

## Downloading and Managing Firmware in Cisco UCS Central

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## **Downloading Firmware from Cisco.com**

You can configure Cisco UCS Central to communicate with the Cisco website at specified intervals to fetch the firmware image list. After configuring Cisco credentials for image download, when you refresh, Cisco UCS Central fetches the available image data from Cisco.com and displays the firmware image in the firmware image library. You can download the actual firmware images when creating a policy using the firmware image version or when downloading the image using the **Store Locally** option.



Important

Make sure that you create a Cisco.com account to download firmware from Cisco.com to Cisco UCS Central.



If you change users in the Cisco.com account, this causes a full synchronization of the Image Library. Download operations are unavailable while it is synchronizing. This can take up to 15 minutes, depending on the size of the library.

### **Firmware Library of Images**

Image Library in Cisco UCS Central displays a list of all firmware images downloaded into Cisco UCS Central from Cisco.com, local file system and remote file system.

The source for images downloaded from Cisco.com is Cisco and for images downloaded from local or remote file system is local. These firmware images are available for creating firmware policies.

The following are the options to delete firmware images from the library:

- **Deleting the firmware image** You can delete any downloaded image in the firmware library using the delete option.
- **Purging the firmware image metadata** You can delete the image metadata using the purge option. Even after you delete the firmware image from the library, the metadata will still exist. You can use the metadata information to download the actual firmware image anytime from Cisco.com even after deleting the image. If you want to completely remove the firmware image and associated metadata from the firmware image library, make sure to delete the actual firmware image and purge the metadata from the library.



If you have already downloaded the image corresponding to the metadata into the firmware image library, you cannot purge the metadata without deleting the image.

## **Configuring Firmware Image Download from Cisco**

	Command or Action	Purpose
Step 1	UCSC# connect operation-mgr	Enters operations manager mode.
Step 2	UCSC(ops-mgr)# connect policy-mgr	Enters policy manager mode from operations manager mode.
Step 3	UCSC(policy-mgr) # scope domain-group domain-group	Enters domain group root mode and (optionally) enters a domain group under the domain group root. To enter the domain group root mode, type / as the <i>domain-group</i> .
Step 4	UCSC(policy-mgr) /domain-group # scope download-policy cisco	Enters the configuration mode.
Step 5	UCSC(policy-mgr) /domain-group/download-policy # set	<ol> <li>set admin-state</li> <li>set downloadintervaldayweekon-demand</li> <li>set http-proxyserver:port</li> <li>usernameusername</li> </ol>

#### Procedure

	Command or Action	Purpose
		5 set password password
		6 set proxy-password password
		7 set proxy-usernameusername
		Enters the configuration details to the system.
Step 6	UCSC(policy-mgr) /domain-group/download-policy/set # commit-buffer	Commits the transaction to the system.

The following example shows how to configure firmware download to Cisco UCS Central from Cisco:

```
UCSC# (ops-mgr)# connect policy-mgr
UCSC(policy-mgr) # scope domain-group /
UCSC(policy-mgr) /domain-group # scope download-policy cisco
UCSC(policy-mgr) /domain-group/download-policy # set
admin-state enable
downloadinterval 1 day
http-proxy Server[:Port]
username
                 Username
password
                 Password
proxy-password
                 HTTP Proxy Password
proxy-username
                 HTTP Proxy Username
UCSC(policy-mgr) /domain-group/download-policy # commit-buffer
UCSC(policy-mgr) /domain-group/download-policy* #
```

## **Downloading Firmware Image from Cisco**

#### Procedure

	Command or Action	Purpose
Step 1	UCSC# connect operation-mgr	Enters operations manager mode.
Step 2	UCSC(ops-mgr)# scope firmware	Enters the firmware management mode.
Step 3	UCSC(ops-mgr) /firmware# scope download-source cisco	Accesses the image metadata downloaded from Cisco website.
Step 4	UCSC(ops-mgr)/firmware/download-source# download list	Downloads the available firmware image metadata from Cisco.com.

The following example shows how to download the actual firmware image from Cisco.com to Cisco UCS Central:

```
UCSC# connect operation-mgr
UCSC(ops-mgr)# scope firmware
UCSC(ops-mgr) / firmware # scope download-source cisco
UCSC(ops-mgr) / firmware/download-source # download list
```

## **Viewing Image Download Status**

#### Procedure

	Command or Action	Purpose
Step 1	UCSC# connect operation-mgr	Enters operations manager mode.
Step 2	UCSC(ops-mgr)# scope firmware	Enters the firmware management mode.
Step 3	UCSC (ops-mgr)/firmware# show download-task detail	Displays the details of the download task.

The following example shows how to view the download task details in Cisco UCS Central:

```
UCSC# connect operation-mgr
UCSC(ops-mgr) # scope firmware
UCSC(ops-mgr) /firmware # show download-task detail
Download task:
File Name: ucs-catalog.2.1.0.475.T.bin
Protocol: Ftp
Server:
Userid: User
Path: /automation/delmar/catalog
Downloaded Image Size (KB): 0
Image Url:
Image Url:
Proxy Userid:
State: Downloaded
Owner: Management
Current Task:
```

## **Viewing Downloaded Firmware Image Bundles**

#### Procedure

	Command or Action	Purpose	
Step 1	UCSC# connect operation-mgr	Enters operations manager mode.	
Step 2	UCSC(ops-mgr)# scope firmware	Enters the firmware management mode.	
Step 3	UCSC(ops-mgr) /firmware # show package	Displays the downloaded firmware image bundles. Yo can view the Cisco UCS Manager and Cisco UCS Central bundles.	
		<b>Note</b> The classic UCS Infra bundle is not provided as an option for auto-install.	

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The following example shows how to view the downloaded firmware image bundles in Cisco UCS Central:

```
UCSC# connect operation-mgr
UCSC(ops-mgr)# scope firmware
UCSC(ops-mgr) / firmware # show package
```

Name	Version	Download Status
ucs-catalog.2.1.0.489.T.gbin ucs-k9-bundle-b-series.2.1.0.489.B.gbin ucs-k9-bundle-infra.2.1.0.489.A.gbin ucsCENTRAL-bundle.1.0.0.361.bin update.bin	2.1(0.489) 2.1(0.489) 2.1(0.489) 2.1(0.489) 1.0(0.361) 1.0(0.376)	Downloaded Downloaded Downloaded Downloaded Downloaded Downloaded

```
UCSC(ops-mgr) /firmware #
```

# Configuring Firmware Image Download from a Remote File System

You can download firmware image from one of the following remote file systems:

- ftp
- scp
- sftp
- tftp

#### **Procedure**

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	Command or Action	Purpose
Step 1	UCSC# connect operation-mgr	Enters operations manager mode.
Step 2	UCSC(ops-mgr)# scope firmware	Enters the firmware management mode.
Step 3	UCSC (ops-mgr)/firmware# <b>download</b> <b>image</b> ftpscpsftptftp <i>image file location</i>	Enters firmware image download configuration and mode and specifies the remote location for firmware image.
Step 4	UCSC(ops-mgr)/firmware#download image ftp: image file location / <b>Password:</b>	Authenticates access to the remote file system.

The following example shows how to configure firmware download to Cisco UCS Central from a remote file system:

```
UCSC# connect operation-mgr
UCSC(ops-mgr)# scope firmware
UCSC(ops-mgr) / firmware # download image ftp: Enter URL ftp:[//[username@]server][/path]
UCSC(ops-mgr) / firmware # download image ftp://image download path/Password:
UCSC(ops-mgr) / firmware #
```

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## **Deleting Image Metadata from the Library of Images**

#### Procedure

	Command or Action	Purpose
Step 1	UCSC# connect operation-mgr	Enters operations manager mode.
Step 2	UCSC(ops-mgr)# scope firmware	Enters the firmware management mode.
Step 3	UCSC(ops-mgr) /firmware# scope download-source cisco	Accesses the image metadata downloaded from Cisco website.
Step 4	UCSC(ops-mgr)/firmware/download-source# purge list	Deletes the firmware images metadata from the library of images.

The following example shows how to delete the image metadata from the library of images:

UCSC# connect operation-mgr UCSC(ops-mgr)# scope firmware UCSC(ops-mgr) /firmware # scope download-source cisco UCSC(ops-mgr) /firmware/download-source # purge list