



Upgrade to Cisco EPN Manager 7.1

You can upgrade to Cisco EPN Manager 7.1 by following one of the [Valid Upgrade Paths, on page 1](#).

This chapter provides instructions for upgrading to Cisco EPN Manager 7.1 using Backup-restore upgrade.

Backup-restore upgrade —Involves backing up all data from the currently installed version of Cisco EPN Manager, then installing Cisco EPN Manager 7.1 on a new server, then restoring the backed up data to the new Cisco EPN Manager 7.1 server.

- [Valid Upgrade Paths, on page 1](#)
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Valid Upgrade Paths

The following table lists the valid paths for installing/upgrading to Cisco EPN Manager 7.1 from previous versions.

Current Cisco EPN Manager Version	Installation Path to Cisco EPN Manager 7.1.0
Cisco EPN Manager 7.0.1	Cisco EPN Manager 7.0.1 > 7.1.0
Cisco EPN Manager 6.1.1	Cisco EPN Manager 6.1.1 > 7.1.0
Cisco EPN Manager 6.0.1.1	Cisco EPN Manager 6.0.1.1 > 7.1.0

See the relevant [installation guide](#) for installation prerequisites and procedures for Cisco EPN Manager versions.

For point patch installation instructions, see the readme file supplied with the patch file on the [Software Download site](#) on Cisco.com.

Prerequisites for Upgrading to Cisco EPN Manager 7.1

Before starting the upgrade:

1. Ensure that you have followed the relevant upgrade path based on your current version of Cisco EPN Manager. See [Valid Upgrade Paths, on page 1](#).
2. Ensure that your deployment meets the requirements in the relevant prerequisites topic:
 - [Prerequisites for OVA/VM Installations](#). For OVA/VM deployments, the upgrade is run from the vmWare vSphere client.
3. Remove any devices running uncertified software versions from Cisco EPN Manager. This step is not mandatory but highly recommended.
4. Back up your data. See [Create a Copy of Your Data](#).
5. Ensure that no backups are running.
6. Ensure that SCP is enabled on your client machine and the required ports are open (see [Ports Used by Cisco EPN Manager](#)). You will need to use SCP to copy files from your client machine to the Cisco EPN Manager server.
7. Copy any gpg files located in /localdisk/defaultRepo to an external repository and then delete them from this folder.



Note Customers using OTDR feature for NCS1001 in EPNM, must perform the following:

Take a backup of /opt/CSColumos/conf/ncs1k-otdr-ports.xml. The below feature entry has to be updated in /opt/CSColumos/conf/Migration.xml to retain the OTDR mapping configuration done for NCS1001 devices.

```
<feature name="Otdr-ports-Properties">
<files>
<file optional="true">/opt/CSColumos/conf/ncs1k-otdr-ports.xml</file>
</files>
</feature>
```

Create a Copy of Your Data

To create a copy of your current data, backup your data to a remote repository. Refer to the backup topics in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#). If necessary, you can revert to the previous version by restoring the data. See [Revert to the Previous Version using Data Restore](#).

Upgrade to Cisco EPN Manager 7.1 (No HA)

These topics explain how to upgrade to Cisco EPN Manager 7.1 from an earlier version of Cisco EPN Manager in a standard deployment (no high availability).

- [Backup-Restore Upgrade \(No HA\)](#)
- [Post-Upgrade Tasks](#)

If you are performing an upgrade in a high availability deployment, see [Upgrade to Cisco EPN Manager 7.1 \(High Availability\), on page 4](#).

Backup-Restore Upgrade (No HA)

Backup-restore upgrade involves backing up all data from the currently installed version of Cisco EPN Manager, then installing Cisco EPN Manager 7.1 on a new server, then restoring the backed up data to the new Cisco EPN Manager 7.1 server. This is the recommended upgrade method.

Before You Begin

- Make sure the new server has the same hardware specifications as the server from which the backup was taken.
- Note the location of the remote backup repository used by the old server. You will need it to configure the same backup location on the new server.

Step 1 Configure the new server to use the same remote backup repository as the old server, as explained in the remote backup repository topics in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#) .

Step 2 Restore the backup in the remote repository to the new server, as explained in the restore backup topics in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#) .

Post-Upgrade Tasks

- If you are using Cisco Smart Licensing, re-register Cisco EPN Manager with the Cisco Smart Software Manager (CSSM) on Cisco.com. Refer to the topics that describe managing licenses in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#) .
- Synchronize the inventory of all devices with the database, as follows:
 1. In the Cisco EPN Manager GUI, choose **Monitor > Network Devices**.
 2. Select all devices, then click **Sync**.
- Instruct users to clear the browser cache on all client machines that accessed an older version of Cisco EPN Manager before they try to connect to the upgraded Cisco EPN Manager server.
- If you were using external AAA before the upgrade, configure external authentication again. Refer to the user management topics in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).
- During the upgrade, the Cisco EPN Manager home page will be reset to the default home page (Getting Started page). Users can select their own default home page from the Getting Started page or from the Settings menu at the top right of the page.

New dashlets on existing tabs, will not be added automatically post upgrade. The user can manually add them from the dashboard menu Settings->Add Dashlet(s).

Manually created command sets (for example: ip access-list, Team Interface or interface GigabitEthernet 1, additional ntp servers and ip route) will not be available post upgrade. The user needs to add them manually. Refer to the [Command Reference Guide for Cisco Evolved Programmable Network Manager](#)

New dashboard tabs will be added automatically.

Upgrade to Cisco EPN Manager 7.1 (High Availability)

The following topic provides the procedure for upgrading to Cisco EPN Manager 7.1 in a high availability deployment:

[Backup-Restore Upgrade \(High Availability\)](#)



Note High availability will not be functional until the upgrade is complete.

Backup-Restore Upgrade (High Availability)

Backup-restore upgrade in an HA environment involves the following basic steps which are explained in detail in the procedure below:

1. Remove HA.
2. Back up your data to a remote repository.
3. Perform a fresh installation of Cisco EPN Manager on both the primary and secondary servers.
4. Restore the backup data on the primary server.
5. Reconfigure HA.

Before You Begin

- Make sure your deployment meets the general HA requirements.
- Make sure your deployment meets the upgrade-specific requirements.
- Make sure the new server has at least the same hardware specifications as the server from which the backup was taken.
- Note the location of the remote backup repository used by the old server (if applicable). You will need it to configure the same backup location on the new server.
- Make sure that you have the password (authentication key) that was created when HA was enabled. You will need it to perform the Cisco EPN Manager installation on the secondary server.

Step 1 On the primary server, remove the High Availability configuration:

- a. Log into Cisco EPN Manager as a user with Administrator privileges.
- b. Choose **Administration > Settings > High Availability**.
- c. Make a note of the HA configuration. You will need this information to reconfigure HA after the upgrade.
- d. Choose **HA Configuration** in the left navigation area, then click **Remove**.
- e. Wait for the remove operation to complete.

- f. Click **HA Configuration** in the left navigation area and confirm that the Configuration Mode field displays **HA Not Configured**.

Step 2 Back up your data to the remote repository. For details, see the topics on backups in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

Note If you do not have a remote repository, configure one. See the topics on remote backup repositories in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

Step 3 Configure the new primary server to use the same remote backup repository as the old primary server (which you used in *Step 2*). See the topics on remote backup repositories in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

Step 4 On the primary server (only), restore the backup from the remote repository. See the topics on restoring data in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

Note You only need to perform the restore operation on the primary server. The secondary server will be synchronized with the primary server when HA is re-enabled.

Step 5 On the primary server:

- a. Verify that the server is restarted.
- b. Run the **ncs status** command and make sure that the Health Monitor process and other processes have restarted. Ensure that, at a minimum, the following services are up and running: Health Monitor, Database, NMS, SAM Daemon, DA Daemon, Compliance Engine. Note that for optimal Cisco EPN Manager functionality, all services should be up and running.

Step 6 Once the restore is completed, perform the post-upgrade tasks on the primary server. See [Post-Upgrade Tasks](#).

Step 7 Re-configure HA by registering the secondary server on the primary server. Use the information you saved in *Step 1*. The registration process must be performed from the primary server. For more information, see the section on registering the secondary server on the primary server, in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

Post-Upgrade Tasks

- If you are using Cisco Smart Licensing, re-register Cisco EPN Manager with the Cisco Smart Software Manager (CSSM) on Cisco.com. Refer to the topics that describe managing licenses in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).
- Synchronize the inventory of all devices with the database, as follows:
 1. In the Cisco EPN Manager GUI, choose **Monitor > Network Devices**.
 2. Select all devices, then click **Sync**.
- Instruct users to clear the browser cache on all client machines that accessed an older version of Cisco EPN Manager before they try to connect to the upgraded Cisco EPN Manager server.
- If you were using external AAA before the upgrade, configure external authentication again. Refer to the user management topics in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

- During the upgrade, the Cisco EPN Manager home page will be reset to the default home page (Getting Started page). Users can select their own default home page from the Getting Started page or from the Settings menu at the top right of the page.

New dashlets on existing tabs, will not be added automatically post upgrade. The user can manually add them from the dashboard menu Settings->Add Dashlet(s).

Manually created command sets (for example: ip access-list, Team Interface or interface GigabitEthernet 1, additional ntp servers and ip route) will not be available post upgrade. The user needs to add them manually. Refer to the [Command Reference Guide for Cisco Evolved Programmable Network Manager](#)

New dashboard tabs will be added automatically.

Revert to the Previous Version of Cisco EPN Manager

This section describes how to go back to the previous version of Cisco EPN Manager after you have installed Cisco EPN Manager, for both high availability and standard environments. This is a manual process—automatic rollback is not supported.



Note You can only revert to a previous version if you created a copy of your data before installing Cisco EPN Manager, as described in [Create a Copy of Your Data](#).

The procedure for reverting to the previous version of Cisco EPN Manager differs depending on which method you used to create a copy of your data.

- If you used the backup facility, see [Revert to the Previous Version using Data Restore](#).
- If you took a VM snapshot, see [Revert to the Previous Version Using the VM Snapshot](#).

Revert to the Previous Version using Data Restore

If you used the backup facility to create a copy of your data, follow one of these procedures to revert to the previous version of Cisco EPN Manager (non-HA or HA).

For non-HA environments, do the following:

1. Reinstall the previous release of Cisco EPN Manager—the release from which you did the backup.
2. Restore the data from the backup. See the topics related to restoring data in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

For HA environments, do the following:

1. Reinstall the previous release of Cisco EPN Manager on the primary and secondary servers—the release from which you did the backup.
2. On the primary server, restore the data from the backup. See the topics related to restoring data in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).
3. Configure HA and register the secondary server on the primary server. The registration process must be performed from the primary server. For more information, see the section on registering the secondary

server on the primary server in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

Revert to the Previous Version Using the VM Snapshot

If you are using a VM for your installation and you took a VM snapshot prior to the installation, follow one of these procedures to revert to the previous version of Cisco EPN Manager (non-HA or HA).

For non-HA environments, do the following:

1. Shut down the VM.
2. Revert the VM snapshot.
3. Start the VM.
4. Start Cisco EPN Manager.

```
ncs start
```

For HA environments, do the following:

1. Shut down the primary and secondary VM servers.
2. Revert the VM snapshot on both servers.
3. Start the primary and secondary VM servers.
4. Start Cisco EPN Manager on the primary server and on the secondary server.

```
ncs start
```

5. Configure HA and register the secondary server on the primary server. The registration process must be performed from the primary server. For more information, see the section on registering the secondary server on the primary server in the [Cisco Evolved Programmable Network Manager User and Administrator Guide](#).

