



Cisco NFVIS Upgrade

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Cisco NFVIS upgrade

A Cisco NFVIS upgrade is a software update process that

- requires copying the upgrade image to the server before starting the process, and
- ensures cryptographic integrity and authenticity through signed RPM packages.
- shuts down the VM and retains VM data during the upgrade, and after the upgrade automatically restores the VM to its prior operational state upon completion.

Upgrade image formats and security

The Cisco NFVIS upgrade image is available as a .iso file. All RPM packages in the Cisco NFVIS upgrade image are signed to ensure cryptographic integrity and authenticity. In addition, all RPM packages are verified during Cisco NFVIS upgrade.



Note Currently, downgrade is not supported.

Image copy requirements

Ensure that you copy the image to the Cisco NFVIS server before starting the upgrade process. Always specify the exact path of the image when registering the image. Use the **scp** command to copy the upgrade image from a remote server to your Cisco NFVIS server. When using the **scp** command, you must copy the image to the `"/data/intdatastore/uploads"` folder on the Cisco NFVIS server.

Upgrade matrix for upgrading Cisco NFVIS

This matrix shows the supported upgrade paths from current Cisco NFVIS versions to target versions, including the required image types for each upgrade scenario.

Table 1: Upgrade matrix for upgrading Cisco NFVIS

Running Version	Supported Upgrade Version	Supported Upgrade
4.18.x	26.2	iso

Restrictions for Cisco NFVIS ISO file upgrade

Cisco NFVIS supports .ISO upgrade only from version N to versions N+1, N+2 and N+3.

- Image downgrade using .ISO file is not supported.
- Upgrade from 4.18 to 26.1 is not supported.

In case of an error while upgrading Cisco NFVIS rolls back to the image version N.

Upgrade NFVIS software using Cisco NFVIS portal

Upgrade the Cisco NFVIS to a newer version to ensure the NFVIS platform is running the desired software version and includes any new features or fixes.

The NFVIS upgrade is a two-step process: first, registering the NFVIS upgrade image, and then initiating the upgrade.



Note

- During the upgrade process, the NFVIS application is not available for use.
- All VMs in a running state will be powered off automatically.
- After the upgrade completes, the NFVIS application will be accessible, and all VM will be powered on.
- The upgrade process typically takes approximately 20-30 minutes to complete.

Procedure

Step 1 From the NFVIS portal, click **Operations > Upgrade**.

Step 2 Register the upgrade image using one of these methods:

- If the upgrade image is on your LOCAL computer:
 - a. Select the **LOCAL** tab.
 - b. Click **Select File (.iso)** and choose the NFVIS upgrade image.
- If the upgrade image is on a REMOTE server:
 - a. Select the **REMOTE** tab.
 - b. Fill in the following fields:

Table 2: Upgrade details

Field	Description
Image Name	Enter a descriptive name for the upgrade image.
Protocol	Select HTTP from the drop-down list. Note REMOTE registration currently supports only HTTP protocol.
IP Address	Enter the server IP address.
Port	Enter the port number (optional, defaults to 80).
Image File Path	Enter the path to the upgrade image.
Image Checksum	Provide the SHA512 checksum value.

c. Click **Submit**.

The system will upload or download the image, validate the supported upgrade path, and register the image. Once complete, the image appears in the **Upgrade Image List** with **Status: Valid**.

Note

A progress bar for image registration is not available for REMOTE uploads. The image registration and download process runs in the background and the image will appear in the Image Repository table once the process completes.

Step 3 Verify the image is registered successfully by checking the **Upgrade Image List** section.

Verify the image shows:

- **Status:** Valid
- **Version:** Correct upgrade version
- **Upload Date:** Registration timestamp

Step 4 In the **Upgrade Image** section, click the + icon to schedule an upgrade.

Step 5 Select the registered upgrade image from the list.

Step 6 Choose the scheduling option:

- **Upgrade Now:** Set the schedule time to 0 hours.
- **Upgrade Later:** Specify hours from now for the upgrade to begin.

Step 7 Click **Submit**.

The **Status** column shows the upgrade status.

Step 8 After the upgrade completes, from the NFVIS portal, click **Platform > About Platform** to verify the new version.

Step 9 Verify all VMs are powered on and operational.

The NFVIS platform is successfully upgraded to the newer version with all VMs powered on and operational.

Upgrade using ISO file

This task enables you to upgrade Cisco NFVIS using an ISO file through command line operations or portal interface.

You can upgrade the system by copying the upgrade image using SCP commands or by uploading through the Cisco NFVIS portal. The upgrade process involves registering the image and then applying the upgrade.

Procedure

Step 1 Copy the upgrade image using one of the following methods:

- To copy the upgrade image, use the **scp** command from Cisco NFVIS CLI:

```
nfvis# scp admin@192.0.2.9:/NFS/2022-01-23/13/nfvis/iso/Cisco_NFVIS-4.8.0-13-20220123_020232.iso
intdatastore:Cisco_NFVIS-4.8.0-13-20220123_020232.iso
```

- To copy the upgrade image, use the **scp** command from remote linux:

```
config terminal
system settings ip-receive-acl 0.0.0.0/0
service scp action accept
commit
```

```
scp -P22222 Cisco_NFVIS-4.8.0-13-20220123_020232.iso
admin@172.27.250.128:/data/intdatastore/uploads/Cisco_NFVIS-4.8.0-13-20220123_020232.iso
```

- Upload the image to the Cisco NFVIS server using the **System Upgrade** option from the Cisco NFVIS portal.

Note

When the NFVIS upgrade is in progress, ensure that the system is not powered off. If the system is powered off during the NFVIS upgrade process, the system may become inoperable and you may need to reinstall the system.

Step 2 Register the image using the **system upgrade image-name** command.

Step 3 Upgrade the image using the **system upgrade apply-image** command.

The system upgrade process completes successfully with the new ISO image installed and operational.

Register an image

Register an image in the system to prepare it for upgrade operations.

Image registration is a prerequisite step before applying system upgrades. This process registers the image file in the system's upgrade directory and validates its integrity.

Procedure

Step 1 Register the image using the system upgrade command.

Example:

```
config terminal
system upgrade image-name Cisco_NFVIS-4.8.0-13-20220123_020232.iso location
/data/intdatastore/uploads/Cisco_NFVIS-4.8.0-13-20220123_020232.iso
commit
```

Note

You must verify the image registration status before upgrading the image using the **system upgrade apply-image** command. The package status must be valid for the registered image.

Step 2 Verify the image registration status.

Example:

```
nfvis# show system upgrade
```

NAME	PACKAGE	VERSION	STATUS	UPLOAD DATE	LOCATION
Cisco_NFVIS-4.8.0-13-20220123_020232.iso	/data/upgrade/register/Cisco_NFVIS-4.8.0-13-20220123_020232.iso	4.8.0-13	Valid	2022-01-24T02:40:29.236057-00:00	

```
nfvis# show system upgrade reg-info
```

NAME	PACKAGE	VERSION	STATUS	UPLOAD DATE	LOCATION
Cisco_NFVIS-4.8.0-13-20220123_020232.iso	/data/upgrade/register/Cisco_NFVIS-4.8.0-13-20220123_020232.iso	4.8.0-13	Valid	2022-01-24T02:40:29.236057-00:00	

The image is successfully registered in the system and shows a "Valid" status, indicating it is ready for upgrade operations.

Upgrade the registered image

This task applies a registered image upgrade to the system at a scheduled time.

Use this procedure when you need to upgrade the system software to a newer version using a previously registered image.

Procedure

Step 1 To upgrade the registered image, use the following command:

Example:

```
config terminal
system upgrade apply-image Cisco_NFVIS-4.8.0-13-20220123_020232.iso scheduled-time 5
commit
```

Step 2 To verify the upgrade status, use the **show system upgrade apply-image** command in the privileged EXEC mode.

Example:

```
nfvis# show system upgrade
```

NAME	STATUS	UPGRADE FROM	UPGRADE TO
Cisco_NFVIS-4.8.0-13-20220123_020232.iso	SCHEDULED	-	-

NAME	PACKAGE VERSION	STATUS	UPLOAD DATE	LOCATION
Cisco_NFVIS-4.8.0-13-20220123_020232.iso	/data/upgrade/register/Cisco_NFVIS-4.8.0-13-20220123_020232.iso	4.8.0-13	Valid	2022-01-24T02:40:29.236057-00:00

The upgrade is scheduled and the system displays the upgrade status showing the image as SCHEDULED.