



# Active Content Manager

## Upgrade Utility User Guide

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Active Network, LLC  
3400 N Central Expy | Suite 300 | Richardson TX 75080

Email support: [ACMSupport@ActiveNetwork.com](mailto:ACMSupport@ActiveNetwork.com)  
Web site: <https://activenetwork.my.salesforce-sites.com/acm/>

## Active Network™

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Active Network, LLC  
3400 N Central Expy  
Suite 300  
Richardson TX 75080  
1.888.543.7223

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# Upgrade Utility

The ACM Upgrade Utility was designed to automate the ACM upgrade process and remove the potential for error that goes hand in hand with the manual process. The Upgrade Utility is not a part of ACM but is rather a separate application, not restricted to any single release of ACM.

This guide describes the steps required to upgrade your ACM instance using the Utility. The guide includes steps for upgrading a single instance as well as multiple instances at one time.

## Technical Support

Technical support is available through the online support center at:

- <https://activenetwork.my.salesforce-sites.com/acm/>

In order to use this site, you must have a valid user name and password. If you're unsure, please try the **Forgot Password** link to check for an existing user name.

Email support: [ACMSupport@ActiveNetwork.com](mailto:ACMSupport@ActiveNetwork.com)

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# Pre-upgrade Preparation

There are a few steps to perform in preparation for your ACM upgrade using the ACM Upgrade Utility. They are described in this section.

## New Version Application files

Contact the support team to schedule an upgrade and receive the application files to perform an upgrade. Once the files are received, use WinZip or a similar program to unzip the files downloaded.

Use the password provided by the upgrades team to extract the files. The resulting folders should be similar to:

- Root
- Documentation
- Health Monitor
- Install files
- Upgrade Utility

## Maintenance Page

Because an ACM upgrade requires the shutdown and restart of the application, your public site is disabled temporarily. In order to make sure that your site visitors do not receive an error when they browse to your site during this period, a page is displayed stating: “The site is currently down for scheduled maintenance. Please check back soon.”

This temporary maintenance page is a customizable file that is created automatically when the Upgrade Utility is run for the first time. To modify the maintenance page that is displayed while the upgrade is happening:

1. Open the ACMUpgradeUtility.exe file to create a new folder.
2. Click **Cancel** to close the utility for now.
3. Open the Data folder in the root of the upgrade utility folder.
4. Customize the App\_Offline.htm file to include the message you want to show when the site is down for maintenance. You can edit this file in Notepad or any HTML file editor.

**Important** The App\_Offline.htm file must not be renamed because it is referenced by the Upgrade Utility.

## .NET Framework Compatibility

ACM runs on the .NET framework so it is required to have the correct version of the .NET framework installed prior to upgrading to a new ACM version.

Refer to the following chart to ensure the correct version of .NET is installed with the version of ACM you are upgrading to. To download the Microsoft .NET Framework, refer to Microsoft's website.

ACM Version	.NET Version Required
ACM 20.0 and up	.NET 4.7

## ACM Search Page

If you are already using the Windows Search service to index search files, no further action is needed. If you were using the Microsoft Indexing Service to index files, you must install the Windows Search service.

Follow "Appendix E" in the *ACM Installation and Configuration Guide* to set up the Windows Search service.

**Note:** Uninstalling the Indexing Service requires a reboot of the server, but installing the Windows Search service does not.

## Use the Correct ACM Upgrade Utility

The upgrade utility is packaged with the latest ACM release. Ensure the corresponding upgrade utility is used when upgrading to a new version.

## Custom Page Types

If you have any custom page types that you have created, you must perform the following task.

1. Place the .dll into the /bin folder and the page type files into the /CM/WebUI/PageTypes folder within the new version package folder of the new application files.

You must complete this task prior to running the Upgrade Utility.

2. Test your custom page types to make sure they work well with the new version.

Contact the ACM Support team if you run into any difficulties.

---

# Coordination and Planning

## Suspend CMS Activity

The ACM Upgrade Utility takes significantly less time to run than the manual upgrade process. In order to make certain that all CMS actions are complete prior to running the upgrade process, suspend all CMS activity a few minutes prior to performing the upgrade.

## Database Backup

The ACM Upgrade Utility automatically backs up your site files but doesn't back up your ACM Database. Even if you have a scheduled database maintenance plan, back up your database immediately prior to running the upgrade. In the event you need to recover the database, it will have all the latest information.

## Time

The Upgrade Utility can take anywhere from 5 – 15 minutes to run depending on the size of your site, performance of your web and database server, and a variety of factors. Your website will be down during parts of this period. Plan the upgrade for a non-peak period.

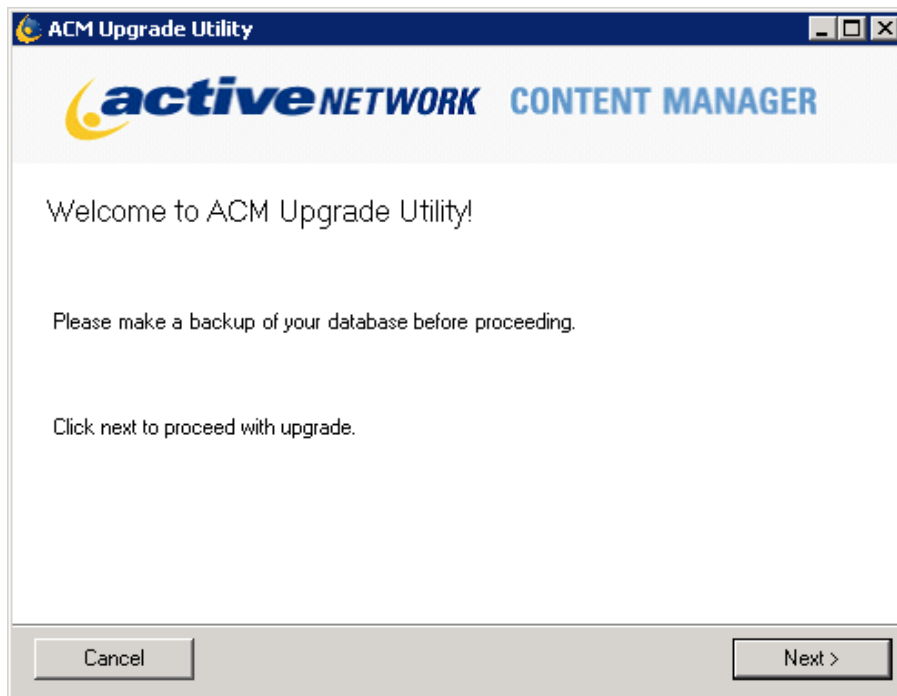
## Close All Applications and Folders

Prior to starting the upgrade process, close any open application that are running on your server. Additionally, close any folders you may have open. Also note that some anti-virus programs can lock files or interfere with the upgrade. Turn off any anti-virus or similar type programs during the upgrade process.

# Upgrade Utility

To begin the upgrade process, browse to the location on the ACM server where the Upgrade utility was extracted. Double click **ACMUpgradeUtility.exe** to launch the Utility. This section describes each of the screens presented in the Utility.

## Welcome



The first screen presented to you is the Welcome screen. Note the reminder to back up your database prior to proceeding with the upgrade. Click **Next** to continue to the next screen in the upgrade utility wizard.


## Choose Settings

This screen allows you to:

- Point to the ACM instance you wish to upgrade.
- Select the install package of the new ACM.
- Define a backup folder for your site files.

Follow the instructions below to complete this screen. File locations for each path as well as the upgrade utility must exist on the same volume (e.g. C:\).

### ACM Instance Section

1. Path:
  - a. Click the **Browse** button.
  - b. In the browse window that appears, select the ACM root folder.
  - c. Ensure that the correct version is shown in the **Version** field.
  - d. Ensure the LastDBScript version corresponds with the version of the site (e.g. a site running 10.3.565.15 should have a LastDBScript starting with 10.3). If the wrong version script appears, contact the ACM Support Team so they can ensure your database version is the correct version.
2. Connection String:
  - a. To the right of the **Connection String** field, click the  button to populate the field with the connection string from the configuration file.

- b. Ensure the server name, database name, user and password information is correct for this site.

**Note:** The user name for the connection string should be CM rather than the mcw user. The mcw user does not have access to modify objects in the database which is needed to upgrade the database.

**Note:** The CM user is not used elsewhere in ACM and the password can be safely reset by a DBA without needing to update any configuration.

- c. Click **Test** to ensure the connection information is correct.

### New Version Package Section

3. Path:
  - a. Click the **Browse** button.
  - b. In the browse window that appears, select the **Install files** folder of the extracted ACM Application Files package.
  - c. Ensure the correct version number is displayed in the **Version** field.

### Backups Section

4. Path:
  - a. Click the **Browse** button.
  - b. In the browse window that appears, select the folder where you would like to back up your site files.

**Note:** The ACM Upgrade Utility automatically creates a folder for the backups with the date and time of the upgrade during the upgrade process.

### Import XML button

The Import XML button allows you to import settings from an XML file. The loaded settings then populate all the text fields (**Instance**, **Connection String**, **Backup path**, etc.) The XML in the file must match the specific structure, which you can retrieve by using the **Export XML** button.

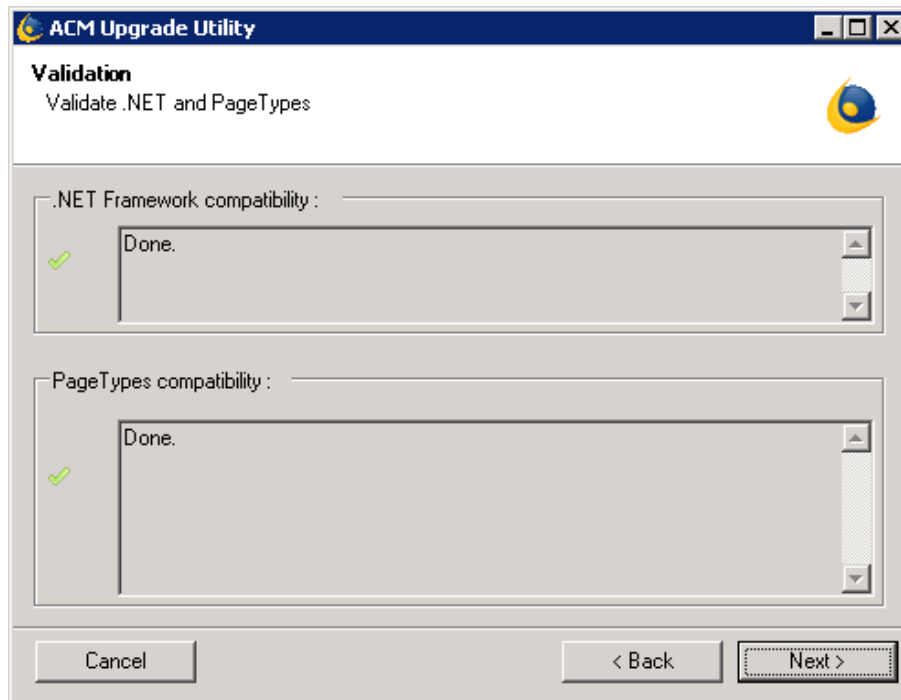
### Export XML button

The **Export XML** button allows you to save the currently entered settings to an XML file on your computer. After you export the file, you can then import the file whenever you need to populate all the fields with the data in the file.

The exported file is editable. You can use an exported file as an example for creating additional XML files with modified values in the file.

5. Once you have completed the above steps, click **Next** to continue with the upgrade.

## Validation



The validation screen of the utility checks for two items between the version of ACM you are currently on and the version of ACM to which you are upgrading: .NET framework compatibility and page type compatibility.

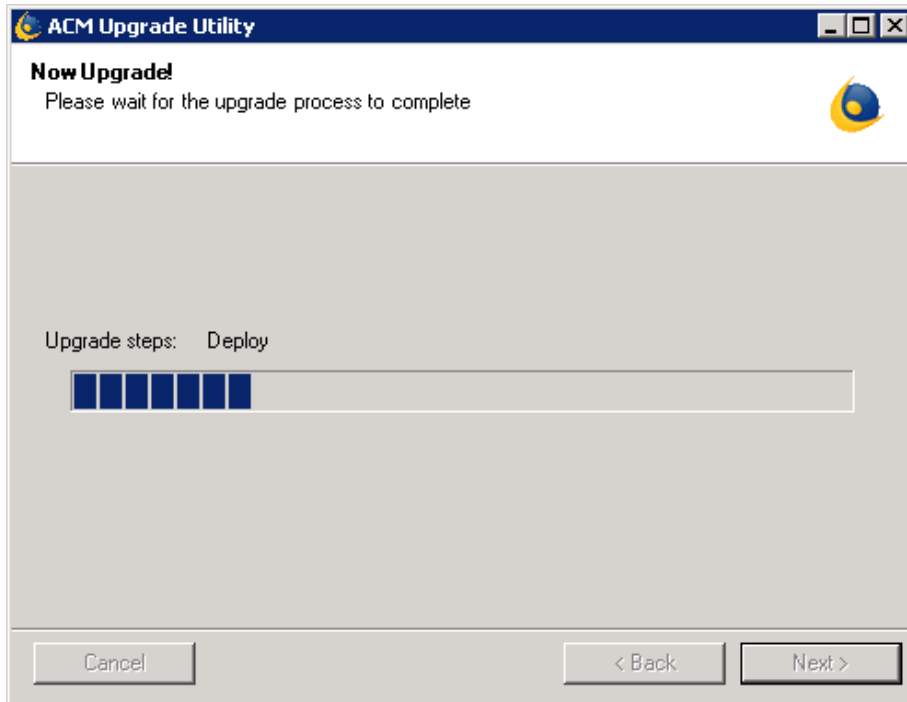
## Page Type Compatibility

If you have existing custom page types or old page types that are no longer supported in the new version of ACM, they are listed here as invalid page types. The upgrade utility will not continue since it could cause data corruption. Contact the ACM support desk to let them know about the incompatible pages and to get your next steps.

If validation is successful, click **Next** to continue with the upgrade process.

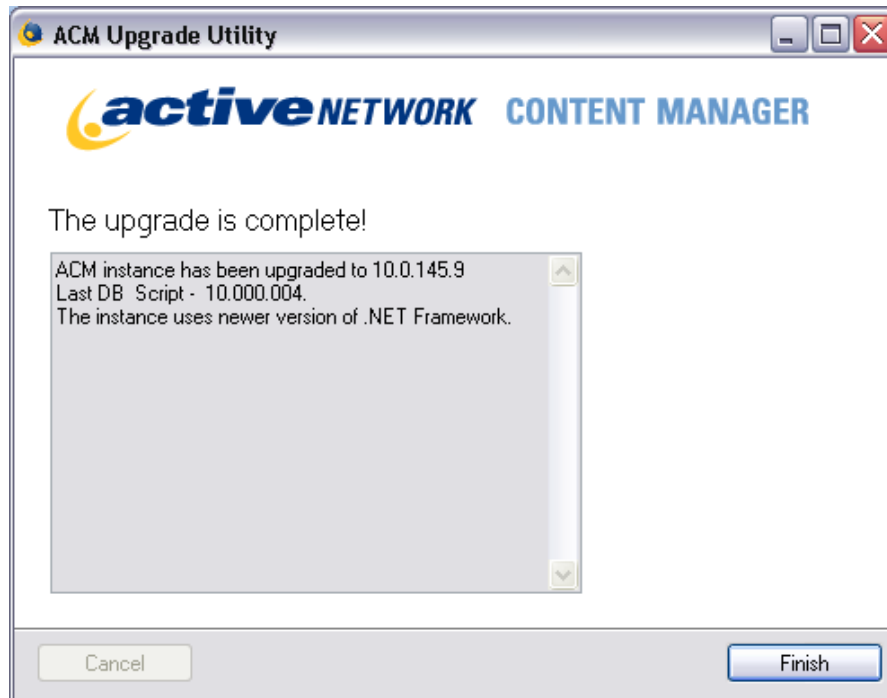
If the validation is not successful, the upgrade cannot proceed. If the validation fails, please click the **Cancel** button.

## Progress



The next screen to be displayed is the upgrade progress screen. Each of the actions for the upgrade are listed as the upgrade progresses. Completion of the upgrade automatically directs you to the next screen.

## Upgrade Utility Complete



The final screen of the Upgrade Utility displays the success of your upgrade with some information on the version to which you upgraded and the last database script run.

Click **Finish** to close the Upgrade Utility.

**Note:** If you encounter a warning or an error during the upgrade process, refer to [Appendix A](#) of this document or contact the Support team at [ACMSupport@ActiveNetwork.com](mailto:ACMSupport@ActiveNetwork.com).

Also, the App\_Offline.htm file remains on the root of the site if the upgrade process runs into an error. If this file exists, IIS displays this page no matter what else is on the site. This file must be deleted to allow IIS to serve up the ACM site again, once the issue causing the upgrade to fail is discovered.

# Post Upgrade Utility Instructions

## Update .NET version

If upgrading from an ACM version using a different .NET version, ensure the correct .NET version is selected for this site in IIS.

1. Open IIS.
2. Expand the IIS instance (indicated by the name of the server).
3. Click **Application Pools**.
4. Right-click the application pool used by ACM > Click **Basic Settings**.
5. Select the correct .NET Framework version in the drop down menu.
6. Click **OK**.
7. Click the IIS instance (indicated by the name of the server).
8. Open **ISAPI and CGI Restrictions**.
9. Ensure ASP.NET v4.0.30319 is allowed for both the 32-bit and 64-bit versions.

## Configure Handler Mappings for Friendly URLs

If the .NET version changed, and your site has existing handler mappings (e.g., for Friendly URLs), then these instructions must be followed. Otherwise, they can be ignored.

1. Open IIS.
2. Expand the IIS instance (indicated by the name of the server).
3. Expand Sites.
4. Click the site.
5. Open **Handler Mappings** in the right pane.
6. Look for an existing script map with the path = \*, State = Enabled, Handler = IsapiModule, and Executable = C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspnet\_isapi.dll (or C:\Windows\Microsoft.NET\Framework64\v4.0.30319\aspnet\_isapi.dll if this server is 64-bit and ACM is running in 64-bit mode in IIS)
  - a. If the script map exists, ignore this step.
  - b. If the script map doesn't exist, create one:
    - i. Click **Add Script Map**:
      - **Request path:** \*
      - **Executable:** C:\Windows\Microsoft.NET\Framework64\v4.0.30319\aspnet\_isapi.dll
      - **Name:** ACM Wildcard Friendly URL
      - Click **Request Restrictions...** > **Access tab** > **Set to None**
    - ii. Click **OK**.
    - iii. Click **Yes** to allow this ISAPI extension.
7. Click **OK**.

8. Ensure there are no handler mappings for \*.htm and \*.html. Remove them if there are.

## Licenses

If any new page type licenses were purchased at the time of your upgrade, you will be sent a separate file that contains the new .lic files for your site. These license files are necessary in order to use the page types you have purchased.

Do not attempt to apply new licenses during the upgrade process. Once the upgrade is complete and the site is successfully running on the new Active CM version, proceed with applying the new licenses.

**Note:** Existing licenses are maintained during the upgrade process.

If there are any issues or concerns with the license files or if you need new license files, questions can be directed to your Account Manager.

## Register Page Types

The Register Page Type process not only activates page types that you've added new licenses for; it also initializes new features of existing page types.

1. Log in to ACM.
2. System > Click **Page Types**.
3. Click **Register Page Types**.
4. Ensure this process completes successfully.

## LDAP Upgrade Scripts

This section only applies to you if you have LDAP integration enabled in ACM. If you are upgrading from an older version, ensure that you check which scripts need to be run against your ACM database. They must be run in the order specified below:

**If upgrading from ACM11.1 or earlier:**

```
Run: CMSRoot\CM\Import  
\SqlClient.CM.Commands_LDAPDirectoryIntegrationSetupAdditional3.sql
```

Ensure that the ACM system cache is cleared or the Application Pool in IIS is recycled after running these scripts.

# Test Your Site

After all these steps are complete, you need to browse and log in to your site.

It takes a few minutes to start the site after an upgrade due to caching of the pages in the site.

1. Start your browser and enter the URL to the login page.
2. Enter your CMS admin user ID and password.

**Note:** The steps below are based on the most recent version of ACM.

## Verify Active CM Version

1. Click **Help > About ACM** on the ACM tool bar.
2. A window appears that provides a summary of the version as well as last script run.

For additional details:

1. Click **System > System Information** on the ACM tool bar.
2. Under the **Ironpoint CMS Framework Software Version Information** section, the “Framework Build Version” indicates the build of Active CM that is installed.

## Check the Design Template

Test to make sure the database has proper access rights.

1. Click **System > Site Design**.
2. Click **Manage Templates**.
3. In the **NAME** column, click the latest design package.
4. When prompted, save the design package. Note the saved location.
5. Once the design template is saved, close the confirmation window.
6. Click **Upload Template Package**.
7. Browse to location where you saved the design package.
8. Highlight the package and click **Open**.
9. Click **Upload** and then wait for the template to upload. If you do not wait, your design template may not have enough time (depending on size) to be uploaded to the site and may cause errors.
10. Once uploaded, click **Commit**.
11. If you did not have any errors uploading it, your database has enough access rights for operation.

## Check Existing Links

Navigate through your site and ensure your links are working as expected.

Check a selection of:

- Content links to other pages.
- Links to digital assets.
- Navigational links (menus, location lines, etc.)

## Publish a Page

Ensure that publishing a page works as expected in the new version.

## Check Health Monitor Service

It is not necessary to upgrade the Health Monitor Service with each release; however, you should check to ensure the service is running.

Also, check the Windows Application Event logs to ensure that there are no failure messages coming from the Health Monitor.

## Update Readme File

As a final step, open the UPGRADE\_README.TXT file in CMS root (if it exists). You should add any notes to this file regarding custom settings, configuration changes, etc. (specifically from your configuration files) to provide information necessary for future upgrades of your site.

**Note:** The UPGRADE\_README.TXT file is not part of the Active CM install. This file is manually created by a site administrator to track changes made to settings and configuration files.

## Log Files

Browse to the folder where the upgrade utility was unzipped and open the **Logs** folder. Email all log files with the current date stamp to [ACMSupport@ActiveNetwork.com](mailto:ACMSupport@ActiveNetwork.com).

# Appendix A: Upgrade Failure Recovery

## Upgrade Failure Recovery

In the event that your upgrade fails or throws an error message, there are a number of steps that need to occur in order to restore your site to the previous version.

### View the Log File

A log file is generated in the folder where the Upgrade Utility resides. It contains messages that may indicate why the upgrade threw an error or failed. Contact ACM Support if you have any questions about what you see in the log file.

### Error Messages

If while upgrading, you receive an error message, you can use this section to help you understand the cause and solution for the error.

If the error mentions a file missing:

1. Make sure you have the entire installation package extracted and have all pagetype files included.

If it complains there are invalid pagetypes:

1. These will have to be removed from the database. Contact ACM support for help with this.

If there is a permissions issue:

1. Make sure all drives are on the same volume (same drive letter).
2. Make sure the account with which you are logged in to the server has read/write permissions to all the files.
3. Make sure no files or folders are open because the upgrade utility attempts to move these files to the backup folder and fails if one of these files is open.

If there is a database script issue:

1. Make sure you specify the CM user in the connection string, not the mcw user.
2. Make sure you are pointed at the right server/hostname/port, and database in the connection string. To denote a specific port, use a comma (e.g., Data Source="myDBserver,2433).
3. Make sure CM login exists, is mapped to the CM user in the ACM database, and has access to the ACM database.

If the upgrade complains about a .NET issue:

1. You may have an invalid version, and you need to contact the upgrades team to get the proper version.

If the utility doesn't run:

1. Make sure .NET 4.7 is installed on the server. And make sure you're logged in as an administrator running the application. Additionally, run the ACMUpgradeUtility.exe as an administrator.

### Removing the App\_Offline.htm File

There may be circumstances where you receive an error message regarding a discontinued page type such as the Order Management pagetype. If you see this error message, your upgrade has completed successfully but your App\_Offline.htm page may still be posted on the site.

To remedy:

1. Close the Upgrade Utility and send the log files to the ACM support team.
2. Browse to the CMS root folder and check to see if the App\_Offline.htm file is in this directory.
3. If it is, delete this file and test your website.

### Failed Upgrade

If an upgrade fails because one of the database scripts fails to run, you can restore the database and manually run the script to re-upgrade only the database.

1. Restore the backup of the ACM database taken before the upgrade started.
2. Start Windows Explorer and browse to the \DatabaseScripts\ directory from the backup created from the Upgrade Utility.
3. Open the folder that corresponds with the version of Active CM that you are upgrading from and the database platform being used and make note of the last script in this folder. (e.g., if using SQL Server, open Version10.0, but if using Oracle, open Version10.0Oracle).
4. Open the CMS root\DatabaseScripts\ directory.
5. Open the same folder as in Step 2, and double-check if there are any newer scripts than the one noted (indicated by a higher script number).
6. Open the first script with the lowest version number and script number that does not exist in the new version files and update the Use IronpointCM to the database name of your ACM database and run this script against the ACM database.
7. Run all the scripts in all subsequent version folders until all of them are run. Ensure that each script is run and in the order they appear within each folder.

In the event that your upgrade failed for any other reason, you should perform the following tasks to restore your site.

1. Restore your Database backup.
2. Restore your Site Files from the backup folder you specified in the Upgrade Utility.
  - a. Copy all the files and folders in the backup folder you specified.

- b. Browse to the CMS root folder and paste the files and folders. Click **Yes to All** if prompted to overwrite certain files.
3. Remove the App\_Offline.htm folder from the CMS root folder.
4. Contact the ACM Support team and include the upgrade log for more information.

# Appendix B: Multi-Server Upgrades

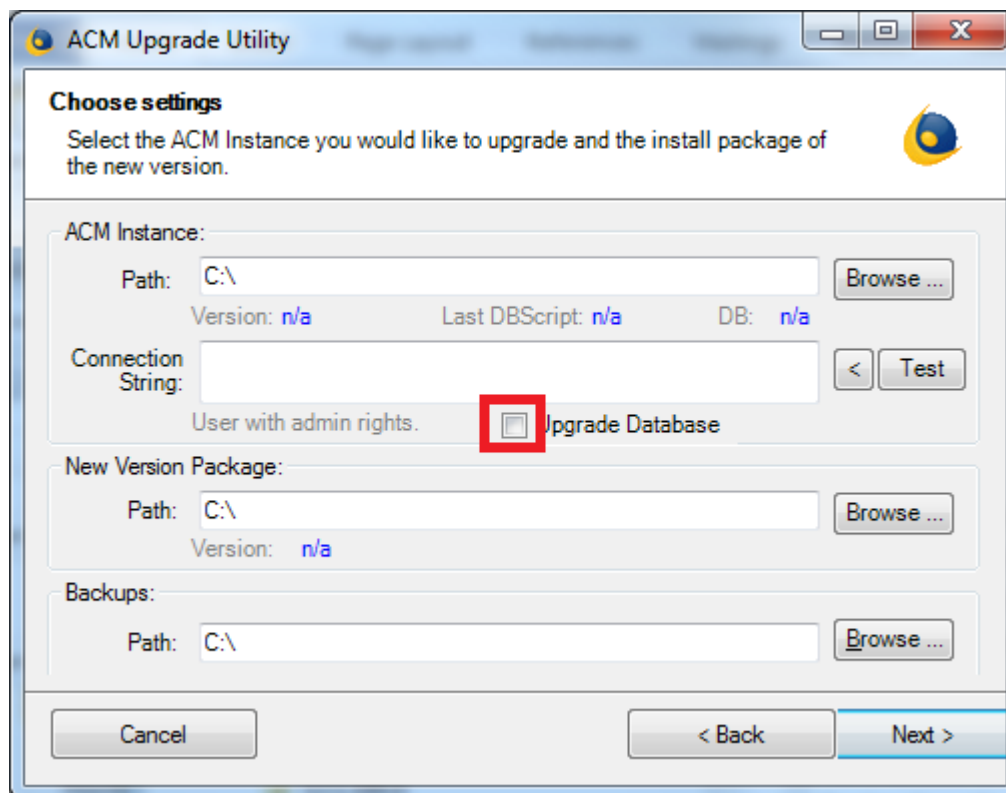
If ACM is running across multiple servers in a load balanced environment, special instructions must be added to the upgrade process.

## Upgrade First ACM Server

Follow the upgrade process to upgrade the first server.

## Upgrade Other ACM Servers

Upgrade ACM on all other servers, but ensure that the **Upgrade Database** checkbox is cleared.



## Upgrade the Cache Invalidation Service (CIS)

If the CIS is installed as an entire ACM instance with a database separate from the ACM instance's database, follow Method 1.

If the CIS shares the existing ACM instance's database, follow Method 2.

### Method 1 - Separate Database

If you are upgrading from ACM 12.4 or higher, the CIS does not need to be upgraded, and you can skip this section.

CISroot refers to the root folder containing the ACM files, similar to CMSroot for your ACM installation.

1. Uninstall the CIS:
  - a. **Start > Run** > type *cmd*.
  - b. Run the following command:

```
%SYSTEMROOT%\Microsoft.NET\Framework\v4.0.30319\InstallUtil.exe /u  
CISroot\CacheInvalidationService.exe
```

2. Upgrade the ACM files used for the CIS.
3. Install the CIS:
  - a. **Start > Run** > type *cmd*.
  - b. Run the following command:

```
%SYSTEMROOT%\Microsoft.NET\Framework\v4.0.30319\InstallUtil.exe /i  
CISroot\CacheInvalidationService.exe
```

- c. Verify that the final lines written to the console by InstallUtil.exe are:
  - The Commit phase completed successfully.
  - The transacted install has completed.

### Method 2 - Shared Database

CISroot refers to the folder containing the CIS files (typically copied from the /bin folder of an CMSroot folder)

1. Uninstall the CIS:
  - a. **Start > Run** > type *cmd*.
  - b. Run the following command:

```
%SYSTEMROOT%\Microsoft.NET\Framework\v4.0.30319\InstallUtil.exe /u  
CISroot\CacheInvalidationService.exe
```

2. Copy the CMSroot\bin folder from an upgraded ACM Server to the CISroot folder
3. Ensure the license file (CacheInvalidationService.lic) file is in the CISroot folder
4. Install the CIS:
  - a. **Start > Run** > type *cmd*.
  - b. Run the following command:

```
%SYSTEMROOT%\Microsoft.NET\Framework\v4.0.30319\InstallUtil.exe /i  
CISroot\CacheInvalidationService.exe
```

- c. Verify that the final lines written to the console by InstallUtil.exe are:
  - The Commit phase completed successfully.
  - The transacted install has completed.

## Appendix C: Moving to a new server

If you plan to move an ACM web instance to a new server, you need to consider the web.config file. In ACM, a section of the web.config file is encrypted using a machine level key. Because the key is tied to the existing server, the config file can't be easily moved to another server.

Use the following buttons on the ACM Upgrade Utility's UI to remove and apply the encryption:

- **Apply machine level encryption**
- **Remove machine level encryption**

The screenshot shows the 'Choose settings' dialog box in the ACM Upgrade Utility. The dialog is titled 'Choose settings' and includes the instruction: 'Select the instance to upgrade and the new ACM package. Db and css options should be selected only once when upgrading a multi-server instance!'. The dialog is divided into three main sections: 'ACM Instance:', 'New Version Package:', and 'Backups:'. Each section has a 'Path' field with a 'Browse ...' button. The 'ACM Instance' section also includes 'Version: n/a', 'Last DBScript: n/a', 'DB: n/a', a 'Connection String' field with a '<' button and a 'Test' button, and a checkbox for 'Upgrade Database (Only Run Once!)'. The 'New Version Package' section includes a 'Version: n/a' field and a checkbox for 'Merge New CSS (Only Run Once!)'. The 'Backups' section includes a 'Path' field with a 'Browse ...' button. At the bottom of the dialog, there are buttons for 'Import XML', 'Export XML', 'Apply machine level encryption', 'Remove machine level encryption', 'Cancel', '< Back', and 'Next >'. The 'Apply machine level encryption' and 'Remove machine level encryption' buttons are circled in red.

**Note:** Because these buttons function independently of an actual upgrade, you can use them without upgrading the instance.

To move an ACM web instance to a new server:

1. On the old server, click **Remove machine level encryption**.
2. Move the instance to the new server.
3. On the new server, click **Apply machine level encryption**.

If you don't apply encryption on the new server, the section will be automatically encrypted the next time you run an upgrade.