Cisco ACI vPod Upgrade

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Cisco ACI vPod Updgrade

You use the Cisco Application Policy Infrastructure Controller (APIC) GUI to upgrade the software on Cisco ACI Virtual Pod (vPod). The upgrade is done in two stages: You first download the new version of Cisco ACI vPod firmware ISO to Cisco APIC and then upgrade the Cisco ACI vPod virtual spines and virtual leafs.

Prerequisites for Upgrading Cisco ACI vPod

1. Download the ISO version of the Cisco ACI vPod firmware that you want to upgrade to; you can download it to a local machine or a remote server.
2. Note the location of the downloaded ISO file.

Guidelines for Upgrading Cisco ACI vPod

You may want to upgrade Cisco APIC one virtual leaf and virtual spine pair at a time to prevent traffic disruption.

Importing the Cisco ACI vPod Firmware ISO Image

You import the Cisco ACI vPod ISO firmware image so you can update the Cisco ACI vPod virtual spines and leafs.

Before you begin

You must have downloaded the Cisco Application Centric Infrastructure (ACI) Virtual Pod (vPod) firmware ISO image from Cisco.com to a local machine or remote server.

Step 1 Log in to Cisco APIC.

Step 2 On the menu bar, choose **Admin** > **Firmware**.

Step 3 Click the **Images** tab, then click the **Tools** icon and choose **Add Firmware to APIC** from the drop-down menu.

The **Add Firmware to APIC.** dialog box appears; perform the following steps in the dialog box.

Step 4 In the **Firmware Image Location** field, complete one of the following series of steps:

Option	Description
If you want to import the Cisco ACI vPod ISO firmware image...	Then...
From your local machine	**a.** Click **Local**. . **b.** Click **Browse**, navigate to the folder on your local system with the Cisco ACI vPod ISO firmware image that you want to import. **c.** Click **Submit**. **d.** Go to the section Upgrading the Cisco ACI vPod Virtual Leafs and Spines, on page 3 in this guide.
From a remote server	**a.** Click **Remote**. **b.** Continue with the following steps.

a) Click **Submit**.

Wait for the Cisco ACI vPod ISO firmware image to download.

Step 5 In the **Download Name** field, choose an existing download from the drop-down menu or enter a name for the Cisco ACI vPod ISO firmware image file to create a new download (for example, *vpod_image*).

Step 6 In the **Protocol** field, click either the **HTTP** or the **Secure copy** radio button.

The following fields appear if you are creating a new download.

Step 7 In the **URL** field, enter the URL from where the image will be downloaded.

Option	Description
In the previous step, if you chose...	Then...
HTTP	**a.** Enter the HTTP source that you want to use to download the software image. For example, **`10.67.82.87:/home/username/ACI/aci-vpod-dk9.14.2.0.73.iso`**. **b.** Click **Submit**. **c.** Go to the section Upgrading the Cisco ACI vPod Virtual Leafs and Spines, on page 3 in this guide.
Secure copy	**a.** Enter the Secure Copy Protocol (SCP) source that you want to use to download the software image, using the format ***`SCP server:/path`***. For example, **`10.67.82.87:/home/username/ACI/aci-vpod-dk9.14.2.0.73.iso`**.

Option	Description
	b. Continue with the following steps.

Step 8 In the **Username** field, enter your username for secure copy.

Step 9 In the **Authentication Type** field, choose the type of authentication for the download:

Option	Description
If you want to...	Then...
Authenticate with a password	**a.** Choose **Use Password**. **b.** In the Password field, enter your password for secure copy. **c.** Click **Submit**. **d.** Go to the section Upgrading the Cisco ACI vPod Virtual Leafs and Spines, on page 3 in this guide.
Authenticate with an SSH public or private key	**a.** Choose **Use SSH Public/Private Key Files**. **b.** Enter the SSH key information in the **SSH Key Contents** field; the **SSH Key Passphrase** can remain empty. **c.** Click **Submit**.

What to do next

Check the progress of the image import:

1. Go to **Admin** > **Firmware** > **Images**.
2. In the **Firmware** central pane, view the **Status** of the image you imported.

   If the image has not finished downloading, you can check progress the **Download Percent(%)** column.

Upgrading the Cisco ACI vPod Virtual Leafs and Spines

After you import the Cisco Application Centric Infrastructure (ACI) Virtual Pod (vPod) firmware ISO image, you update the virtual spines and switches.

Before you begin

You must have imported the new Cisco ACI vPod firmware ISO image. See the section Importing the Cisco ACI vPod Firmware ISO Image, on page 1 in this guide.

Step 1 Log in to Cisco APIC.

Step 2 On the menu bar, choose **Admin** > **Firmware**.

Step 3 Click the **Infrastructure** tab, and then click the **Nodes** sub-tab.
The **Firmware** central pane lists all the pods by name, function, model, current firmware, upgrade group, and status.

Step 4 Click the tools icon and choose **Schedule Node Upgrade**.

Step 5 In the **Schedule Node Upgrade** dialog box, perform the following steps:

a) In the **Group Type** field, choose **Switch** or **vPpod**.

b) In the **Upgrade Group Name** field, choose an existing upgrade group from the drop-down menu, or click the **x** in the corner of the field to clear the field, and then enter a name for the upgrade group.

Note If you select an existing POD maintenance group, fields that are associated with that maintenance group are automatically filled in.

c) From the **Target Firmware Version** drop-down list, choose the desired image version to which you want to upgrade the switches.

d) Check the **Ignore Compatibility Check** check box.

e) Check the **Graceful Maintenance** check box to change the node to the Graceful Insertion and Removal (GIR) mode before performing the upgrade.

f) In the **Run Mode** field, choose the run mode to proceed automatically to the next set of nodes once the set of nodes has gone through the maintenance process successfully.

The options are:

- **Do not pause on failure and do not wait on cluster health**
- **Pause only Upon Upgrade Failure**

The default is **Pause only Upon Upgrade Failure**.

g) In the **Upgrade Start Time** field, select **Now** or **Schedule for Later**.

If you select **Schedule for Later**, select the trigger value using the Scheduler scroll-down menu.

h) In the **Node Selection** field,choose **Range** or **Manual**.

- If you select **Range**, enter the range in the **Group Node Ids** field.
- If you choose **Manual**, a list of available leaf switches and spine switches appears in the **All Nodes** area. Choose the nodes that you want to include in this upgrade.

i) In the **Group Node IDs** field, enter the ID numbers of the nodes that you want to upgrade.

j) Click **Submit**.

What to do next

1. Check the progress of the upgrade by going to **Admin** > **Firmware** > **Infrastructure** > **Nodes** and viewing the percentage in the **Upgrade Progress** column.
2. (Optional) Repeat this procedure to upgrade other nodes.