C H A P T E R 14

Working with Configuration Change Management

This chapter describes how to use the Configuration Change Management feature.

This chapter includes the following sections:

Information About Configuration Change Management

The Configuration Change Management feature allows you to keep an archive of configurations from managed devices. You can view and compare archived configurations. You can roll back the running configuration of a managed device to any archived configuration version available for the device in Cisco Data Center Network Manager (DCNM).

This section includes the following topics:

Version Browser

The Version Browser feature allows you to see information about archived configurations, view and compare specific configuration versions, and merge changes from one configuration version to another. After you modify a configuration by merging changes, you can save the modified configuration as a text file on a file system available to the computer that you are using to run the DCNM client.

From the Version Browser, you can initiate a configuration rollback for a device, using any of the archived configurations available in DCNM for the device. DCNM uses the rollback feature available in Cisco NX-OS. For more information about the Cisco NX-OS rollback feature, see the *Cisco NX-OS System Management Configuration Guide, Release 4.1*.

Archival Jobs

The Archival Jobs feature allows you to control the automated archival of the running configuration on managed devices. You can add, edit, and delete custom archival jobs. A job consists of settings that determine when the job runs and a list of managed devices included in the job. You can choose to archive configurations at a regular interval, at a scheduled time on selected days, or whenever DCNM detects configuration changes on a device. You can also comment on a job.

The Default archival job always exists. You cannot delete it. By default, it is disabled.

Devices can be assigned to one archival job only. If you assign a device to an archival job, DCNM removes the device from the job that it was previously assigned to.

If a managed device is not assigned to a custom archival job, DCNM automatically assigns it to the Default archival job.

Archival Settings

The Archival Settings feature allows you to configure settings related to configuration change management, including the number of configuration versions that DCNM stores for each managed device, how many rollback and archival history entries DCNM stores for each managed device, and which file server DCNM uses during a configuration rollback.

Virtualization Support

DCNM treats each virtual device context (VDC) on a Cisco NX-OS device as a separate device; therefore, DCNM archives the running configurations of each VDC provided that DCNM has successfully discovered the VDC and views it as a managed device.

Licensing Requirements for Configuration Change Management

The following table shows the licensing requirements for this feature:

Product	License Requirement
DCNM	Configuration Change Management requires a LAN Enterprise license. For information about obtaining and installing a DCNM LAN Enterprise license, see the "Installing Licenses" section on page 2-7.

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Prerequisites for Configuration Change Management

The Configuration Change Management feature has the following prerequisites:

- The Configuration Change Management feature supports only devices that are managed by DCNM, which means that DCNM must have successfully discovered the device.

- The Configuration Change Management feature supports only devices that you have added to the list of DCNM-licensed devices.

- Devices must be reachable by DCNM when DCNM attempts to archive the configuration or to perform a configuration rollback. An archival job or configuration rollback fails if the device is unreachable by DCNM.

Guidelines and Limitations for Configuration Change Management

Configuration Change Management has the following configuration guidelines and limitations:

- You can archive a maximum of 50 configuration versions per managed device.

- Configure archival jobs and archival settings based upon the needs of your organization.

- We recommend enabling the Default archival job and configuring the job to run at the lowest frequency that your backup policy tolerates.

Working with the Version Browser

Figure 14-1 shows the Version Browser content pane.

Figure 14-1   Version Browser Content Pane
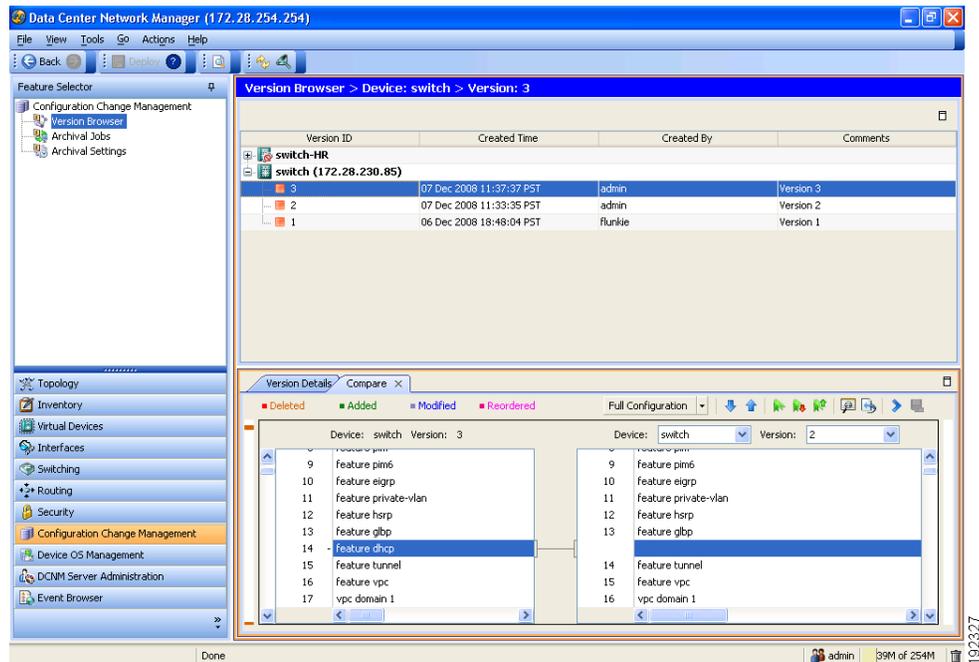
This section includes the following topics:

- Viewing the Archival Status of a Device, page 14-5
- Viewing the Archival History of a Device, page 14-5
- Browsing and Commenting on Configuration Versions, page 14-6
- Archiving the Current Running Configuration of a Device, page 14-6
- Viewing an Archived Configuration Version, page 14-7
- Comparing Configuration Versions, page 14-8
- Using the Version Comparison Tools, page 14-9
- Merging Configuration Differences, page 14-11
- Performing a Configuration Rollback, page 14-12
- Viewing the Rollback History of a Device, page 14-13
- Deleting All Archived Configurations for a Device, page 14-13

Viewing the Archival Status of a Device

You can view the archival status of a device. The archival status for a device includes the following information:

- Whether the archival job that includes the device is enabled or disabled.
- The schedule for the archival job that includes the device.
- The Job ID of the archival job that includes the device.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

DETAILED STEPS

To view the archival status of a device, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Click the device that has the archival status that you want to view.

The Details pane displays archive-related information about the device, including an Archival Status section.

If the archival job that includes the device is enabled, a View Schedule link appears.

If the archival job that includes the device is disabled, a Enable Archival Schedule link appears.

Step 3   (Optional) If you want to view the details of the archival job that includes the device, click the **View Schedule** link or the **Enable Archival Schedule** link. For more information, see the "Viewing Details of an Archival Job" section on page 14-17.

Viewing the Archival History of a Device

You can view the archival history of a device. The archival history records each attempt to create a new archival configuration version from the current running configuration of a device

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

DETAILED STEPS

To view the archival history of a device, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Click the device that has archival history that you want to view.

The Details pane displays archive-related information about the device, including an Archival History section.

Step 3   (Optional) If necessary, click the Archival History section to expand it.

The Archival History section displays a table of information about every attempt made to create a new archival configuration version for the device.

Browsing and Commenting on Configuration Versions

You can browse the archived configuration versions for managed devices. Browsing allows you to see information about all versions of an archived configuration.

You can also add, change, or delete comments on any version of an archived configuration.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

The archived configuration versions that you want to browse or comment on must exist in DCNM.

DETAILED STEPS

To browse and comment on configuration versions, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Double-click the device that has archived configuration versions that you want to browse.

A list of archived configuration versions appears below the device that you double-clicked. For each version, the Summary pane shows the version ID, the date and time that DCNM created the version, the DCNM user who created the version, and comments about the version.

Step 3   (Optional) If you want to comment on a version, follow these steps:

a.   Click the version that you want to update with comments.

The Details pane shows the Version Details tab, which contains the same information about the version that appears in the Summary pane, except that the Comments box is available for you to use.

b.   Click in the **Comments** box and enter your comments.

c.   From the menu bar, choose **File > Deploy** to save your changes to the DCNM server.

Archiving the Current Running Configuration of a Device

You can archive the current running configuration of a managed device.

Archiving the current running configuration succeeds only if the most recent archived version in DCNM is different than the current running configuration.

BEFORE YOU BEGIN

The device must be managed and reachable.

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

DETAILED STEPS

To archive the current running configuration of a managed device, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Click the device that has a running configuration that you want to archive now.

Step 3   From the menu bar, choose **Actions > Archive Configuration**.

Step 4   To confirm that DCNM successfully archived the configuration, view the list of archived configuration versions for the device. If necessary, double-click the device to open the list. The new version should appear at the top of the list.

> **Note**   If a message box notifies you that archiving the configuration was skipped, then DCNM did not detect differences between the current running configuration and the most recent archived configuration version for the device. To close the message box, click **OK**.

Viewing an Archived Configuration Version

You can view a version of an archived configuration.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

The archived configuration version that you want to view must exist in DCNM.

DETAILED STEPS

To view a version of an archived configuration, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Click the device that has an archived configuration version that you want to view.

Step 3   (Optional) If necessary, to view the list of archived configuration versions for the device, double-click the device.

Step 4   Click the version of the archived configuration that you want to view.

Step 5   From the menu bar, choose **Actions > View Configuration**.

In the Details pane, the Configuration tab displays the configuration version that you selected.

⌕

Tip   You can search the text of the configuration. To do so, press **Ctrl + F**.

Comparing Configuration Versions

You can compare two configuration versions. The configurations that you can compare can be any two archived configuration version in DCNM, including archived configurations from different managed devices. You can also compare an archived configuration version to the running configuration or the startup configuration of a managed device.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

If you are comparing archived configuration versions, the two versions must exist in DCNM.

If you are comparing an archived configuration version to a running configuration or startup configuration on a managed device, the device must be reachable by DCNM.

DETAILED STEPS

To compare an archived configuration version to another configuration version, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Double-click the device that has an archived configuration version that you want to compare to another configuration version.

Step 3   (Optional) If necessary, to view the list of archived configurations for the device, double-click the device.

Step 4   Click the archived configuration version that you want to compare to another configuration version.

Step 5   Use the following table to compare the selected version to the configuration version that you want:

To Compare With	Follow These Steps
Most recent configuration version from the current device	Right-click the version and choose **Compare with > Latest**.
Next configuration version from the current device	Right-click the version and choose **Compare with > Next**.
Previous configuration version from the current device	Right-click the version and choose **Compare with > Previous**.

To Compare With	Follow These Steps
Another configuration version that you select	1. Press and hold the **Ctrl** key. 2. Click the archived configuration version that you to compare the first selected version to, and then release the **Ctrl** key. 3. Right-click either selected configuration version and choose **Compare with > Selected Versions**. The selected configuration versions appear in the two configuration panes on the Compare tab. The configuration version that is listed highest in the Summary pane appears in the left configuration pane. **Tip** You can select archived configuration versions from different devices.
Current running configuration from the current device	Right-click the version and choose **Compare with > Current Running Configuration**.
Current startup configuration from the current device	Right-click the version and choose **Compare with > Current Startup Configuration**.
A configuration version from another device	1. Right-click the version and choose **Compare with > Another Device Configuration**. In the Details pane, the Compare tab shows the selected configuration version in the left configuration pane. 2. From the Device list above the right configuration pane, choose the device that has the configuration version that you want to compare with the configuration in the left pane. 3. From the Version list, pick the configuration version that you want to compare. You can use any version archived by DCNM or you can use the running configuration or the startup configuration currently on the device. 4. Click the 🖅 icon. The right configuration pane displays the configuration version that you specified.

In the Details pane, the Compare tab displays the two configuration versions in side-by-side panes.

Step 6   Use the version comparison tools as needed. For more information, see the "Using the Version Comparison Tools" section on page 14-9.

Using the Version Comparison Tools

When you use the Version Browser to compare configuration versions, the Compare tab in the Details pane has many options to assist you with the comparison.

Note   You must be comparing two configurations to use the version comparison tools. For more information, see the "Comparing Configuration Versions" section on page 14-8.

Use the options described in the following table to assist you compare two configuration versions.

Option Icon and Name	How to Use the Option
`Full Configuration` ▾ Full vs. Delta View	From the list, choose the desired viewing option, as follows: • `Full Configuration` ▾—Shows all of both configuration versions. • `Delta Configuration` ▾—Shows only the sections of each configuration that differ.
⬇ Next Diff	Click the ⬇ icon to jump to the next difference between the two configurations shown.
⬆ Prev Diff	Click the ⬆ icon to jump to the previous difference between the two configurations shown.
▶ Bookmark	1. Click a line in one of the configuration panes. 2. Click the ▶ icon. A bookmark icon appears beside the line number.
▶ Next Bookmark	1. Click the configuration pane that has the bookmarked line that you want to view. 2. Click the ▶ icon. The configurations in both panes jump to the next bookmarked line.
▶ Prev Bookmark	1. Click the configuration pane that has the bookmarked line that you want to view. 2. Click the ▶ icon. The configurations in both panes jump to the previous bookmarked line.
▣ Compare	Use this option to choose the archived configuration version shown in the right configuration pane. 1. From the Device list, choose the device that has the configuration version that you want to compare with the configuration in the left pane. 2. From the Version list, pick the configuration version that you want to compare. You can use any version archived by DCNM or you can use the running configuration or the startup configuration currently on the device. 3. Click the ▣ icon. The right configuration pane displays the configuration version that you specified.
▣ Reset	Click the ▣ icon when you want to do the following: • Undo all configuration merges. • Remove all bookmarks. • Jump to the first line in both configuration panes. • Use the Full Configuration view.

Option Icon and Name	How to Use the Option
❯ Merge	Use this option to copy a difference from the configuration in the left configuration pane into the configuration in the right pane. For detailed steps, see the "Merging Configuration Differences" section on page 14-11.
💾 Save As	Click the 💾 icon to save the configuration in the right pane to a filename and location that you specify in the Save dialog box that appears.

Merging Configuration Differences

While you are comparing two configuration versions, you can merge lines that contain differences. The merge feature allows you to merge a whole line shown in the left configuration pane into the configuration that is shown in the right configuration pane.

BEFORE YOU BEGIN

You must be comparing two configuration versions that have differences.

Ensure that the configuration version that you want to want to merge the changes into appears in the right configuration pane.

DETAILED STEPS

To merge configuration differences, follow these steps:

Step 1   Use the ⬇ icon and the ⬆ icon as needed to jump to the line that you want to merge from the left configuration pane into the right configuration pane.

> 🔎
>
> **Tip**   The ❯ icon becomes available only when you use the ⬇ icon and the ⬆ icon to locate differences.

Step 2   Click the ❯ icon.

The selected configuration line in the left pane replaces the selected line in the right pane.

Step 3   Repeat Step 1 and Step 2 as often as needed.

> 🔎
>
> **Tip**   If you want to undo all merges, click the 🔄 icon.

Step 4   (Optional) If you would like to save a copy of the configuration in the left pane as an ASCII text file, click the 💾 icon and use the Save dialog box to save the configuration to a filename and location that you specify.

Performing a Configuration Rollback

You can roll back the configuration of a managed device to any previous version that is archived by DCNM. A rollback replaces the running configuration of the managed device with an archived configuration version that you specify.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

The archived configuration version that you want to use in the rollback must exist in DCNM.

DETAILED STEPS

To perform a configuration rollback, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2   Click the device for which you want to perform a configuration rollback.

The Details pane displays archival information about the device, including a Rollback History section.

Step 3   (Optional) If necessary, to view the list of archived configurations for the device, double-click the device.

Step 4   Click the version of the archived configuration that you want to use as the running configuration on the device.

Step 5   Do one of the following:

- If you want to save the configuration version that you selected as the startup configuration on the device, choose one of the following rollback options:

  – If you want DCNM to restore the original running configuration of the device if any configuration command fails during the rollback, from the menu bar, choose **Actions > Rollback and Save as Start-up > Restore Original Config on Error (Atomic)**.

  – If you want DCNM to ignore configuration errors during rollback, from the menu bar, choose **Actions > Rollback and Save as Start-up > Skip Errors and Rollback (Best Effort)**.

  – If you want DCNM to stop the rollback at the first configuration error, from the menu bar, choose **Actions > Rollback and Save as Start-up > Stop Rollback at First Error**.

- If you want the rollback to proceed without affecting the startup configuration currently on the device, choose one of the following rollback options:

  – If you want DCNM to restore the original running configuration of the device if any configuration command fails during the rollback, from the menu bar, choose **Actions > Rollback > Restore Original Config on Error (Atomic)**.

  – If you want DCNM to ignore configuration errors during rollback, from the menu bar, choose **Actions > Rollback > Skip Errors and Rollback (Best Effort)**.

  – If you want DCNM to stop the rollback at the first configuration error, from the menu bar, choose **Actions > Rollback > Stop Rollback at First Error**.

DCNM begins the rollback operation.

Viewing the Rollback History of a Device

You can view the rollback history of a device.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. Only licensed devices appear in the Version Browser.

DETAILED STEPS

To view the rollback history of a device, follow these steps:

Step 1 From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2 Click the device for which you want to view rollback history.

The Details pane displays archival information about the device, including a Rollback History section.

Step 3 (Optional) If necessary, double-click the Rollback History section to expand it.

In the Rollback History section, a table of rollback history events appears. If no configuration rollbacks have occurred on the device, the table is empty.

Deleting All Archived Configurations for a Device

You can delete all the archived configuration versions of a device.

✎
Note You cannot delete a specific version of an archived configuration.

BEFORE YOU BEGIN

Be certain that you do not want any of the archived configuration version for the device. You cannot undo the deletion and the DCNM client does not confirm your choice to delete the archived configuration versions.

DETAILED STEPS

To delete all archived configurations for a device, follow these steps:

Step 1 From the Feature Selector pane, choose **Configuration Change Management > Version Browser**.

The Summary pane displays a table of devices.

Step 2 Click the device that has archived configurations that you want to delete.

Step 3 Verify that you clicked the correct device.

✎
Note The next step deletes the archived configuration versions without confirming your choice.
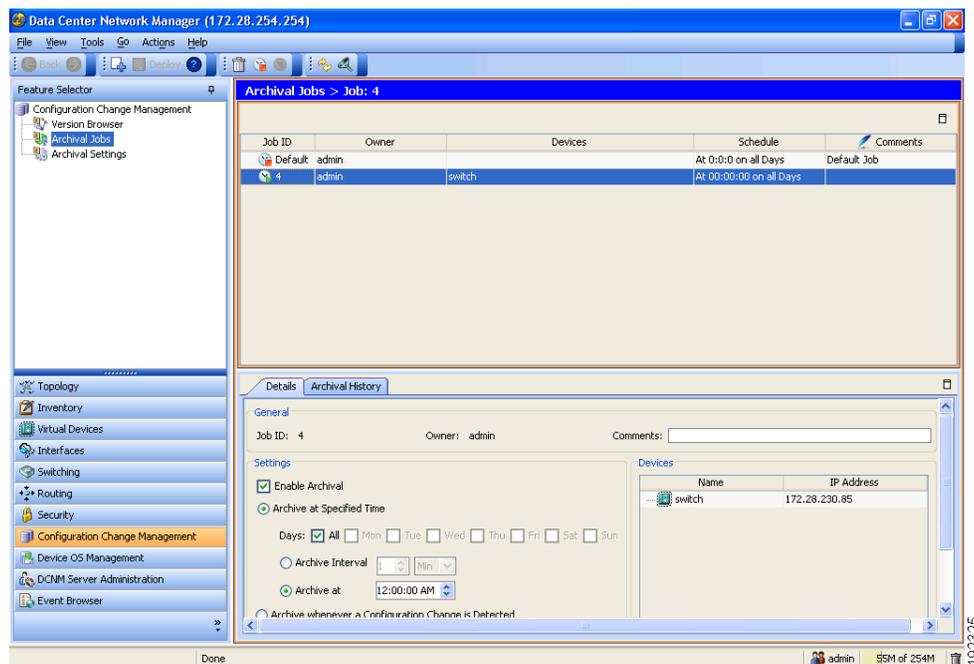
Step 4   From the menu bar, choose **Actions > Delete All Versions**.

The archived configurations for the selected device disappear from the Summary pane.

Configuring Archival Jobs

Figure 14-1 shows the Archival Jobs content pane.

Figure 14-2   Archival Jobs Content Pane

This section includes the following topics:

Configuring an Archival Job

You can create an archival job or make changes to an existing archival job.

Note   By default, a new archival job is enabled.

BEFORE YOU BEGIN

A managed device must be on the list of DCNM-licensed devices before you can use it with Configuration Change Management. You can include only licensed devices in an archival job.

DETAILED STEPS

To configure an archival job, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Archival Jobs**.

The Summary pane displays a table of archival jobs.

Step 2   Do one of the following:

- If you want to create an archival job, from the menu bar, choose **File > New Job**.
- If you want to make changes to an existing archival job, in the Summary pane, click the job that you want to change.

The Details pane shows the Details tab and Archival History tab for the job.

Step 3   (Optional) If necessary, in the Details pane, click the **Details** tab.

Step 4   (Optional) In the Comments field, enter your comments about the job.

Step 5   (Optional) If you want the job to archive configurations at a specific time, follow these steps:

    a.   Click the **Archive at Specified Time** radio button.

    b.   In the row of Days check boxes, check the check box for each day that you want the archival job to be active.

    c.   Do one of the following:

        – If you want the job to archive configurations at a regular interval, click the **Archive Interval** radio button and use the adjacent box and list to specify the interval. You can specify an interval in minutes or hours. The maximum interval is either 59 minutes or 23 hours.

        – If you want the job to archive configurations once on each day that the job is active, click the **Archive at** radio button and use the adjacent box to specify the time that you want the job to start.

Step 6   (Optional) If you want the job to archive configurations at any time that DCNM detects a change to the configuration of a device included in the job, click the **Archive whenever a Configuration Change is Detected** radio button.

Step 7   If you want to add one or more devices to the archival job, follow these steps:

    a.   Under Device, right-click in a blank area and choose **Add New Device**.

    A dialog box shows available and selected devices.

    a.   For each device that you want to add, under Available Devices, click the device and click **Add**.

> **Tip**   To add all devices to the job, click **Add All**.

    b.   Click **OK**.

The devices that you added appear under Devices.

Step 8   If you want to remove a device from an archival job, follow these steps:

    a.   Under Devices, click the device that you want to remove from the job.

    b. Right-click the device and choose **Remove Device**.

    The device that you removed no longer appears under Devices.

Step 9 From the menu bar, choose **File > Deploy** to save your changes to the DCNM server.

If you created an archival job, it is enabled by default. If you changed an existing archival job, whether it is enabled or disabled does not change.

Enabling and Disabling an Archival Job

You can enable or disable any archival job.

DETAILED STEPS

To enable or disable an archival job, follow these steps:

Step 1 From the Feature Selector pane, choose **Configuration Change Management > Archival Jobs**.

The Summary pane displays a table of archival jobs. In the Job ID column, enabled jobs show a green triangle and disabled jobs show a red square.

Step 2 In the Summary pane, click the archival job that you want to enable or disable.

Step 3 Do one of the following:

- To enable the job, from the menu bar, choose **Actions > Enable**. The icon in the Job ID column changes to show a green triangle.
- To disable the job, from the menu bar, choose **Actions > Disable**. The icon in the Job ID column changes to show a red square.

You do not need to save your changes.

Deleting an Archival Job

You can delete an archival job, except the Default archival job. When you delete an archival job, any devices included in the deleted job are automatically added to the Default archival job.

BEFORE YOU BEGIN

At least one custom archival job must exist in DCNM. You cannot delete the Default archival job.

DETAILED STEPS

To delete an archival job, follow these steps:

Step 1 From the Feature Selector pane, choose **Configuration Change Management > Archival Jobs**.

The Summary pane displays a table of archival jobs.

Step 2 In the Summary pane, click the archival job that you want to delete.

Step 3   From the menu bar, choose **Actions > Delete**.

The archival job disappears from the Summary pane.

Devices that were included in the deleted job are automatically added to the Default archival job.

You do not need to save your changes.

Viewing Details of an Archival Job

You can view the details of an archival job, which include the job ID, the owner of the job, comments about the job, the job schedule, and the devices included in the job.

DETAILED STEPS

To view the details of an archival job, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Archival Jobs**.

The Summary pane displays a table of archival jobs.

Step 2   In the Summary pane, click the archival job that has details that you want to view.

The Details pane displays information about the archival job, including a Details tab.

Step 3   (Optional) If necessary, in the Details pane, click the **Details** tab.

The Details pane displays information and settings for the archival job that you selected.

Viewing the History of an Archival Job

You can view the history of an archival job.

BEFORE YOU BEGIN

The archival job must have occurred at least once; otherwise, there are no archival history entries to view.

DETAILED STEPS

To view history of an archival job, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Archival Jobs**.

The Summary pane displays a table of archival jobs.

Step 2   In the Summary pane, click the archival job that has archival history that you want to view.

The Details pane displays information about the archival job, including an Archival History tab.

Step 3   In the Details pane, click the **Archival History** tab.

The Details pane displays a list of archival history entries, ordered by the date and time when the entry occurred. If
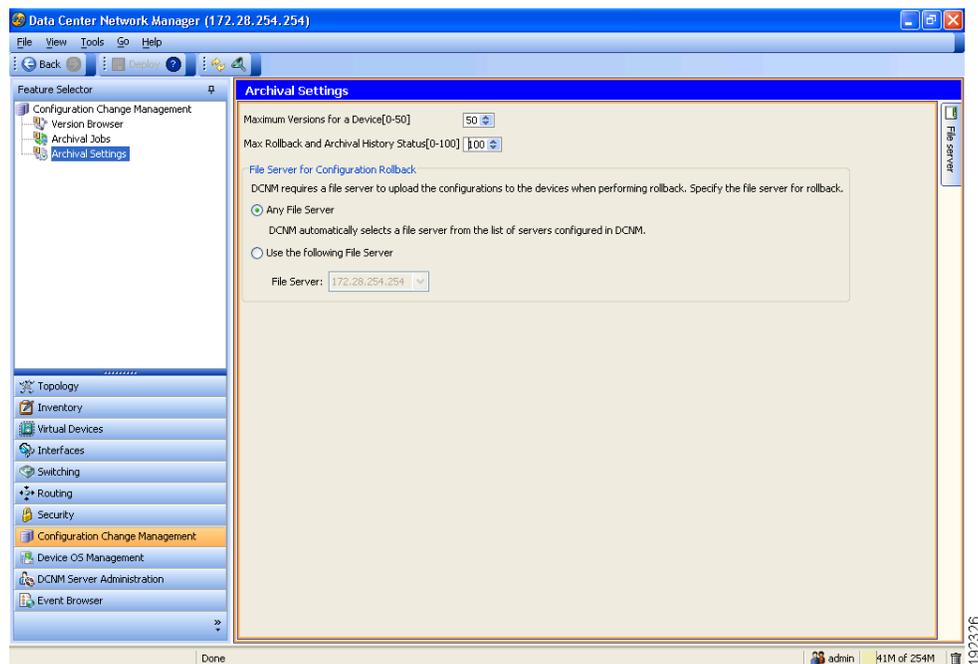
Step 4 (Optional) To see additional details about an archival history entry, in the Status column, click the plus symbol (+) to expand the entry.

The expanded entry lists information for each device included in the entry.

Configuring Archival Settings

Figure 14-3 shows the Archival Settings content pane.

Figure 14-3   *Archival Settings Content Pane*

This section includes the following topics:

- Configuring Version and History Settings, page 14-18
- Configuring the Rollback File Server Setting, page 14-19

Configuring Version and History Settings

You can configure the following settings about configuration versions and history:

- Maximum number of configuration versions that DCNM archives per managed device.
- Maximum number of rollback history and archival history status entries that DCNM retains per managed device.

DETAILED STEPS

To configure version and history settings, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Archival Settings**.

The Contents pane displays the Archival Settings fields.

Step 2   (Optional) Use the **Maximum Version for a Device [0 - 50]** box to configure the maximum number of configuration versions that DCNM should archive for each managed device.

Step 3   (Optional) Use the **Max Rollback and Archival History Status [0 - 100]** box to configure the maximum number of rollback history and archival history status entries that DCNM retains for each managed device.

Step 4   From the menu bar, choose **File > Deploy** to save your changes to the DCNM server.

Configuring the Rollback File Server Setting

You can configure whether DCNM uses a specific file server during a configuration rollback or whether it uses any available file server that you have configured.

BEFORE YOU BEGIN

You must configure at least one file server in DCNM. For more information, see the "Adding a File Server" section on page 13-13.

DETAILED STEPS

To configure the rollback file server settings, follow these steps:

Step 1   From the Feature Selector pane, choose **Configuration Change Management > Archival Settings**.

The Contents pane displays the Archival Settings fields.

Step 2   (Optional) If you want DCNM to use any available file server during a configuration rollback, under File Server for Configuration Rollback, click the **Any File Server** radio button.

Step 3   (Optional) If you want to specify a file server that DCNM should use during a configuration rollback, follow these steps:

  a.   Under File Server for Configuration Rollback, click the **Use the following File Server** radio button.

  b.   From the File Server drop-down list, choose the file server.

Step 4   From the menu bar, choose **File > Deploy** to save your changes to the DCNM server.

Field Descriptions for Configuration Change Management

This section includes the field descriptions for the three features available in the Feature Selector drawer for Configuration Change Management:

Field Descriptions for the Version Browser

This section includes the following field descriptions for the Device OS Management feature:

Device: Details: Archival Status Section

Table 14-1   Device: Details: Archival Status Section

Field	Description
Status	*Display only.* Whether the archival job that the device is assigned to is enabled or disabled.
Schedule	*Display only.* When the archival job that the device is assigned to is scheduled to occur.
Job ID	*Display only.* Identification number of the archival job that the device is assigned to.

Device: Details: Rollback History Section

Table 14-2   Device: Details: Rollback History Section

Field	Description
Time	*Display only.* Date and time that the rollback occurred.
Version	*Display only.* Configuration version that became the running configuration as a result of the rollback.
User	*Display only.* Username of the DCNM user who initiated the rollback.
Status	*Display only.* Whether the rollback succeeded or failed.

Device: Details: Archival History Section

Table 14-3   Device: Details: Archival History Section

Field	Description
Time Stamp	*Display only.* Date and time that the archival event occurred.
Job Id	*Display only.* Identification number of the archival job that created the archival event.
Status	*Display only.* Whether the archival event succeeded, failed, or was skipped.
Reason	*Display only.* Cause of a skipped or failed archival event.

Version: Version Details Tab

Table 14-4   Version: Version Details Tab

Field	Description
Config Version ID	*Display only.* Version identification number for the archived configuration version. Each archived configuration for a device receives a unique version ID.
Creation Time	*Display only.* Date and time that an archival job created the configuration version.
Created By	*Display only.* Username of the DCNM user who created the archival job that created the configuration version or the DCNM user who manually initiated the archival event that created the configuration version.
Comments	Text entered by a DCNM user.

Version: Compare Tab

Table 14-5   Version: Compare Tab

Field	Description
Device	Name of the managed device that the configuration version came from. In the left configuration pane, this field is display only. In the right configuration pane on the Compare tab, this field is configurable and you can select any managed device that you have added to the DCNM license.
Version	Configuration version ID of the archived configuration. In the left configuration pane, this field is display only. In the right configuration pane on the Compare tab, this field is a drop-down list with the following options: • Configuration version IDs—The numbers of the archived configuration versions currently available in DCNM. • Running-Configuration—The running configuration currently on the managed device selected in the Device field. • Start-up Config—The startup configuration currently on the managed device selected in the Device field.

Field Descriptions for Archival Jobs

This section includes the following field descriptions for the Archival Jobs feature:

Archival Job: Details Tab

Table 14-6   Archival Job: Details Tab

Field	Description
General	
Job ID	*Display only.* Identification number of the archival job.
Owner	*Display only.* Username of the DCNM user who created the archival job.
Comments	Text entered by DCNM users.
Settings	
Enable Archival	Whether the archival job is enabled. By default, this check box is unchecked.
Archive at Specified Time	Archival job occurs at the time specified by the Days and Archival Interval or Archive at fields.
Days	Days of the week that the archival job occurs. By default, the All check box is checked, which makes the individual day check boxes unavailable.
Archive Interval	Specifies that the archival job occurs at a regular interval, specified by the interval value box and the unit drop-down list, to the right of this radio button.
Archive at	Specifies that the archival job occurs once on each active day, at the time specified in the box to the right of this radio button.
Archive whenever a Configuration Change is Detected	Specifies that DCNM archives the running configuration of a device in the job when it detects that the running configuration of a device has changed.
Devices	
Name	Name of devices that are assigned to the archival job.
IP Address	IP address that DCNM uses to connect to the device.

Archival Job: Archival History Tab

Table 14-7   Installation Job: Details: General Section

Field	Description
Time	*Display only.* Date and time that the archival job ran.
Status	*Display only.* Number of devices in the job for which the archival job run succeeded, failed, or was skipped. The numbers are shown after each status, in parentheses.

Table 14-7   Installation Job: Details: General Section (continued)

Field	Description
Device Name	*Display only.* Name of a device assigned to the job. This field is shown when you expand the status of an archival history entry.
IP Address	*Display only.* IP address that DCNM used to attempt to connect to the device. This field is shown when you expand the status of an archival history entry.
Status (per Device)	*Display only.* Whether the archival job run succeeded, failed, or was skipped for the device.
Reason	*Display only.* Explanation for the status. For example, if the device was skipped because the running configuration had not changed since the previous archival job run, the following text appears in the Reason field: `Archival skipped as there are no changes from the previous version`

Field Descriptions for the Archival Settings Contents Pane

Table 14-8   Archival Settings Contents Pane

Field	Description
Maximum Versions for a Device	Largest number of archived configuration versions that DCNM retains for each device included in an archival job. Valid values are from 0 to 50, where 50 is the default value.
Max Rollback and Archival History Status	Largest number of rollback history and archival history status entries DCNM retains for each device.
File Server for Configuration Rollback	
Any File Server	Specifies that DCNM selects a file server to upload configurations to during a configuration rollback. Any file server that you have configured in DCNM may be used.
Use the following File Server	Specifies that DCNM uploads configurations during a configuration rollback to the file server that you specify in the File Server drop-down list.
File Server	IP address or DNS name of the file server that DCNM uploads configurations to during a rollback. This field is available only when you select the Use the following File Server radio button.

Additional References

For additional information related to configuration change management, see the following sections:

Related Documents

Related Topic	Document Title
File servers in DCNM	*File Servers, page 13-3*
Configuration rollbacks in Cisco NX-OS	*Cisco NX-OS System Management Configuration Guide, Release 4.1*

Standards

Standards	Title
No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.	—

Feature History for Configuration Change Management

Table 14-9 lists the release history for this feature.

Table 14-9   Feature History for Configuration Change Management

Feature Name	Releases	Feature Information
Version Browser	4.1(2)	This feature was introduced.
Archival Jobs	4.1(2)	This feature was introduced.
Archival Settings	4.1(2)	This feature was introduced.