



Upgrade to Cisco EPN Manager 8.0

This chapter provides instructions for upgrading to Cisco EPN Manager 8.0 using Backup and Restore method.

Backup-restore upgrade —Involves backing up all data from the currently installed version of Cisco EPN Manager, then installing Cisco EPN Manager 8.0 on a new server, then restoring the backed up data to the new Cisco EPN Manager 8.0 server.

The valid upgrade paths are listed in [Valid Upgrade Paths, on page 1](#).

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Valid Upgrade Paths

The following table lists the valid paths for upgrading to Cisco EPN Manager 8.0 from previous versions.

Current Cisco EPN Manager Version	Installation Path to Cisco EPN Manager 8.0
Cisco EPN Manager 7.0.1	Cisco EPN Manager 7.0.1 > 8.0
Cisco EPN Manager 7.1.3	Cisco EPN Manager 7.1.3 > 8.0

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 8.0

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 that are mentioned in the prerequisites [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 must use SCP to copy files from your client machine to the Cisco EPN Manager server.
7. Copy any gpg files that are located in `/localdisk/defaultRepo` to an external repository and then delete them from this folder.



Note Customers using the OTDR feature for Cisco NCS 1001 devices in Cisco EPN manager must perform the following:

- Create 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.

```
<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 and Restore* section in the [Cisco Evolved Programmable Network Manager 8.0 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 8.0 Using Backup-Restore Method (Non-HA)

Backup-restore upgrade involves backing up all data from the currently installed version of Cisco EPN Manager, installing Cisco EPN Manager 8.0 on a new server, and then restoring the backed-up data to the new Cisco EPN Manager 8.0 server. This is the recommended upgrade method.

Before You Begin

- Make sure that 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 that is used by the old server. You need it to configure the same backup location on the new server.

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- 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 *Backup and Restore* section of the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#) .
- Step 2** Restore the backup in the remote repository to the new server, as explained in the *Backup and Restore* section of the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#) .
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Post-Upgrade Tasks

- If you are using Cisco Smart Licensing, reregister Cisco EPN Manager with the Cisco Smart Software Manager (CSSM) on Cisco.com. Refer to the *Smart Licensing* topics in the *Licenses and Software Updates* section of the [Cisco Evolved Programmable Network Manager 8.0 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 Permissions and Device Access* section in the [Cisco Evolved Programmable Network Manager 8.0 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 are not added automatically post upgrade. The user can manually add them from the dashboard menu **Settings > Add Dashlet**.

Manually created command sets (for example: ip access-list, Team Interface or interface GigabitEthernet 1, additional ntp servers, and IP route) are not available post upgrade. You must add them manually, refer to the [Command Reference Guide for Cisco Evolved Programmable Network Manager 8.0](#).

Upgrade to Cisco EPN Manager 8.0 Using the Backup-Restore Method (High Availability)

The backup-restore upgrade in an HA environment begins with removing HA, followed by backing up your data to a remote repository. This is followed by a fresh installation of Cisco EPN Manager on both the primary and secondary servers. Once the installation is complete, the backup data on the primary server is restored and the HA is reconfigured to complete the process.

Before You Begin

- Ensure that your deployment meets the general HA requirements.
- Ensure that your deployment meets the upgrade-specific requirements.
- Ensure that 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 that is used by the old server (if applicable). You need it to configure the same backup location on the new server.
- Ensure that you have the password (authentication key) that was created when HA was enabled. You need it to perform the Cisco EPN Manager installation on the secondary server.

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- 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 need this information to reconfigure HA after the upgrade.
 - d. Choose the **HA Configuration** tab, then click **Remove**.
 - e. Wait for the remove operation to complete.
 - f. Confirm that the **HA Configuration Mode** field displays **HA Not Configured**.
- Step 2** Back up your data to the remote repository. For more information, see the *Backup and Restore* section in the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#).
- Note** If you do not have a remote repository, configure one. see the *Backup and Restore* section in the [Cisco Evolved Programmable Network Manager 8.0 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 *Backup and Restore* section in the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#).
- Step 4** On the primary server (only), restore the backup from the remote repository. See the *Backup and Restore* section in the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#).
- Note** You must perform the restore operation only 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. 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 that you saved in *Step 1*. The registration process must be performed from the primary server. For more information about HA, see the *Configure and Manage High Availability* section in the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#).

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

Revert to the Previous Version of Cisco EPN Manager

This section describes how to revert 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 have 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 have 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:

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 *Backup and Restore* section in the [Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide](#).

For HA environments:

Procedure

	Command or Action	Purpose
Step 1	Reinstall the previous release of Cisco EPN Manager on the primary and secondary servers—The release from which you did the backup.	
Step 2	On the primary server, restore the data from the backup. See the <i>Backup and Restore</i> section in the Cisco Evolved	

	Command or Action	Purpose
	Programmable Network Manager 8.0 User and Administrator Guide .	
Step 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 <i>Backup and Restore</i> section in the Cisco Evolved Programmable Network Manager 8.0 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 before the installation, follow one of these procedures to revert to the previous version of Cisco EPN Manager (non-HA or HA).

To revert to the previous version of Cisco EPN Manager in non-HA environments using a VM snapshot, follow these steps:

1. Shut down the VM.
2. Restore the VM to the snapshot taken before the installation.
3. After restoring the snapshot, restart the VM again. This reboots the system with the configuration and state that is captured in the snapshot.
4. Start Cisco EPN Manager by running the `ncs start` command, which launches the Cisco EPN Manager.

To revert to the previous version of Cisco EPN Manager in HA environments using a VM snapshot, follow these steps:

Procedure

	Command or Action	Purpose
Step 1	Shut down both the primary and secondary VM servers.	
Step 2	Restart the primary and secondary VM servers.	
Step 3	Start Cisco EPN Manager on both the primary server and the secondary server by running the <code>ncs start</code> command, which launches the Cisco EPN Manager.	
Step 4	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 <i>Configure and Manage High Availability</i> section in the Cisco Evolved Programmable Network Manager 8.0 User and Administrator Guide .	