Managing Firmware

This chapter includes the following sections:

- Firmware Management Overview, on page 1
- Viewing Firmware Components, on page 2
- Updating the Firmware, on page 3
- Activating the Firmware, on page 4
- Cancelling Firmware Activation, on page 4

Firmware Management Overview

You can manage the following firmware components from a single page in the web UI:

- Adapter firmware —The main operating firmware, consisting of an active and a backup image, can be installed from different interfaces such as:
  - Host Upgrade Utility (HUU)
  - Web UI — Local and remote protocols
  - PMCLI —Remote protocols
  - XML API — Remote protocols

  You can upload a firmware image from either a local file system or a TFTP server.
- Bootloader firmware—The bootloader firmware cannot be installed from the Cisco IMC. You can install this firmware using the Host Upgrade Utility.

Firmware for the following individual components can be updated:

- BMC
- BIOS
- CMC
- SAS Expander
- Adapter

Firmware for the Hard Disk Drive (HDD) can also be installed from the same interfaces as the adapter firmware mentioned above.

Viewing Firmware Components

Procedure

Step 1 In the **Admin** menu, click **Firmware Management**.

Step 2 In the **General** tab's **Firmware Management** area, review the following information:

Name	Description
Update button	Opens a dialog box that allows you to install a firmware image file that is available to your local machine or on a remote server.
Activate button	Opens a dialog box that allows you to select which available firmware version you would like to activate on the server. **Important** If any firmware or BIOS updates are in progress, do not activate new firmware until those tasks complete.
Cancel Activation button	**Note** This button is displayed only when you choose a BIOS firmware that is in **Activation Pending** state. This button allows you to cancel the selected BIOS activation that is in a pending state.
Component column	List of components available for which you can update the firmware.
Running Version column	The firmware version of the component that is currently active.
Backup Version column	The alternate firmware version installed on the server, if any. The backup version is not currently running. To activate it, click **Activate**. **Note** When you install new firmware, any existing backup version is deleted and the new firmware becomes the backup version. You must manually activate the new firmware if you want the server to run the new version.
Bootloader Version column	The bootloader version associated with the boot-loader software of the component.

Name	Description
Status column	The status of the firmware activation on this server.
Progress in % column	The progress of the operation, in percentage.

Updating the Firmware

You can install the firmware package from a local disk or from a remote server, depending on the component you choose from the **Firmware Management** area. After you confirm the installation, BMC replaces the firmware version in the component's backup memory slot with the selected version.

Procedure

Step 1 In the **Admin** menu, click **Firmware Management**.

Step 2 In the **Firmware Management** area, select a component from the **Component** column and click **Update**.

The **Update Firmware** dialog box appears.

Step 3 Review the following information in the dialog box:

Name	Description
Install Firmware through Browser Client radio button	If the firmware package resides on a local machine, click this radio button.
Install Firmware through Remote Server radio button	If the firmware package resides on a remote server, click this radio button.

Step 4 To install the firmware through the browser client, click **Browse** and navigate to the firmware file that you want to install.

Step 5 After you select the file, click **Install Firmware**.

Step 6 To update the firmware using remote server, select the remote server type from the **Install Firmware from** drop-down list. This could be one of the following:

- **TFTP**
- **FTP**
- **SFTP**
- **SCP**
- **HTTP**

Step 7 Depending on the remote server type you choose, enter details in the server's **IP/Hostname** and **Image Path and Filename** fields.

Once you install the firmware, the new image replaces the non-active image. You can activate the image after it is installed.

Important
For FTP, SFTP, and SCP server types, you need to provide user credentials.

Step 8 Click **Install Firmware** to begin download and installation.

Activating the Firmware

Procedure

Step 1 In the **Admin** menu, click **Firmware Management**.

Step 2 In the **Firmware Management** area, select a component from the **Component** column and click **Activate**.
The **Activate Firmware** dialog box appears.

Step 3 In the **Activate Firmware** dialog box, select the desired firmware image (radio button) to activate. This image becomes the running version.

Step 4 Click **Activate Firmware**.

Depending on the firmware image you chose, the activation process begins.

Important
While the activation is in progress, do not:

- Reset, power off, or shut down the server
- Reboot or reset BMC
- Activate any other firmware
- Export technical support or configuration data

Cancelling Firmware Activation

Before you begin

BIOS firmware must be in **Activation Pending** state for you to cancel the activation.

Procedure

Step 1 In the **Admin** menu, click **Firmware Management**.

Step 2 In the **Firmware Management** area, select the BIOS firmware for which you want to cancel the activation.

Step 3 Click **Cancel Activation**.

Cancel Activation button is displayed only when you choose a BIOS firmware that is in **Activation Pending**