



## Switch Software Management

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To upgrade your switches to a new software release, you must upload the new software image to the switch image catalog. Then you may create an upgrade object that contains the list of switches to upgrade, the image to use, and additional configurable options. This section explains how to upload Cisco NX-OS images to the switch image catalog, how to create, edit, and delete an upgrade object, and how to start and stop an upgrade.



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**Note**

A maximum of ten parallel switch upgrades are supported.

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## Uploading Images to the Switch Images Catalog

The switch images catalog is a summary table that lists and sorts your uploaded switch software images. To access the images catalog, click the **Navigation** menu to display a drop-down list and choose **Images**. The images listed in the switch images catalog are used for creating upgrade objects, which enable you to specify the image you want to upgrade to. This section explains how to upload an image to the images catalog.

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**Step 1** From the **Navigation** drop-down list, choose **Images**.

- The **Images** window appears.
- Step 2** From the **Settings** drop-down list, choose **Upload new image**.  
The **UPLOAD NEW IMAGE** dialog box appears.
- Step 3** Click **CHOOSE FILES**.  
The **File Upload** dialog box appears.
- Step 4** Browse for the file then click **Open**.  
You return to the **UPLOAD NEW IMAGE** dialog box.
- Step 5** Click **UPLOAD**.  
The image will upload to the image catalog and can be used to create an upgrade object. For information on creating an upgrade object, see [Creating an Upgrade Object, on page 2](#).
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## Creating an Upgrade Object

To upgrade your switches, you upload a new image to the switch images catalog then create an upgrade object. An upgrade object contains members, which are the switches you chose to upgrade, and configurable options such as a name, a description, the image that the switches will be upgraded to, and the upgrade strategy. After the upgrade object has been created, you initiate the upgrade as a separate task (see [Starting an Upgrade, on page 6](#)). This section explains how to create an upgrade object.

### Before You Begin

- A switch has been successfully added to the switchpool.
- At least one image is in the image catalog.

- Step 1** From the **Navigation** drop-down list, choose **Home**.
- Step 2** Click the **SWITCHES** tab.
- Step 3** Click the **check box** in the bottom right corner of the switch tiles you want to upgrade.
- Step 4** From the **Settings** drop-down list, choose **Add to new Upgrade**.  
The **CREATE UPGRADE** dialog box appears displaying the **GENERAL** and **MORE** tabs.
- Step 5** Enter the appropriate values in the fields of each tab as listed in the *CREATE UPGRADE Dialog Box Fields* table below then continue to step 7.

**Table 1: CREATE UPGRADE Dialog Box Fields**

Field	Description
<b>GENERAL</b> Tab	
<b>Name</b>	Enter a name for the upgrade task.
<b>Description</b>	Enter a description for the upgrade.

Field	Description
<b>Image</b>	Choose the image you are upgrading to by using the drop-down menu.
<b>SELECTED</b> Tab	
Click to see the specified switch(es) that can be added to the upgrade object.	
<b>EXCLUDED</b> Tab	
Click to see the specified switch(es) that cannot be added to the upgrade object.	
<b>MORE</b> Tab	
<b>Strategy</b>	Choose one of the following options: <ul style="list-style-type: none"> <li>• <b>Parallel</b> —All switches are upgraded in parallel.</li> <li>• <b>Sequential</b>—Switches are upgraded one at a time.</li> </ul> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• If <b>Sequential</b> is chosen, there is a <b>Timeout (sec)</b> box with a default 60-second delay.</li> <li>• The default value is Parallel.</li> </ul>

**Step 6**

Click **SAVE CHANGES**.

The upgrade object can now be started, edited, or deleted. For how to start the upgrade, see [Starting an Upgrade, on page 6](#). For how to edit an upgrade, see [Editing an Upgrade Object, on page 3](#). For how to delete an upgrade, see [Deleting an Upgrade, on page 7](#). To add additional switches to the upgrade object, see [Adding New Members to an Existing Upgrade Object, on page 5](#). To remove switches from the upgrade object, see [Removing Members from an Upgrade Object, on page 5](#).

## Editing an Upgrade Object

An upgrade object contains members, which are the switches you chose to upgrade, and configurable options such as a name, a description, the image that the switch will be upgraded to, and the upgrade strategy. To add additional switches to the upgrade object, see [Adding New Members to an Existing Upgrade Object, on page 5](#). To remove switches from the upgrade object, see [Removing Members from an Upgrade Object, on page 5](#). This section explains how to edit the configurable options of your existing upgrade object.

### Before You Begin

An upgrade object has been created.

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- Step 1** From the **Navigation** drop-down list, choose **Upgrades**.  
The **Upgrades** window appears listing your created upgrade objects.
- Step 2** Click on the upgrade object name you want to edit.  
An upgrade-specific window appears with an Upgrade summary pane on the right.
- Step 3** Click **EDIT**.  
The **UPGRADE SETTINGS** dialog box appears displaying the **GENERAL** and **MORE** tabs.
- Step 4** Enter the appropriate values in the fields of each tab as listed in the *UPGRADE SETTINGS Dialog Box Fields* table below then continue to step 6.

**Table 2: UPGRADE SETTINGS Dialog Box Fields**

Field	Description
<b>GENERAL</b> Tab	
<b>Name</b>	Enter a name for the upgrade task.
<b>Description</b>	Enter a description for the upgrade.
<b>Image</b>	Choose the image you are upgrading to using the drop-down menu.
<b>MORE</b> Tab	
<b>Strategy</b>	Choose one of the following options: <ul style="list-style-type: none"> <li>• <b>Parallel</b> —All switches are upgraded in parallel.</li> <li>• <b>Sequential</b>—Switches are upgraded one at a time.</li> <li>• If <b>Sequential</b> is chosen, there is a <b>Timeout (sec)</b> box with a default 60-second delay.</li> <li>• The default value is Parallel.</li> </ul>

- Step 5** Click **SAVE CHANGES**.  
The upgrade object can now be started or deleted. For how to start the upgrade, see [Starting an Upgrade, on page 6](#).  
For how to delete an upgrade object, see [Deleting an Upgrade, on page 7](#).
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## Adding New Members to an Existing Upgrade Object

An upgrade object contains members, which are the switches you chose to upgrade. This section explains how to add members to an existing upgrade object.

### Before You Begin

- A switch has been successfully added to the switchpool.
- An upgrade object has been created.

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**Step 1** From the **Navigation** drop-down list, choose **Home**.

**Step 2** Click the **SWITCHES** tab.

**Step 3** Click the **check box** in the bottom right corner of the switch tiles you want to upgrade.

**Step 4** From the **Settings** drop-down list, choose **Add to upgrade**.  
The **ADD TO EXISTING UPGRADE** dialog box appears.

**Note** The following options appear in the dialog box:

- **SELECTED**—Click to see the specified switch(es) that can be added to the upgrade object.
- **EXCLUDED**—Click to see the specified switch(es) that cannot be added to the upgrade object.

**Step 5** From the **Add to** drop-down list, choose an **upgrade object**.

**Step 6** Click **ADD**.

The upgrade object can now be started, edited, or deleted. For how to start the upgrade, see [Starting an Upgrade, on page 6](#). For how to edit an upgrade, see [Editing an Upgrade Object, on page 3](#). For how to delete an upgrade, see [Deleting an Upgrade, on page 7](#). To remove switches from the upgrade object, see [Removing Members from an Upgrade Object, on page 5](#).

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## Removing Members from an Upgrade Object

An upgrade object contains members, which are the switches you chose to upgrade. This section explains how to remove members from an existing upgrade object.

### Before You Begin

Members have been added to an upgrade object.

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**Step 1** From the **Navigation** drop-down list, choose **Upgrades**.

The **Upgrades** screen appears listing your uploaded image files.

**Step 2** Click the **MEMBERS** tab.

A list of switches chosen for this upgrade object are displayed.

- Step 3** Click the **check box** in the bottom right-hand corner of the switch tiles you want to remove from the upgrade object.
- Step 4** Click the **Settings** icon.
- Step 5** Choose **Remove selected**.  
The **REMOVE SELECTED DEVICES** dialog box appears.
- Step 6** Click **REMOVE**.  
The upgrade object can now be started, edited, or deleted. For how to start the upgrade, see [Starting an Upgrade, on page 6](#). For how to edit an upgrade, see [Editing an Upgrade Object, on page 3](#). For how to delete an upgrade, see [Deleting an Upgrade, on page 7](#). To add additional switches to the upgrade object, see [Adding New Members to an Existing Upgrade Object, on page 5](#).

## Starting an Upgrade

You can upgrade your switch software to a new image after the new image has been uploaded to the switch images catalog and an upgrade object has been created. This section explains how to start an upgrade using your existing upgrade object.



**Note** If a switch is being upgraded to the image it is already running, no message is generated in the Cisco Nexus Fabric Manager UI. The upgrade finishes successfully as soon as it is determined that the switch is already running the image to which it is being upgraded. If you click the **HISTORY** tab of the switch object, it displays a completed upgrade task with the following message: `Switch already running the correct image, nothing to do.`

### Before You Begin

- A switch has been successfully added to the switchpool.
- An upgrade object has been created.
- The desired Cisco NX-OS image has been uploaded.

- Step 1** From the **Navigation** drop-down list, choose **Upgrades**.  
The **Upgrades** window appears listing your created upgrade objects.
- Step 2** Click on the upgrade you want to start.  
An upgrade-specific window appears with an Upgrade summary pane on the right.
- Step 3** Verify that the image being uploaded to each switch is correct. The upgrade-specific window displays the image information in the **Switches** section.
- Note** The Cisco Nexus Fabric Manager chooses the image being uploaded by searching in the locations listed below. The search is performed in the following order until an image is found:
- 1 The switch object.
  - 2 The switch profile that is applied to the switch.

3 The upgrade object.

**Step 4**

Click **START**.

If needed, the upgrade object can now be stopped. For how to stop the upgrade, see [Stopping an Upgrade](#), on page 7.

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## Stopping an Upgrade

You can stop an upgrade after the upgrade object has been started. This section explains how to stop an upgrade.

### Before You Begin

An upgrade has been started.

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**Step 1**

From the **Navigation** drop-down list, choose **Upgrades**.

The **Upgrades** window appears listing your created upgrade objects.

**Step 2**

Click on the upgrade you want to stop.

An upgrade-specific window appears with an upgrade summary pane on the right.

**Step 3**

Click **STOP**.

The upgrade object can now be started again, edited, or deleted. For how to edit an upgrade, see [Editing an Upgrade Object](#), on page 3. For how to delete an upgrade, see [Deleting an Upgrade](#), on page 7. To add additional switches to the upgrade object, see [Adding New Members to an Existing Upgrade Object](#), on page 5. To remove switches from the upgrade object, see [Removing Members from an Upgrade Object](#), on page 5.

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## Deleting an Upgrade

An upgrade object is used to upgrade your switches. This section explains how to delete your existing upgrade object.

### Before You Begin

An upgrade object has been created.

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**Step 1**

From the **Navigation** drop-down list, choose **Upgrades**.

The **Upgrades** window appears listing your created upgrade objects.

**Step 2**

Click on the upgrade you want to delete.

An upgrade-specific window appears with a summary pane on the right that contains the **DELETE** option.

**Step 3**

Click **DELETE**.

**Step 4**

The **DELETE UPGRADE** dialog box appears.

Click **DELETE**.

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