



Upgrading Software from the ACNS 5.4 or ACNS 5.5 Software Release

This chapter explains how to upgrade software in a centrally managed environment. It contains the following sections:

- [Determining the Current Software Version in the ACNS 5.4 or 5.5 Content Distribution Manager GUI, page 4-1](#)
- [Registering a Software File URL in the ACNS 5.4 or 5.5 Content Distribution Manager GUI, page 4-2](#)
- [Upgrading the Software Using the ACNS 5.4 or 5.5 Content Distribution Manager GUI, page 4-5](#)

In ACNS 5.4 software and later releases, all devices (including standby and primary Content Distribution Managers) can be upgraded by using the primary Content Distribution Manager GUI.



Note

Before installing new software, always review the release interoperability issues and requirements in [Chapter 1, “Introduction to Upgrading Your ACNS Software.”](#)

Determining the Current Software Version in the ACNS 5.4 or 5.5 Content Distribution Manager GUI

To view the current software version running on any particular device, choose **Devices > Devices**. The Devices window displays the software version for each device listed.

You can also click the **Edit** icon next to the name of a device in the Devices window. The Device Home window appears, listing the software version for that device.



Note

The software version is not upgraded until a software upgrade has been successfully completed. If a software upgrade is in progress, the version number displayed is the base version, not the upgraded version number.

Alternatively, in the Contents pane for any given device, choose **Show/Clear Commands > Show Commands**. Choose **version** and click **Submit**. A secondary window pops up and displays the CLI output for the **show version** command.

To determine the current ACNS software version from the CLI, use the **show version EXEC** command.

Registering a Software File URL in the ACNS 5.4 or 5.5 Content Distribution Manager GUI

To upgrade your software from ACNS 5.4.x or a later release using the Content Distribution Manager GUI, you must first register a software file URL with the Content Distribution Manager and configure the software file settings. The software file settings form in the Content Distribution Manager GUI defines the software file (.bin) and can be used to specify how to obtain the software file, and whether to pre-position it or download it directly to a device.

To configure the software file settings form, follow these steps:

- Step 1** From the Content Distribution Manager GUI, choose **System > Software Files**.
- Step 2** Click the **Create New Software File** icon in the taskbar. The Creating New Software File window appears. (See [Figure 4-1](#).)

Figure 4-1 Creating New Software File Window

The screenshot shows the 'Creating New Software File' window in the Cisco Application and Content Networking System GUI. The window is titled 'Software File Settings' and contains several input fields and sections. The 'Software File URL' field has a dropdown menu set to 'ftp' and a text input field. Below it are fields for 'Username', 'Password', and 'Confirm Password'. The 'Software Version' field has a text input field and a help icon with a tooltip explaining the version format (X.Y.Z.b.B). The 'File Size' field has a text input field and a help icon with a tooltip. Below these fields is a 'Validate Software File Settings' button. The 'Advanced Settings' section includes 'Auto Reload' (checked), 'Download Method' (radio buttons for Default, Prepositioned Only, and Direct Download Only), and 'CDM IP Address' (text input field). At the bottom is a 'Comments' section with a text area and 'Submit' and 'Cancel' buttons.

- Step 3** In the Software File URL field, enter the URL for the .bin software file that you downloaded from Cisco.com.
 - a.** Choose a protocol (**http** or **ftp**) from the drop-down list.
 - b.** Enter the URL of the software file. For example, a valid URL might look like this:
`http://internal.mysite.com/acns/ACNS-5.x.x-K9.bin`
 where `ACNS-5.x.x-K9` is the name of the software upgrade file. (The filename might include the version number.)

**Note**

If you are using a pre-positioned software file and you are entering the URL manually (rather than using the Select File from Channel option), the server name or IP address of the URL in the Software File URL field must match either the Origin Server field or the Request Routed FQDN field in the Content Distribution Manager GUI Web Site window of the channel. This is not a requirement if you are downloading the software file directly from the origin server. (See the [“Pre-Positioning a Software File”](#) section on page 2-4 for details.)

Alternatively, click the **Select File from Channel** button. A separate window pops up that allows you to choose a channel, set criteria, search the channel, and select the software file that you want to use for the software upgrade. (You must first pre-position the software file in the channel. See the [“Pre-Positioning a Software File”](#) section on page 2-4.)

- Step 4** If your server requires user login authentication, enter your username in the Username field and enter your login password in the Password field. Enter the same password in the Confirm Password field.
- Step 5** Enter the software version number in the Software Version field. You can copy this number from the version portion of the software filename in the software file URL.
- Specify the version in one of two formats: X.Y.Z-bB or X.Y.Z.b.B, where X = major version, Y = minor version, Z = maintenance version, b = build letter, and B = build number.
- Step 6** If you want the size of the software file considered during validation, enter a file size (in bytes) in the File Size field. If you leave this field blank, the URL is checked without regard to the software file size.
- Step 7** To validate the Software File URL, Username, and Password fields, click the **Validate Software File** button.

When you click the **Validate Software File** button, the following occurs:

- The software file URL is resolved.
 - A connection to the software file URL is established using the username and password, if specified.
 - If a file size is specified, the actual size of the software file is obtained and compared against the value in the File Size field.
 - A message is returned, indicating success or errors encountered.
- Step 8** In the Advanced Settings section, check the **Auto Reload** check box to automatically reload a device when you upgrade the software.
- Step 9** If you want, you can choose one of three download methods:
- Default—Uses pre-positioned content but always falls back to direct download.
 - Pre-positioned content only—Uses the local file copy if the software file URL references pre-positioned content and its replication status is complete.
 - Direct download only—Directly downloads the file using the software file URL.

**Note**

If you choose **Pre-positioned content only**, the software file settings that you define in this window cannot be used to upgrade a Content Distribution Manager or a Content Router, because these devices do not have pre-positioned content.

- Step 10** For downgrades to ACNS 4.x software only, specify the 4.x Content Distribution Manager IP address to be used for device registration in the CDM IP Address field.

The CDM IP Address field is the IP address of an ACNS 4.x Content Distribution Manager after the software is downgraded to ACNS 4.x. (This field is optional and applies only for downgrades to ACNS 4.x software.) After the downgrade, the Content Engine registers with the Content Distribution Manager with the IP address specified in this field.

Step 11 Click **Submit**. A message appears indicating that the upgrade is successful. Click **OK**.



Caution

If your browser is configured to save the username and password for the Content Distribution Manager GUI, the browser will autopopulate the username and password fields in the Creating New Software File window. You must clear these fields before you click **Submit**.

The software file that you want to use is now registered with the Content Distribution Manager. When you perform the software upgrade or downgrade, the URL that you just registered becomes one of the choices available in the Update Software window. (See the [“Upgrading the Software Using the ACNS 5.4 or 5.5 Content Distribution Manager GUI”](#) section on page 4-5.)

Using a Meta File as a Template for the Software File Settings Form

A meta file contains a pointer to the software file, as well as other descriptive information. A meta file is posted on Cisco.com along with each software file. (See the [“Obtaining a Meta File from Cisco.com”](#) section on page 2-2.)



Tip

We suggest that you edit the meta file before you import it to use as a template. See the [“Editing the Meta File”](#) section on page 2-3. If you choose not to edit the meta file before importing it, you can edit the information in the software file settings form; however, it is best to edit the meta file first, and use it as a template for future upgrades.

To import a meta file to use as a template for filling in the software file settings form, follow these steps:

- Step 1** Launch the Content Distribution Manager and log in using an administrative username and password.
- Step 2** From the Content Distribution Manager GUI, choose **System > Software Files**. The Software Files listing window appears.
- Step 3** Click the **Import Meta File** icon in the task bar. The Importing Meta File to Create New Software File window appears.
- Step 4** In the Meta File URL field, enter the URL for the .meta file that you downloaded from Cisco.com.
- Step 5** Click **Submit**. A message appears indicating that the upgrade is successful. Click **OK**. The Modifying Software File window appears with the fields populated from the information in the meta file.
- Step 6** Review the software file information and make changes if you want. At this time, you can configure the Advanced Settings section, if you want.
- Step 7** Click **Submit** in the Modifying Software File window if you modified the form, or click **Cancel** to return to the Software File listing window.

Upgrading the Software Using the ACNS 5.4 or 5.5 Content Distribution Manager GUI

When upgrading software in your ACNS network, begin with Content Engines and Content Routers before upgrading the Content Distribution Manager. The Content Distribution Manager reboots at the conclusion of the upgrade procedure, causing you to temporarily lose contact with the device and the graphical user interface. After the Content Distribution Manager has upgraded its software and rebooted, it may be unable to communicate with devices running different versions of the ACNS software.

Primary and standby Content Distribution Managers must be running the same version of ACNS software. If they are not, the standby Content Distribution Manager detects this and will not process any configuration updates it receives from the primary Content Distribution Manager. If you use the primary Content Distribution Manager GUI to perform the software upgrade, you need to upgrade your standby Content Distribution Manager first, and then upgrade your primary Content Distribution Manager. We also recommend that you create a database backup for the primary Content Distribution Manager and copy the database backup file to a safe place before you upgrade the software.

**Note**

See the “[Upgrade, Downgrade, and Interoperability Considerations](#)” section on page 1-2 for the correct order in which to upgrade devices.

Multiple Device Upgrades for Content Engines Using Device Groups

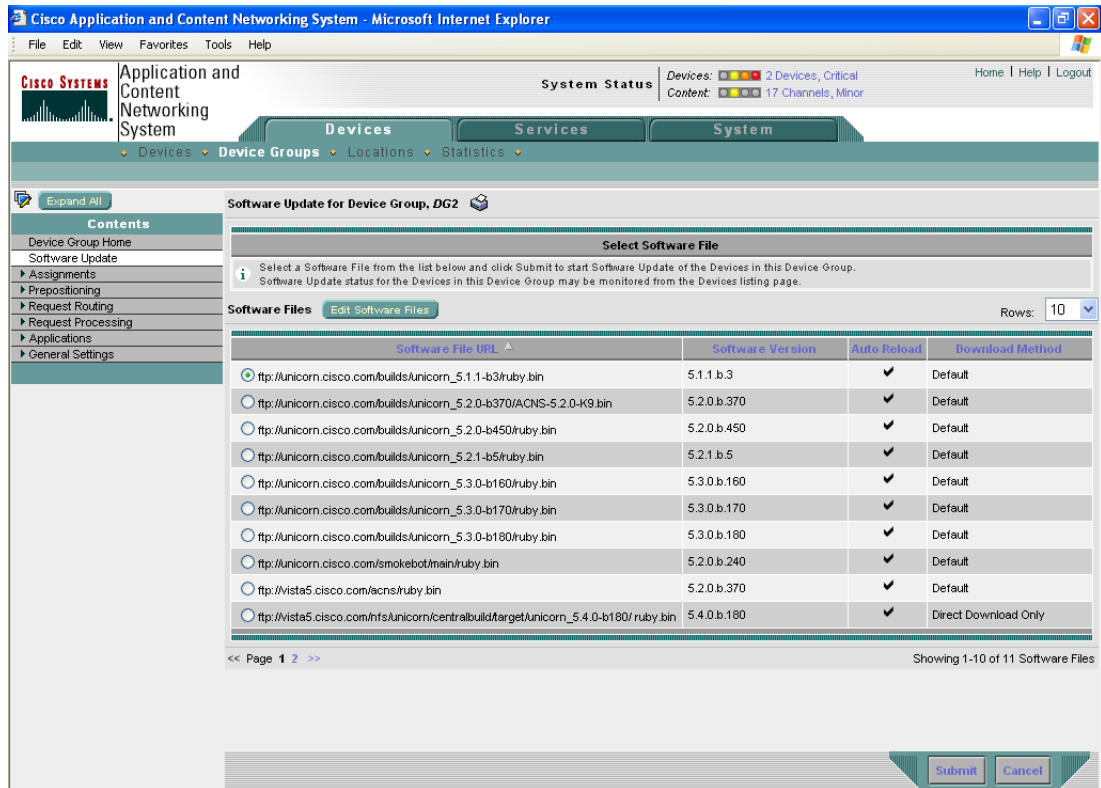
**Note**

This procedure is for Content Engines only. Content Routers and Content Distribution Managers cannot be associated with device groups.

To upgrade your software from an ACNS 5.4.x software release to another ACNS 5.4.x software release or from an ACNS 5.5.x release to another ACNS 5.5.x release on multiple Content Engines, follow these steps:

- Step 1** From the ACNS 5.4 or ACNS 5.5 software Content Distribution Manager GUI, choose **Devices > Device Groups**. The Device Groups listing window appears, listing all the device groups in your ACNS network.
- Step 2** Click the **Edit** icon next to the name of the device group that you want to upgrade. The Modifying Device Group window appears.
- Step 3** In the Contents pane, choose **Software Update**. The Software Update for Device Group window appears. (See [Figure 4-2](#).)

Figure 4-2 Software Update for Device Group Window



Step 4 Choose the software file URL from the Software File URL list by clicking the radio button next to the filename.

Step 5 Click **Submit**.

To view progress on an upgrade, go to the Devices window (**Devices > Devices**). Software upgrade status messages are displayed in the Software Version column. These intermediate messages are also written to the system log on Content Engines. See [Table 4-1](#) for a description of upgrade status messages.

Table 4-1 Upgrade Status Messages

Upgrade Status Message	Condition
Pending	The request has yet to be sent from the Content Distribution Manager to the device, or receipt of the request has yet to be acknowledged by the device.
Downloading	The download method for the software file is being determined.
Proceeding with Prepositioned Download	The download method for the software file is determined to be pre-positioning. Proceeding with download of a pre-positioned software file.
Proceeding with Download	The download method for the software file is determined to be direct download. Proceeding with the request for direct download of the software file.

Table 4-1 Upgrade Status Messages (continued)

Upgrade Status Message	Condition
Download in Progress (Completed ...)	Direct download of the software file is being processed. “Completed” indicates the number of megabytes processed.
Download Successful	The direct download of the software file has been successful.
Download Failed	The direct download of the software file cannot be processed. Further troubleshooting is required; see the device system message log.
Proceeding with Flash Write	A request has been made to write the software file to the device flash memory.
Flash Write in Progress (Completed ...)	The write of the device flash memory is being processed. “Completed” indicates the number of megabytes processed.
Flash Write Successful	The flash write of the software file has been successful.
Reloading	A request to reload the device has been made in order to complete the software upgrade. The device may be offline for several minutes.
Reload Needed	A request to reload the device has not been made. The device must be reloaded manually to complete the software upgrade.
Cancelled	The software upgrade request was interrupted, or a previous software upgrade request was bypassed from the CLI.
Update Failed	The software upgrade could not be completed. Troubleshooting is required; see the device system message log.

Single Device Upgrades Between ACNS 5.4 or ACNS 5.5 Releases

Use this upgrade procedure for Content Routers and Content Distribution Managers. You can also use this upgrade procedure to upgrade Content Engines one at a time.

To upgrade your software from an ACNS 5.4.x software release to another ACNS 5.x software release or from an ACNS 5.5.x software release to another ACNS 5.5.x software release on a single device, follow these steps:

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- Step 1** From the Content Distribution Manager GUI, choose **Devices > Devices**.
 - Step 2** Click the **Edit** icon of the device that you want to upgrade. The Device Home window appears.
 - Step 3** Verify that the device is not already running the version that you plan to upgrade to, and that the current version has an upgrade path to the version that you plan to upgrade to.

- Step 4** Click the **Update Software** button. The Software Update window appears.
- Step 5** Choose the software file URL from the Software Files list by clicking the radio button next to the filename.
- Step 6** Click **Submit**, and then click **OK** to confirm your decision.
- The Devices listing window reappears. You can monitor the progress of your upgrade from this window. Software upgrade status messages are displayed in the Software Version column. These intermediate messages are also written to the system log on Content Engines. See [Table 4-1](#) for a description of upgrade status messages.

Deleting a Software File from the ACNS 5.4 or 5.5 Content Distribution Manager GUI

To delete an ACNS software file, follow these steps:

- Step 1** Choose **System > Software Files**.
- Step 2** Click the **Edit** icon next to the software file that you want to delete. The Modifying Software File window appears.
- Step 3** Click the **Trash** icon in the taskbar. You are prompted to confirm your decision to delete the software file.
- Step 4** Click **OK**. You are returned to the Software Files listing window with the selected software file removed from the ACNS network.



Note

When upgrading Content Distribution Managers or Content Engines and Content Routers using the CLI, follow the procedures in the [“Installing the Software File Using the CLI”](#) section on page 3-2.

Downgrading from ACNS 5.4 Software to ACNS 4.2.9 Software Using the Content Distribution Manager GUI

To downgrade to ACNS 4.2 software using the ACNS 5.4 Content Distribution Manager GUI, you must first downgrade to ACNS 5.3, ACNS 5.2, or ACNS 5.1 software, and from that release you can downgrade to ACNS 4.2 software.



Note

You cannot downgrade directly to ACNS 4.2 software or to ACNS 5.0.x software from the ACNS 5.4 release.

When downgrading, you can follow the procedure for installing a software file found in the [“Upgrading the Software Using the ACNS 5.4 or 5.5 Content Distribution Manager GUI”](#) section on page 4-5.

**Note**

The procedure for upgrading and for downgrading software involves installing a software file. The software file, depending on the release number, either upgrades or downgrades the current version of software running on your device.

To downgrade from ACNS 5.4 software to ACNS 4.2.9 software, follow these steps:

Step 1

Perform the initial downgrade to an earlier version of ACNS 5.x software.

In the Software File URL field, enter the URL of a software downgrade file, such as the following:

ACNS-5.4.x.x-TO-5.3.x.x-K9.bin

(See the “[Registering a Software File URL in the ACNS 5.4 or 5.5 Content Distribution Manager GUI](#)” section on page 4-2 and see [Figure 4-1](#).)

Step 2

Perform the second downgrade from ACNS 5.x software to ACNS 4.2 software.

- In the Software File URL field, enter the URL of a software downgrade file, such as the following:
ACNS-5.3.x.x-TO-4.2.9-K9.bin
where 5.3.x.x corresponds to the version that you selected for the downgrade from ACNS 5.4 software.
 - In the CDM IP Address field, specify the 4.x Content Distribution Manager IP address to be used for device registration.
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To downgrade from ACNS 5.4 software to ACNS 4.2.9 software using the CLI, follow the procedure in the “[Downgrading from ACNS 5.x Software to ACNS 4.2.9 Software Using the CLI](#)” section on page 3-2, using a similar two-step downgrade process.

