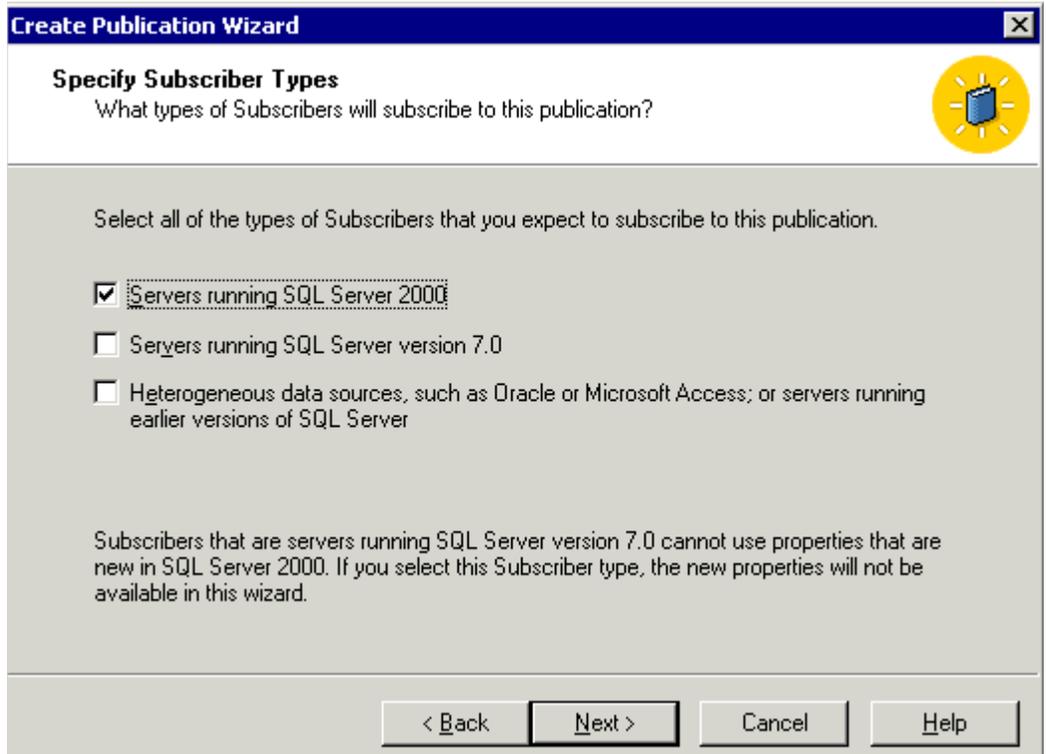
6. Choose the Ektron CMS300 database and click **Next**.

7. The Select Publication Type screen appears.



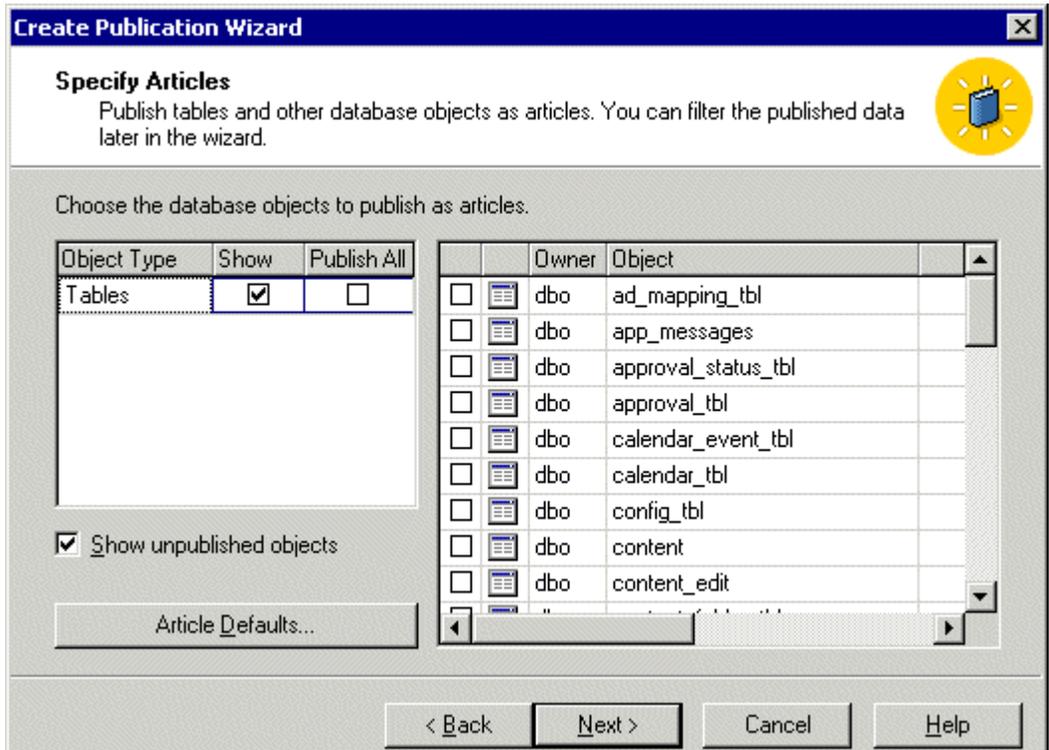
8. Choose **Snapshot Publication** then click **Next**.

9. The Specify Subscriber Types screen appears.



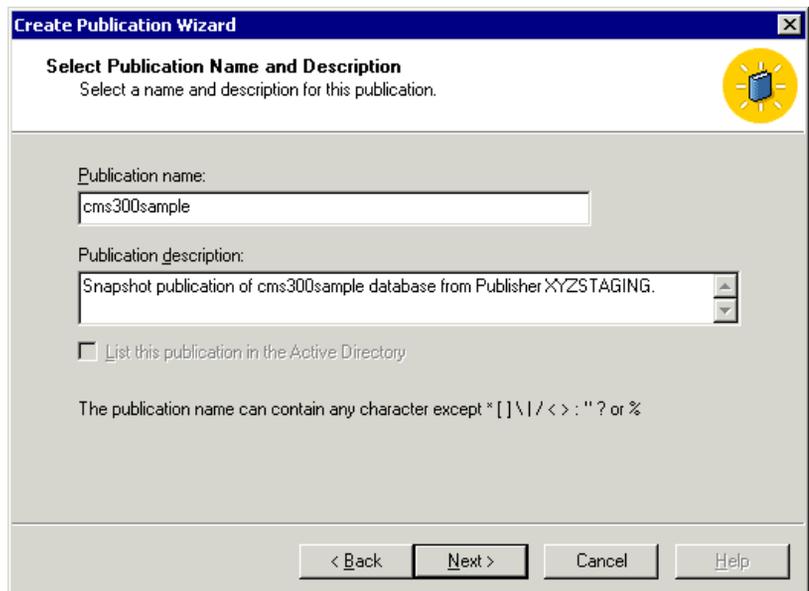
10. Check the box next to the version of MS-SQL that the production server is running and click **Next**.

11. The Specify Articles screen appears. Check the **Publish All** option.

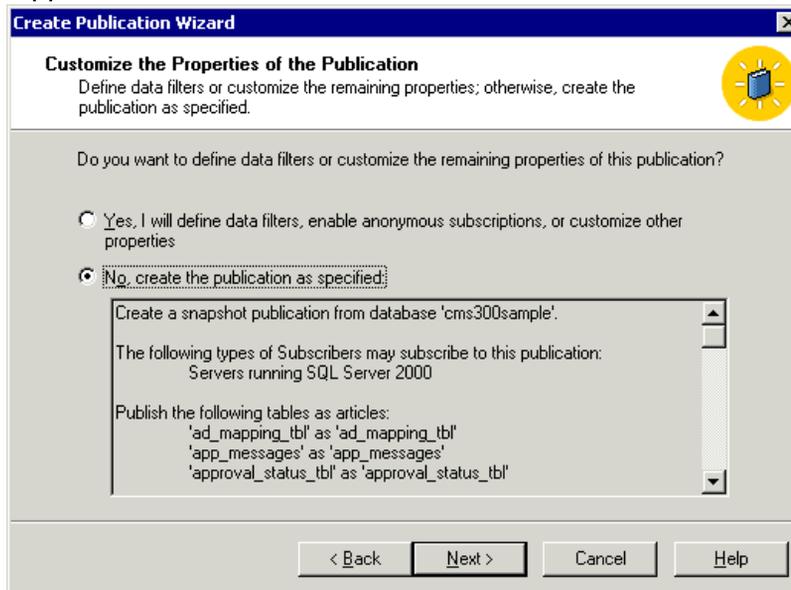


12. Click **Next** to continue.

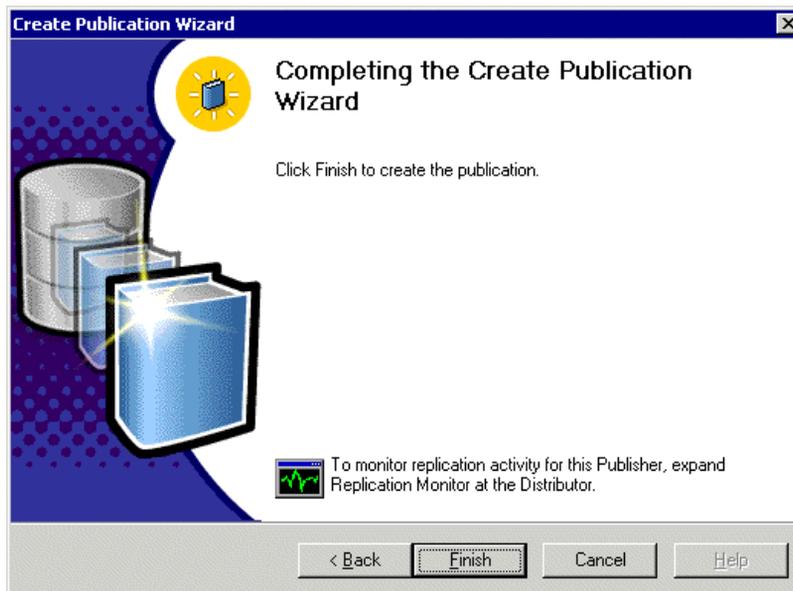
13. The Select Publication Name and Description page appears.



14. Enter a name and description for the publication, then click **Next**.
15. The Customize the Properties of the Publication screen appears.

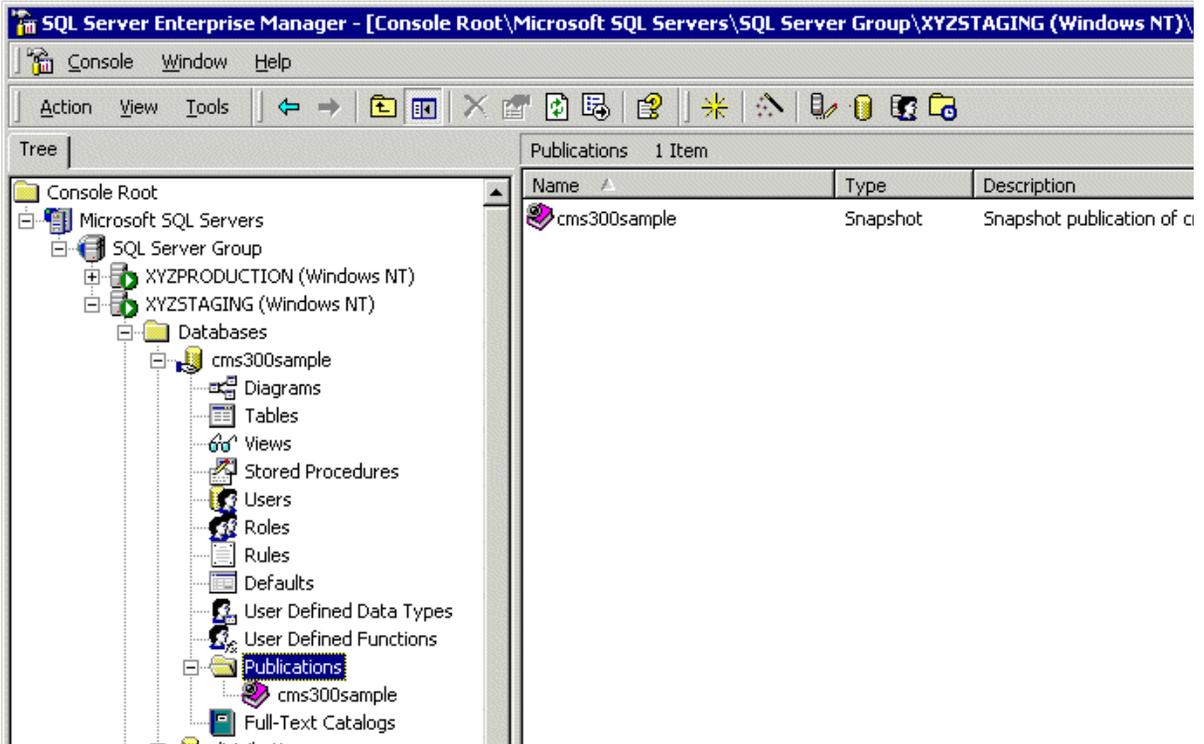


16. Choose **No, Create the publication as specified** then click **Next**.
17. The Completing the Create Publication Wizard screen appears.



18. Click **Finish**.

19. A Publications folder is added to the database tree, and the new publication is added to it.

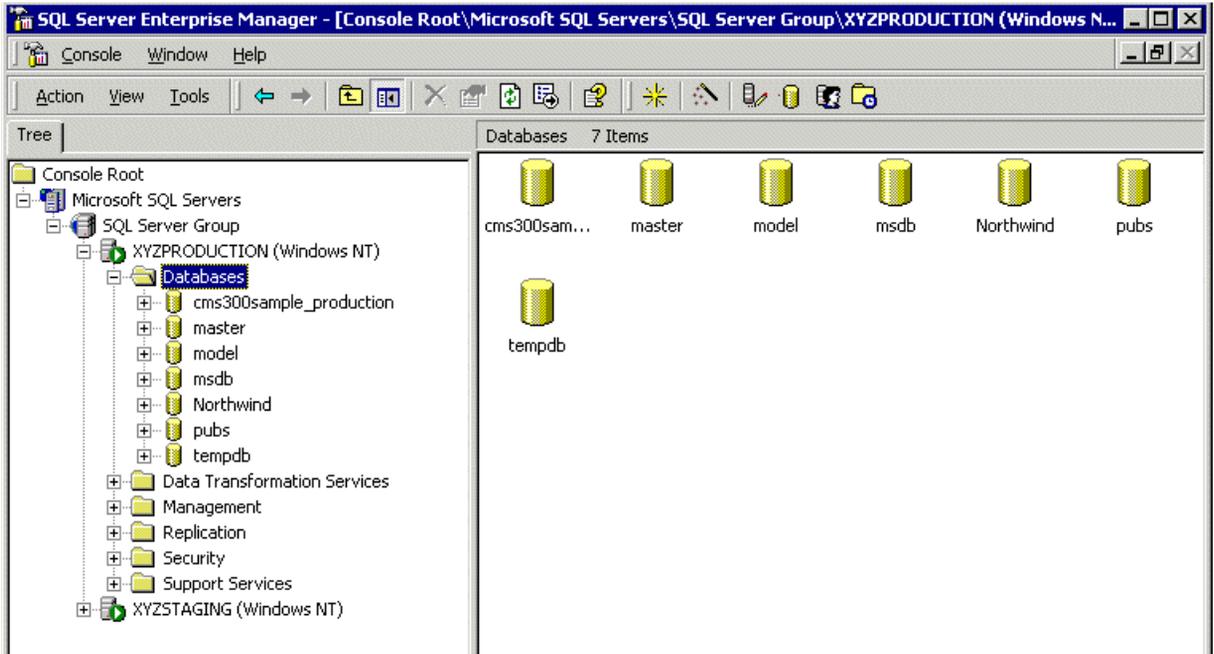


Now that the staging server's database is configured as a publication database, we can configure the production database to subscribe to it.

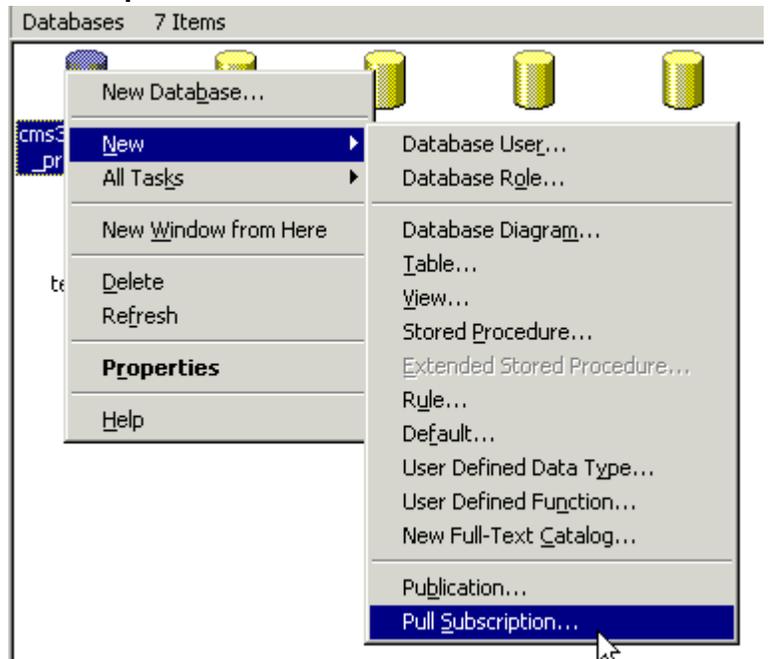
Configuring the Production Server's Database

To configure the production server's database to subscribe to the staging server's database, follow these steps.

1. On the staging server's SQL Server Manager, connect to the production server's SQL server and access the databases folder.



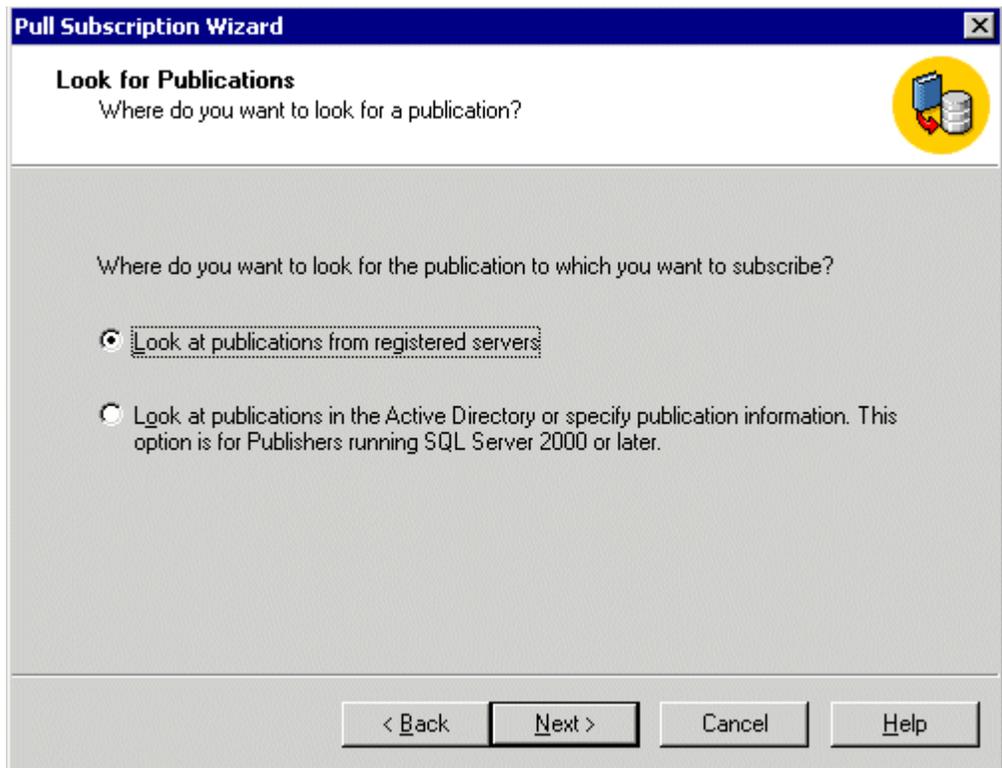
2. Right click the blank Ektron CMS300 database and click **New > Pull Subscription...**



3. The Pull Subscription Wizard opens. Click **Next** to begin.

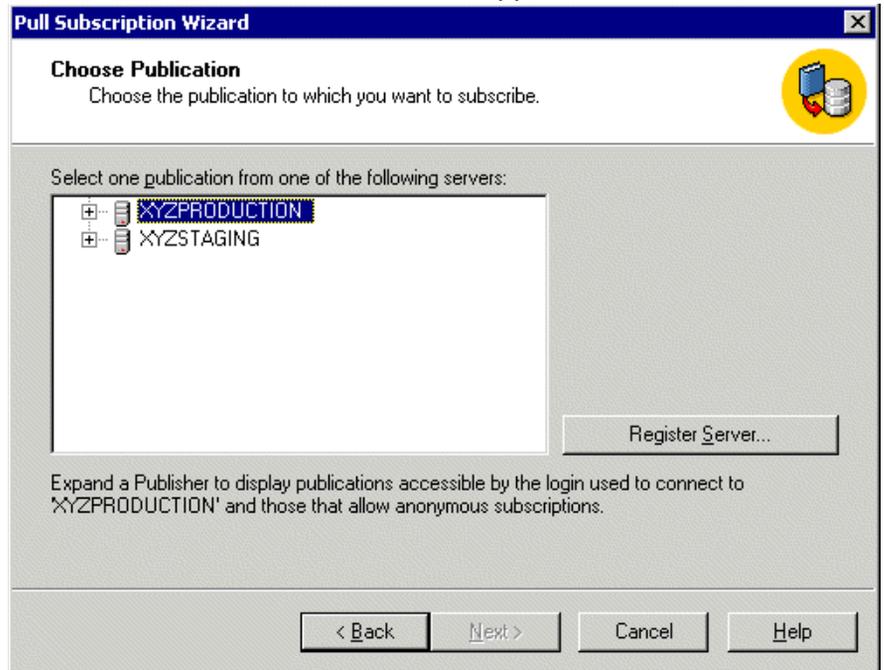


4. The Look for Publications screen appears.

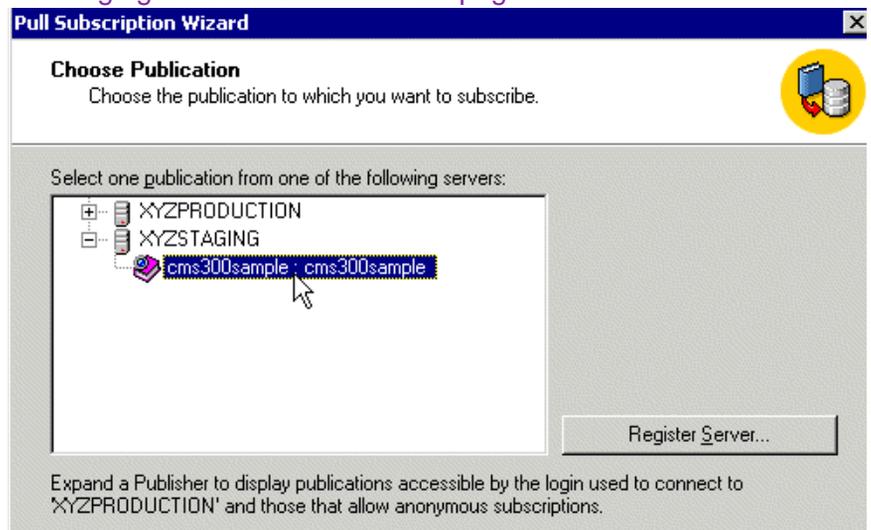


5. Choose **Look at publications from registered servers** and click **Next**.

6. The Choose Publication screen appears.



7. Expand the Staging Server's tree and select the Ektron CMS300 Publication that was created in "Configuring the Staging Server's Database" on page 151.



NOTE If the Ektron CMS300 publication does not appear under the staging server, make sure the publication was created properly.

8. Click **Next** to continue.

9. The Specify Synchronization Agent Login screen appears.

Pull Subscription Wizard

Specify Synchronization Agent Login
Specify the login used by the synchronization agent to connect to the Publisher and Distributor.

The synchronization agent cannot run because the SQL Server Agent account is not included in the publication access list for this publication.

When the agent connects to the Publisher:

Impersonate the SQL Server Agent account

Use SQL Server Authentication

Login: Confirm password:

Password:

If impersonating the SQL Server Agent account, contact your system administrator to ensure that the account is included in the publication access list.

< Back Next > Cancel Help

10. Choose which option you want to use to connect to the publisher. Then, click **Next**.

11. The Initialize Subscription screen appears.

Pull Subscription Wizard

Initialize Subscription
Specify whether the subscription(s) needs to be initialized, and if so, when to start the initialization process.

Does Microsoft SQL Server need to initialize the publication schema and data at the Subscriber when the subscription is created?

Yes, initialize the schema and data

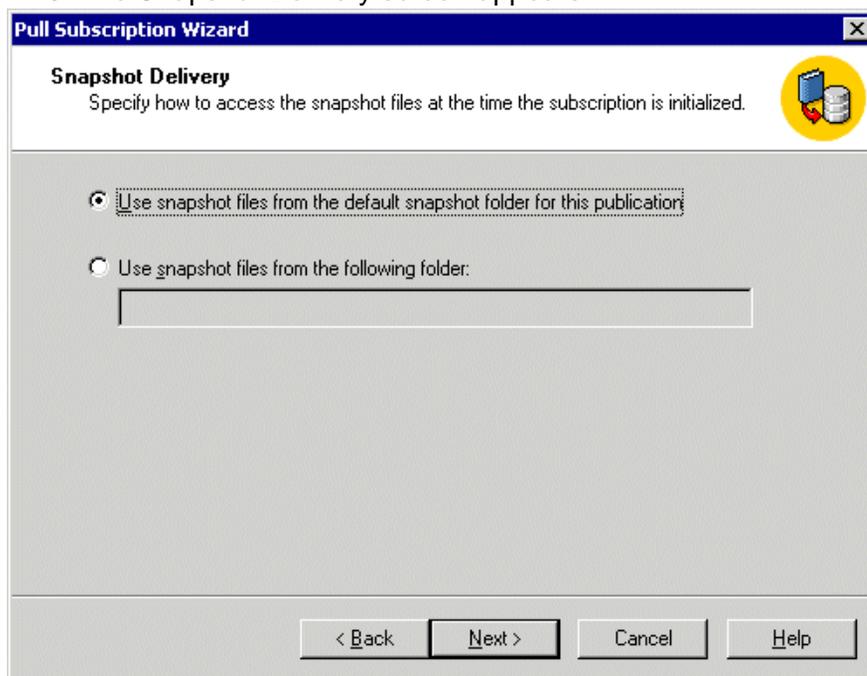
If yes, the Snapshot Agent must create a snapshot of the publication schema and data. The Distribution Agent will apply the snapshot automatically when it is available.

No, the Subscriber already has the schema and data

< Back Next > Cancel Help

12. Choose **Yes, initialize the schema and data**, then click **Next**.

13. The Snapshot Delivery screen appears.



14. Choose **Use snapshot files from the default snapshot folder for this publication**. Then, click **Next**.

15. The Set Distribution Agent Schedule screen appears.

Pull Subscription Wizard

Set Distribution Agent Schedule
Specify how frequently the Distribution Agent(s) updates the subscription(s).

When should the Distribution Agent update the subscription?

Continuously -- provides minimal latency between when an action occurs at the Publisher and is propagated to the Subscriber

Using the following schedule:
Occurs every 1 day(s), every 5 minute(s) between 12:00:00 AM and 11:59:59 PM Change...

On demand only -- you can synchronize this subscription using SQL Server Enterprise Manager or the Windows Synchronization Manager

< Back Next > Cancel Help

16. Choose an option using the following table for reference.

Option	Result
Continuously	Propagates data modifications between Publisher and Subscriber immediately.
Schedule	Runs the Distribution Agent hourly (default), or daily, weekly, or monthly. Choosing a frequency other than Continuously increases the latency between the Subscriber and Publisher.
On-Demand	Run the Distribution Agent only when specifically requested.

For demonstration purposes, we choose **On-Demand** so we can synchronize the databases with a click of a button

17. Click **Next** to continue.

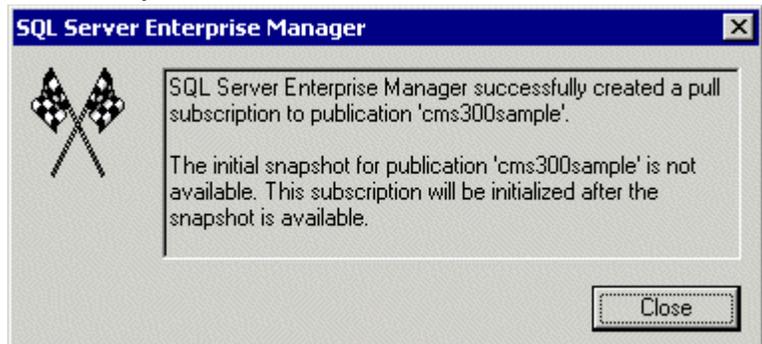
18. The Specify Subscriber Security screen appears.

19. Specify the login used by the synchronization agent to the subscriber. Then, click **Next**.

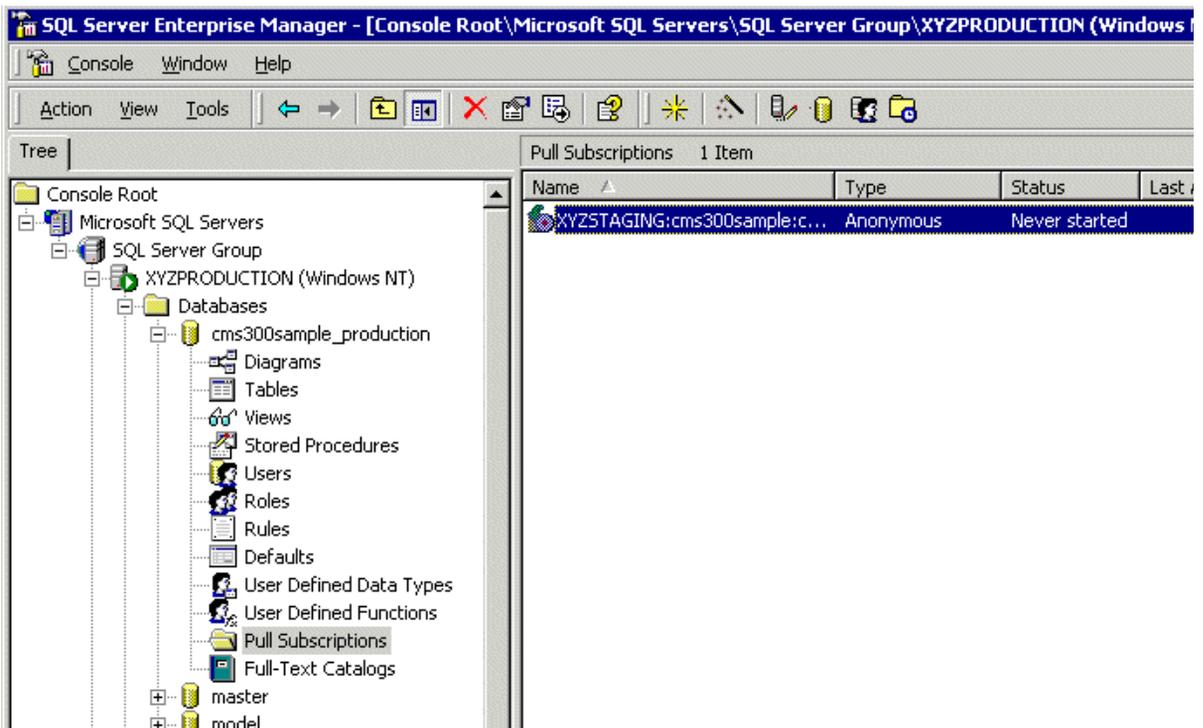
20. The Completing the Pull Subscription Wizard appears.

21. Click **Finish** to complete the wizard.

22. A message informs you that the pull subscription was created successfully.



23. Click **Close** to close the dialog box.
24. The box closes.
25. A Pull Subscription folder appears on the database's data tree with the new pull subscription added.



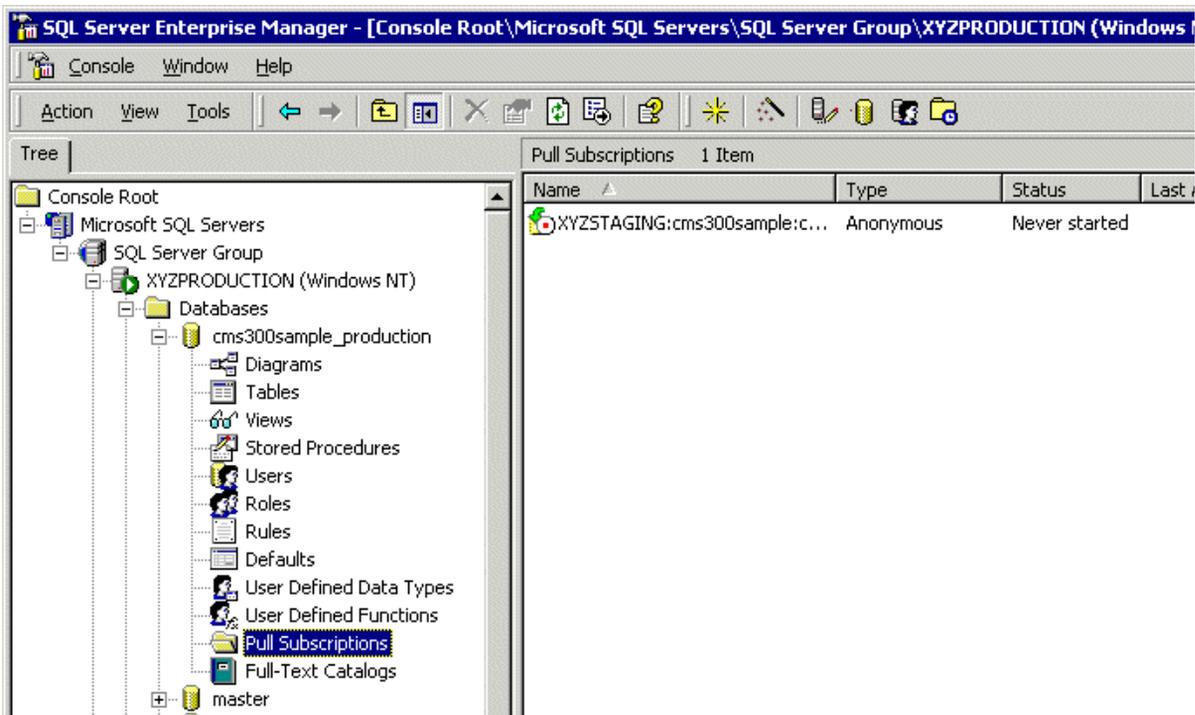
Now that the publication and subscription have been created, we can perform our initial synchronization for the databases.

Synchronizing the Databases

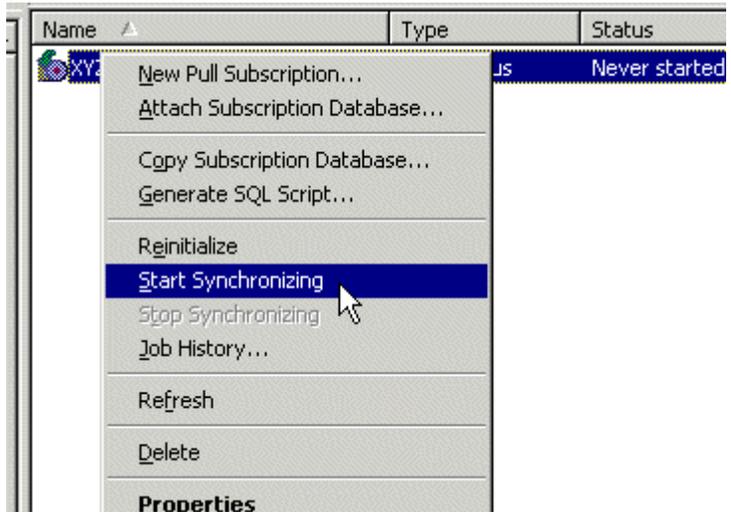
The initial synchronization moves all data from the publication database (staging server) to the subscribing database (production server).

To perform the initial synchronization, follow these steps.

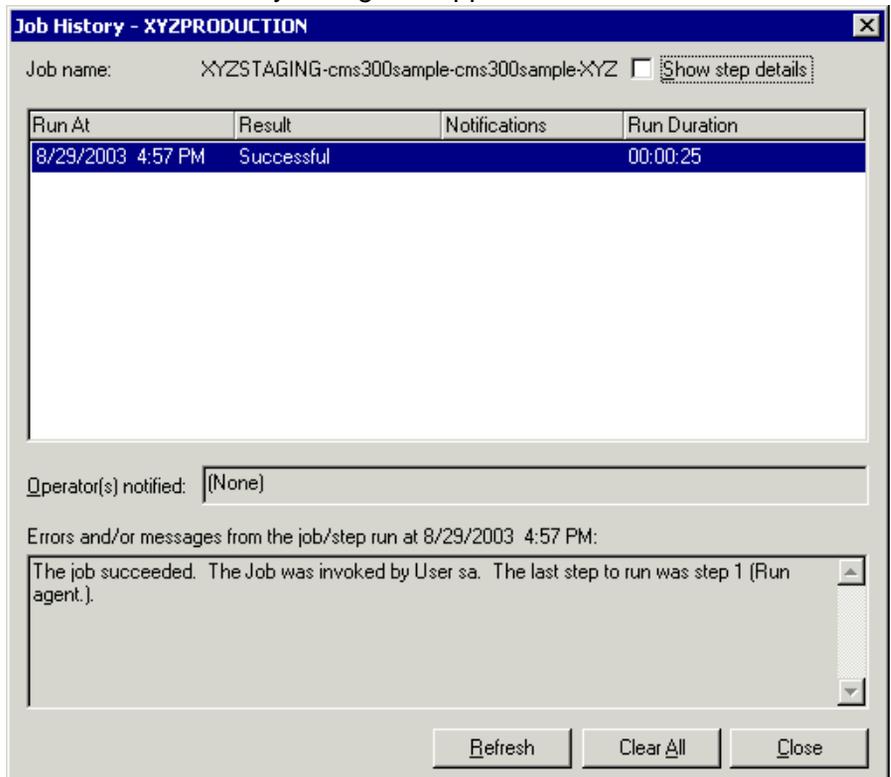
1. In SQL Enterprise manager, connect to the production server's database and locate the pull subscription that was created in ["Configuring the Production Server's Database"](#) on page 157.



- Right click the pull subscription record and click **Start Synchronizing**.

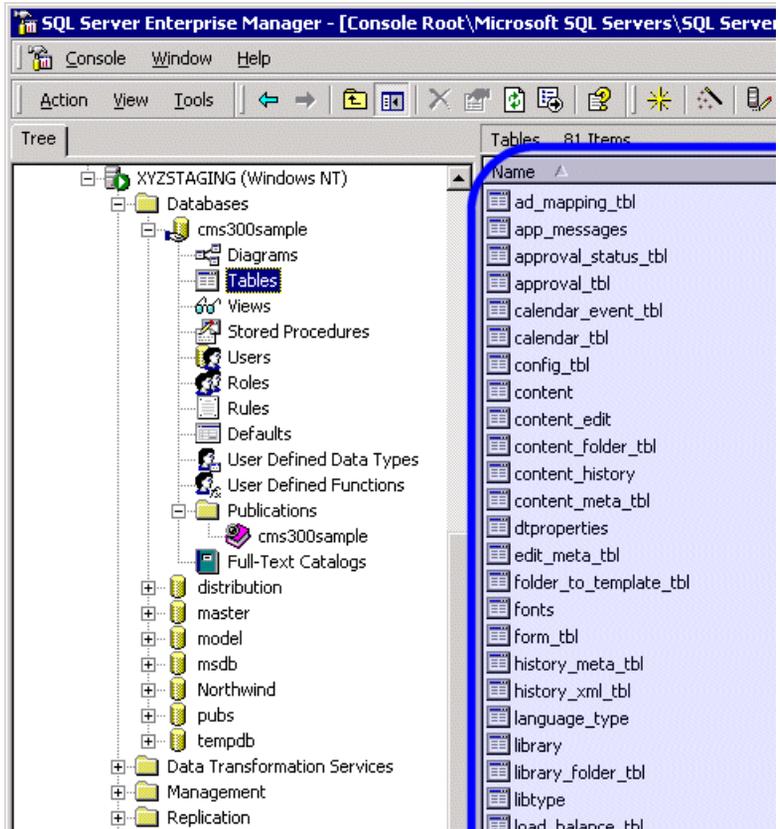


- The synchronization is performed.
- To view results of the initial synchronization, right click the pull subscription and click **Job History**.
- The Job History dialog box appears.



NOTE If you receive a message other than a successful notification, re-check the settings and try again.

Also, the Ektron CMS300 tables from the staging server are included in the production database.



What's Next?

The deployment configuration is complete! The next section explains how to use it.

Using the Deployment Model

Now that the deployment model has been configured, you can easily make changes on your staging server and move the contents to the production server with a click of the mouse.

The following two tasks must be performed to use the deployment model.

Task...	Use...~	More Information...
Deploy Files	MS Application Center	"Deploying the Files" on page 138
Synchronize Databases	MS SQL Server	"Synchronizing the Databases" on page 166

Additional Information

Supporting Documents

You can find more detailed information about Ektron CMS300 in the following documents:

- Ektron CMS300 Administrator Manual
- Ektron CMS300 Developers Reference Manual
- Ektron CMS300 User Manual
- Ektron CMS300 Quick Start Manual

Support

If you are experiencing trouble with any aspect of Ektron CMS300, please contact the Ektron Support Team via our Web Site, or by e-mail:

support@ektron.com

<http://www.ektron.com/support/index.aspx>

Sales

For questions and answers about purchasing Ektron CMS300 from Ektron, contact the sales department by sending an e-mail to:

sales@ektron.com

Ektron, Inc.
5 Northern Boulevard, Suite 6
Amherst, NH 03031 USA
Tel: +1 603.594.0249
Fax: +1 603.594.0258
<http://www.ektron.com>