

# **Licenses and Software Updates**

- View and Manage Licenses, on page 1
- Manage Software Updates, on page 14

# View and Manage Licenses

Licenses determine the features that you can use and the type and number of devices that Cisco EPN Manager can manage. When you connect to Cisco EPN Manager (without logging in), the login page displays a banner that identifies the type of license the server is running (see Types of Cisco EPN Manager Licenses, on page 1). If Cisco EPN Manager is configured to use single sign-on (SSO), check the license type by viewing the banner contents.

Cisco EPN Manager supports Cisco Smart Licensing and Traditional licensing. If you are currently using traditional licensing, Cisco recommends that you convert to Smart Licensing. For information on the differences between the two types of licensing, refer to the Cisco Smart Licensing Overview on Cisco.com. From Release 5.0, Smart license is enabled by default on all fresh installations of Cisco EPN Manager.

After upgrading the EPN Manager software from version 6.0.x or 6.1.x to version 7.1, the previously installed EPN Manager 6.x or 4.x licenses or applied EPNM 6.x or 4.x smart tokens will continue to be recognized by EPN Manager 7.x.

In other words, there is no need to upgrade EPN Manager 6.x or 4.x licenses after installing the EPN Manager version 7.0 or subsequent 7.x releases.

How to use Cisco Smart Licensing and traditional licensing is explained in the following topics:

- Use Cisco Smart Licensing, on page 4
- Use Traditional Licensing, on page 11

# **Types of Cisco EPN Manager Licenses**

Cisco EPN Manager 7.x releases continue to use the new and simplified EPN Manager Right-to-Manage licenses. However, the Right-to-Manage licenses that were introduced with EPN Manager 3.x and 4.x releases will continue to work in the EPN Manager 7.x releases. Subsequently, Advanced RTM licenses are now renamed as *Advantage Add-on RTM licenses*, and Full RTM licenses are now renamed as *Advantage RTM licenses*.

The following topics describe the feature and time-based licenses supported by Cisco EPN Manager.

### Right-to-Use (RTU) License

The RTU License (also known as base license) serves as the foundational license, providing access to all applications and device drivers without limitations on device counts.

You also get a Northbound License along with the Base license.

### Device Right-to-Manage (RTM) License

The Device RTM License allows for the management of a specific number of devices of a specific device type. For RTM licenses, the device count is displayed next to the device type.



**Note** Devices that are configured as satellites (for example, Cisco ASR 903 routers with a Cisco ASR 9000v host) are counted as independent devices.

- RTM licenses are categorized by specific device capacity (that is, small, medium, or large capacity devices).
- You can only manage a Node by using the equivalent RTM device capacity category (for example, large capacity RTM license can be used to manage a large capacity Node).

By designating RTMs as small and large, Cisco EPN Manager 7.x allows for RTM license portability when moving to next-gen platforms. For example, a user transitioning from a Cisco ASR 901 router to a next-gen Cisco NCS 520 device can use the same small RTM licenses, as both devices belong to the small category.

For more sizing and device groups related information, visit Cisco EPN Manager Ordering Guide.

Cisco EPN Manager also discovers third-party network devices. The collected information is displayed in the web GUI, but results can vary widely (depends on the responses Cisco EPN Manager receives from the devices).

RTM licenses are displayed in the GUI as follows:

- For Cisco devices—Device model, such as NCS 2002 or ASR 9001.
- For third-party devices—Generic: Third Party Device.

There are three types of RTM licenses:

#### Essential Right-to-Manage (RTM) License

The Cisco Essential license is a type of RTM license that enables all features and options that are related to device manageability such as, device inventory, Chassis view, topology, alarms, configuration management, and so on (RTM license that covers EMS-level functionality).

Cisco EPN Manager RTMs are offered in three types of licenses: Essentials, Advantage (formerly referred to as Full), and Generic/3rd party vendor licenses. An Essential license can be upgraded to an Advantage license by purchasing an Advantage Add-on (previously referred to as Advanced) RTM license (explained below). An Essential license is also the prerequisite for a corresponding Advantage Add-on license.



**Note** Only the naming terminology has changed, and the licenses remain the same without any impact on licenses that are purchased with the previous terminology.

Essential Entitlement	Advantage Add-on Entitlement	Generic/3rd party Vendor Entitlement
Device Inventory	Transport View (OCHCC, MPLS-TE, MPLS-SR)	Device discovery with inventory information based on standard instrumentation (MIB-II, LLDP MIB, and so on)
Chassis View* (Cisco Non-Generic devices)	Service View (that is, EVPN VPWS P2P, Optical Circuit, TDM2IP)	Trap support
Topology (Physical, Logical (LLDP, CDP, and so on), and Geo Maps)	Multi-Layer View	Topology view with discovery based on LLDP (apart from CDP)
Alarms (uncorrelated)	Advanced visualization (Multi-Layer, 3D views)	Manual Link creation
Metrics (per device, SNMP-based metric)	End to End Transport/Service monitoring (QoS, Y.1731)	Template execution (ASCII CLI)
SWIM/Configuration Management	Advanced Alarm and Metrics reporting and dashboarding	

The table that is given below shows the differences between the licenses and the support given.

Area of Support	Essential	Advantage RTM	Generic/3rd Party
Basic driver support	Yes	Yes	Yes
Faults support	Yes	Yes	
MBC support	Yes	Yes	
Performance monitoring	Yes	Yes	
SWIM and config archive	Yes	Yes	
Compliance Audit	Yes	Yes	
Licensing	Yes	Yes	Yes
Service management - L2VPN		Yes	
Service management - L3VPN		Yes	
Service management - CEM/SATOP		Yes	

#### Advantage Add-on Right to Manage (RTM) License

The Cisco Advantage Addon Function RTM license is displayed in the web GUI as Cisco Advantage Add-on Right-to-Manage license.

This license enables all features and options that are related to service discovery, provisioning, service promotion, service assurance, and multilayer trace functions. Features and menu options related to these

functions are not visible unless the license is active. Also, any scheduled provisioning jobs fail to run. After you install the first Cisco Advantage Addon Right to Manage (RTM) license, these features and options are enabled. Cisco EPN Manager licensing function tracks and reports use of this license in the licensing dashboard.

#### Advantage Right to Manage (RTM) License

To simplify ordering the Essential and corresponding Advantage Add-on licenses together, Cisco EPN Manager has introduced the Advantage license. The Advantage RTM License consolidates Essential and Advantage Add-on licenses, providing a comprehensive licensing solution.

## SBY License for High Availability

The Standby (SBY) license allows the setup of high availability deployments. In a high availability deployment, all the device and feature licenses must be installed on the primary server.

No additional purchase of licenses is required on the secondary server.

### **Licensing Models**

Cisco EPN Manager offers flexible licensing options to cater to different user needs. These licensing models provide the right-to-use software and its features. Following are the licensing models offered:

- Subscription licenses: Software with the right-to-use for the length of the subscription term. Subscription models generally provide faster access to the latest features and innovations and have more predictable cost structures. These licenses are offered as a one-, three-, or five-year subscription licenses. Subscription licenses entitle both access to upgrades as well as technical support.
- **Perpetual licenses:** Software with the right-to-use for an indefinite period of time. Perpetual licenses is typically locked to the device, and additional annual fees are required to maintain support and maintenance. While purchasing perpetual licenses, a separate Software Innovation Access (SIA) subscription and Technical support subscription are required to access upgrades and technical support, respectively. These subscriptions are offered for a duration of one, three, or five years.
- **Time-Based (Evaluation):** For a 90-day trial period (the product is disabled when the trial period expires). If you purchase a time-based license, the days remaining are listed next to the license name.

Cisco EPN Manager is also available packaged in two suite options with Cisco Crosswork Essentials and Cisco Crosswork Advantage. These suites provide the advantage of lower licensing costs than if you purchase Crosswork tools individually. Please see the Crosswork Essentials and Advantage Data Sheet for more details.

For comprehensive details on ordering and pricing, users are encouraged to engage with a Cisco sales representative and refer to the detailed information in the Cisco EPN Manager Ordering Guide. This guide serves as an informative resource, providing users with a clear understanding of Cisco EPN Manager licensing.

# **Use Cisco Smart Licensing**

Cisco recommends that you use the simple and efficient Cisco Smart Licensing mechanism to manage your licenses.

A comparison of Smart and traditional licensing is provided in the Cisco Smart Licensing Overview on Cisco.com. After enabling Smart Licensing in Cisco EPN Manager, you must register Cisco EPN Manager with the Cisco Smart Software Manager (CSSM) on Cisco.com. After you are registered, all Cisco EPN Manager license types will be available to you from the Cisco EPN Manager web GUI.

If you are currently using traditional licensing, you can convert your existing Cisco EPN Manager licenses to Smart entitlements at any time, as described in Convert Traditional Licenses to Smart Entitlements, on page 8.

The following topics explain how to set up and manage Cisco EPN Manager licenses using Cisco Smart Licensing.

- Set Up Cisco Smart Licensing in Cisco EPN Manager, on page 5
- Choose Cisco EPN Manager Licenses Using Smart Licensing, on page 8
- Configure License Thresholds for the Smart License Dashboard, on page 9
- Check Cisco EPN Manager License Usage, on page 9
- Disable Smart Licensing, on page 9
- Reference: Smart Product Registration and License Authorization Statuses, on page 10

# Set Up Cisco Smart Licensing in Cisco EPN Manager

Follow these steps to set up Cisco Smart Licensing so you can use it to manage your licenses. If you are currently using traditional licensing, use these same procedures to use Cisco Smart Licensing and, when convenient, convert your existing Cisco EPN Manager licenses as described in Convert Traditional Licenses to Smart Entitlements, on page 8.

	Step	See:
1.	Create a Smart Account with Cisco Systems.	Go to Smart Account Request and follow the instructions on the web site.
2.	Set up communication between Cisco EPN Manager and the CSSM on Cisco.com.	Set Up the Transport Mode Between Cisco EPN Manager and Cisco Smart Software Manager, on page 5
3.	Enable Smart Licensing in Cisco EPN Manager.	Enable Smart Licensing in Cisco EPN Manager, on page 6
4.	Register Cisco EPN Manager with the CSSM on Cisco.com by obtaining a token from the CSSM and entering it in the Cisco EPN Manager web GUI.	Register Cisco EPN Manager with the Cisco Smart Software Manager, on page 7
5.	Choose the licenses you want to use in Cisco EPN Manager.	Choose Cisco EPN Manager Licenses Using Smart Licensing, on page 8
6.	Set up the Smart License Dashboard so you can monitor your licensing usage.	Configure License Thresholds for the Smart License Dashboard, on page 9

### Set Up the Transport Mode Between Cisco EPN Manager and Cisco Smart Software Manager

**Step 1** Choose Administration > Settings > System Settings, then choose General > Account Settings.

- **Step 2** Click the **Smart Licensing Transport** tab and select a communication mode:
  - Direct mode—Sends license information directly to the cloud. This is the default. You cannot edit this URL. Click **Test Connectivity** to check the connection status.
  - Transport Gateway—Uses either a Cisco Smart Call Home transport gateway or a Cisco Smart Licensing Software satellite (which is installed at customer premises and provides a subset of CCSM functionality) for communication. (See Cisco.com for more details.) Enter the appropriate URL in the Enter URL field. Click Test Connectivity to check the connection status.
  - HTTP/HTTPS Proxy—Uses either an HTTP or HTTPS proxy for communication between Cisco EPN Manager and the cloud. To enable this option, you must first configure the proxy settings. Click **HTTP/HTTPS Proxy** hyperlink or click the **Proxy** tab to add or edit the proxy settings. See Set Up the Cisco EPN Manager Proxy Server.
- **Step 3** Click **Save** to save the transport settings.
- **Step 4** To revert to the default values, click **Reset**, and then click **Save**.

#### What to do next

If you have not already done so, enable Smart Licensing. See Enable Smart Licensing in Cisco EPN Manager, on page 6.

#### Enable Smart Licensing in Cisco EPN Manager

#### Before you begin

Make sure you have set up the transport mode. See Set Up the Transport Mode Between Cisco EPN Manager and Cisco Smart Software Manager, on page 5.

- **Step 1** Choose Administration > Licenses and Software Updates > Smart Software Licensing.
- **Step 2** Enable Cisco Smart Licensing in the Cisco EPN Manager web GUI.
  - a) Click the Licensing Settings tab.
  - b) In the Licensing Mode field, click Smart Software Licensing radio button.
  - c) Choose Evolved Programmable Network Manager from the Product Name drop-down list.
  - d) Click **Enable Smart Software Licensing**. Cisco EPN Manager may display a dialog box indicating that when you complete this procedure, you must restart the web GUI before you can proceed with the configuration step.
  - e) Click **OK** in the dialog box.
  - f) If necessary, log out of the web GUI and then log back in.

#### What to do next

Do one of the following:

 If you have not yet registered Cisco EPN Manager with the CSSM on Cisco.com, Cisco EPN Manager will run in evaluation mode (which has a limit of 90 days). Register the product as described in Register Cisco EPN Manager with the Cisco Smart Software Manager, on page 7. • If you have registered Cisco EPN Manager with the CSSM, select the licenses you want to use. See Choose Cisco EPN Manager Licenses Using Smart Licensing, on page 8.

### **Register Cisco EPN Manager with the Cisco Smart Software Manager**

To register Cisco EPN Manager with the CSSM, you must obtain a token from the CSSM and enter it into the Cisco EPN Manager web GUI. This is a one-time requirement. If for any reason you have to re-register your product instance, you can do that by following this procedure.

```
Note
```

Refer to the Cisco Smart Software Manager User Guide for information on how to use the CSSM and the other actions that you can perform from this application—for example, renewing license registration and license authorization, unregistering the product from Cisco Smart Licensing, and so forth.

#### Before you begin

If your organization does not have a Smart Account, go to software.cisco.com, choose **Request a Smart** Account in the Administration area, and follow the instructions to create an account.

- **Step 1** Go to the Cisco Software Central web site (software.cisco.com).
- **Step 2** Obtain your tokens. If you already have tokens (for example, you converted traditional licensing PAKs to Smart entitlements), proceed to the next step.

If you are re-registering your product instance, your token will be listed in the CSSM user interface. If your token is no longer valid, you can obtain a new token using this procedure.

- **a.** On Cisco Software Central, choose License > Smart Software Licensing.
- **b.** Select the appropriate virtual account.
- c. Click the General tab, then click New Token.
- **d.** Follow the instructions to provide a name, duration, and export compliance applicability before accepting the terms and responsibilities.
- e. Click Create Token.
- f. Copy the Token ID to your clipboard and proceed to the next step.
- **Step 3** Enter the Token ID into the Cisco EPN Manager web GUI to register the product instance.
  - a. Choose Administration > Licenses and Software Updates > Smart Software Licensing.
  - b. Click the Licensing Settings tab, then paste your token into the Registration Token field.
  - c. Click Register.
- **Step 4** Log out of the Cisco EPN Manager web GUI, then log back in.

#### What to do next

Choose the licenses you want to use. See Choose Cisco EPN Manager Licenses Using Smart Licensing, on page 8.

# **Choose Cisco EPN Manager Licenses Using Smart Licensing**

After you have registered Cisco EPN Manager with the CSSM, all Cisco EPN Manager license types will be listed in the Cisco EPN Manager web GUI, and you can choose the ones you want to use.

**Step 1** If this is the first time you are choosing Smart licenses:

#### a) Choose Administration > Licenses and Software Updates > Licenses.

After a few moments, Cisco EPN Manager displays a dialog box informing you that you cannot access the page because you are not using traditional licensing. This is normal.

- b) In the dialog box, click **Smart License Settings**.
- c) Click the Licensing Settings tab.
- **Step 2** If you are already using Smart Licensing:
  - a) Choose Administration > Licenses and Software Updates > Smart Software Licensing.
  - b) Click the Licensing Settings tab.
- Step 3 Under Smart License Usage, click Choose Licenses.
- **Step 4** Select licenses from the Available Licenses dialog box, then click **Save**. Cisco EPN Manager immediately begins consuming the licenses.

### What to do next

Configure the Smart License Dashboard thresholds for the new licenses. See Configure License Thresholds for the Smart License Dashboard, on page 9.

# **Convert Traditional Licenses to Smart Entitlements**

If you have been managing Cisco EPN Manager licenses using traditional licensing, you can enable and configure Smart Licensing by following the setup tasks in Set Up Cisco Smart Licensing in Cisco EPN Manager, on page 5. When convenient, convert your existing traditional licenses to Smart entitlements described in this procedure. You will have to enter your Product Activation Key (PAK) numbers in the License Registration Portal on the Cisco Software Central site.

#### Before you begin

- You must have a Cisco.com account to access Cisco Software Central. If you do not have an account, go to the Cisco Software Central.
- Make sure you have your existing traditional licensing PAK numbers.
- **Step 1** On Cisco Software Central, choose **License** > **Traditional Licensing**.
- **Step 2** Click **Continue to Product License Registration** to open the License Registration Portal.

- **Step 3** In the field under **Get New Licenses**, enter your PAK numbers. If you are entering multiple PAKs, separate them with a comma. You can enter a maximum of 10 PAKs.
- **Step 4** Under the **PAKs/Tokens** tab, select the PAKs you want to convert to Smart entitlements, then choose **Actions** > **Convert** to **Smart Entitlements**.

### **Configure License Thresholds for the Smart License Dashboard**

To efficiently manage your licenses, configure the Smart License Dashboard to indicate when Cisco EPN Manager is approaching the point where its licenses will be depleted. The settings you configure here are system-wide .

# Step 1 Choose Administration > Licenses and Software Updates > Smart Software Licensing, then click the License Dashboard Settings tab.

- **Step 2** Make a selection from the **License Type** drop-down list.
- **Step 3** Enter a value in the **Threshold Value** field.
- Step 4 Click Save.

The threshold value is displayed as a straight line in the graphical representation of the **License Summary** and the **Device Distribution for License** dashlets.

**Note** Creating a threshold does not influence the license status, whether it is compliant or non-compliant. Additionally, it does not trigger any system warning events or alarms. Instead, it provides the ability to set a horizontal line on the Licensing dashboard that indicates an approaching limit.

# **Check Cisco EPN Manager License Usage**

Check current license usage using the Smart Licensing Dashboard. To open the dashboard, choose Administration > Dashboards > Licensing Dashboard. For an explanation of the basic license types, see Types of Cisco EPN Manager Licenses, on page 1.

To view these license counts:	Check this part of the dashboard:
For the current date	License Summary Count—Green indicates compliant license counts; red indicates non-compliant license counts.
For a specific week or month	License Summary—Hover over a bar chart to view more details.
For a specific license type	Device Distribution for License—Click one of the license links at the top of the License Summary dashlet. Hover your mouse cursor over the chart to view the details.

# **Disable Smart Licensing**

**Step 1** Change the license setting in the Cisco EPN Manager web GUI.

- a) Choose Administration > Licenses and Software Updates > Smart Software Licensing.
- b) At the bottom of the page, click Disable Smart Licensing, then confirm your choice.
- **Step 2** Log out of the Cisco EPN Manager web GUI, then log back in.

Because Cisco EPN Manager is not yet registered to use traditional licensing, when you log back in, all features are disabled. This is normal.

**Step 3** Enable traditional licensing in the Cisco EPN Manager web GUI. (This is done from the Smart License Settings page.)

a) Choose Administration > Licenses and Software Updates > Licenses.

After a few moments, Cisco EPN Manager displays a dialog box informing you that you cannot access the page because you are not using traditional licenses. This is normal.

- b) In the dialog box, click Smart License Settings.
- c) Click the License Settings tab.
- d) For the Licensing Mode, select Traditional Licensing.
- e) Click Register.
- **Step 4** Log out of Cisco EPN Manager, then log back in.

## **Reference: Smart Product Registration and License Authorization Statuses**

#### **Product Registration Status**

The License Registration Status reflects whether the product is properly registered with Cisco Smart Software Licensing on Cisco.com.

License Registration Status	Description
Unregistered	Smart Software Licensing is enabled in Cisco EPN Manager but Cisco EPN Manager is not registered with the CSSM.
Registered	Cisco EPN Manager is registered with the CSSM. Cisco EPN Manager has received an ID certificate that will be used for future communication with the Cisco licensing authority.
Registration Expired	Cisco EPN Manager did not successfully renew its registration prior to the expiration date and has been removed from CSSM.

#### **License Authorization Status**

The License Authorization status reflects license usage against purchased licenses, and whether you are in compliance with Cisco Smart Licensing. If you exceed the number of purchased licenses, the product's status will be **Out of Compliance**.

License Authorization Status	Description
Evaluation Mode	Cisco EPN Manager is running in evaluation mode (expires in 90 days).

License Authorization Status	Description
Authorized	Cisco EPN Manager has a valid Smart Account and is registered. All licenses requested by the product are authorized for use.
Out of Compliance	Cisco EPN Manager has exceeded the number of licenses that were purchased. (Specifically, the virtual account for the product instance has a shortage of one or more licenses types.)
Evaluation Expired	The evaluation period has expired and Cisco EPN Manager is in the unlicensed state.
Authorization Expired	Cisco EPN Manager did not successfully renew its license authorization prior to the authorization expiration date.

# **Use Traditional Licensing**

Note

Cisco recommends that you convert to Cisco Smart Licensing. See Set Up Cisco Smart Licensing in Cisco EPN Manager, on page 5. If you are using Smart Licensing and want to re-enable traditional licensing, see Disable Smart Licensing, on page 9.

Cisco EPN Manager checks traditional licenses every 4 hours and writes the status to the License log (/opt/CSCOlumos/logs/license.log). If a time-based license expires, any users that are in an active session will be redirected to the **Licenses** page, and new users are prevented from logging in. If an RTM license device count is exceeded, you should either:

- Delete some of the devices. After the daily inventory collection, the devices will be displayed as Managed.
- Obtain a license with a higher RTM count. See Add and Delete Traditional Licenses, on page 12.

See these topics for more information on traditional licenses:

- Types of Cisco EPN Manager Licenses, on page 1
- View Traditional Licenses, on page 11
- Add and Delete Traditional Licenses, on page 12
- Move a Traditional License to Another Server, on page 12

## **View Traditional Licenses**

To view the traditional Cisco EPN Manager licenses that are currently installed, choose Administration > Licenses and Software Updates > Licenses. Cisco EPN Manager supports the licenses listed under Base License.



Note

A separate license is used by each chassis in a multi shelf device. For example, if a Cisco NCS 2006 device houses 3 chassis, 3 licenses are used by that device.

# Add and Delete Traditional Licenses

To install a new traditional license, the original license must already reside on the server. Do not create copies of licenses. To purchase new traditional licenses, go to www.cisco.com/go/license. Make sure you install licenses in the correct order. For example, you must always install the Base license first because it is required by the other licenses.

When you delete a license, all of that license's information is removed from the server.

**Caution** If you make a manual change to a license file, Cisco EPN Manager considers the file corrupted and will not install it. If this happens, obtain a new license file.

#### Step 1 Choose Administration > Licenses and Software Updates > Licenses.

### Step 2 Choose Files > License Files.

- To add a license, click Add, click Choose File, browse to the location of the license file, and then click OK.
- To delete a license, select the license file, then click **Delete**.

# Move a Traditional License to Another Server

The only time you may have to move a license to another server is if you are using high availability, and a server fails. If you need to delete a license, see Add and Delete Traditional Licenses, on page 12. To move the license:

Step 1	Delete the traditional	licenses from	the original server.
--------	------------------------	---------------	----------------------

- **Step 2** Send an e-mail to licensing@cisco.com requesting a *re-host* for your traditional licenses.
- **Step 3** When you receive the traditional license, install it on the new server.

### **Renewing an Expired License**

If your Cisco EPN Manager license has expired, you can complete the following procedure to renew it:

Step 1 Choose Administration > Licenses and Software Updates > Licenses.

The Licenses page opens.

- **Step 2** Do one of the following:
  - If you see the **Summary** and **Files** menus in the top left portion of the page, skip ahead to Step 4.
  - If you do not see these menus, you will first need to register traditional licensing. Proceed to Step 3.
- **Step 3** Register traditional licensing, then return to Step 1 of this procedure:

- a) Choose Administration > Licenses and Software Updates > Smart Software Licensing.
- b) With the Licensing Settings tab selected, click the Traditional Licensing radio button, then click Register.
- c) Log out of Cisco EPN Manager, then log back in.

**Step 4** From the top left area of the page, choose **Files** > **License Files**.

The License Files page opens.

- **Step 5** Choose the license file you want to renew:
  - a) Click Add.

The Add A License File dialog box opens.

- b) From the Select License File field, click Choose File.
- c) Navigate to and click the appropriate license file, then click Open.
- d) Click OK.
- **Step 6** Log out of Cisco EPN Manager, then log back in.

# **View the Licensing Dashboard**

From the **Licensing** dashboard, you can determine whether traditional or smart software licensing is enabled (indicated in the **Active Licensing Mode** field at the top of the dashboard) and view the number of licenses that are currently in use. You can set the licensing mode from the **Smart Software Licensing** page (**Administration** > **Licenses and Software Updates** > **Smart Software Licensing**).

To open the dashboard, do one of the following:

- Choose Administration > Dashboards > Licensing Dashboard.
- Click the Licensing Dashboard link from the top-right corner of the Smart Software Licensing page.

The information displayed in the dashboard depends on the licensing mode that is enabled. If smart software licensing is currently enabled, the following dashlets are displayed:

- License Summary Count area—Displays the number of licenses consumed and the compliance status for each license type. The number of licenses displayed is based on the current date.
- License Summary dashlet—Displays a bar chart that graphs the number of licenses consumed for each license type during a particular time period. To view additional information, place your cursor over the chart.
- **Device Distribution for License** dashlet—To view the device distribution chart for a particular license, click its link from the top of the chart displayed in the **License Summary** dashlet. To view additional information, place your cursor over the chart.



Note

The information displayed in the **License Dashboard** is refreshed daily after the SmartLicense job runs at 02:00 a.m. (its pre-configured run time). To view this job in the **Job Dashboard**, choose **Administration** > **Dashboards** > **Job Dashboard**.

If traditional licensing is currently enabled, the **Licensing** dashboard displays the **Traditional Licensing** dashlet. Specify whether you want to view information about Small, Medium, Large, or Generic licenses by choosing the corresponding option from the **License Type** drop-down list. The dashlet updates, displaying information such as the device families with that license type, the number of tokens allocated to each device in those families, as well as the number of tokens that are not being used at the moment.

#### **Related Topics**

Set Up Cisco Smart Licensing in Cisco EPN Manager, on page 5 Enable Smart Licensing in Cisco EPN Manager, on page 6 Register Cisco EPN Manager with the Cisco Smart Software Manager, on page 7 Configure License Thresholds for the Smart License Dashboard, on page 9 Disable Smart Licensing, on page 9 Reference: Smart Product Registration and License Authorization Statuses, on page 10

# Manage Software Updates

- What Are Software Updates?, on page 14
- View the Installed Product Software Version, on page 15
- Enable or Disable Notifications About Software Updates, on page 15
- View Installed Software Updates, on page 15

# What Are Software Updates?

Cisco provides updates to the Cisco EPN Manager software periodically. These updates fall into the following three categories:

- Critical Fixes—Provide critical fixes to the software. We strongly recommend that you download and apply all of these updates as soon as they are available.
- Device Support—Adds support for managing devices which Cisco EPN Manager did not support at release time.
- Add-ons—Provide new features, which can include GUI screens and functionality, to supplement the Cisco EPN Manager version you are using. This includes Cisco EPN Manager maintenance packs and maintenance pack point patches.

The update notifications that Cisco EPN Manager displays depend on the Notification Settings specified by your administrator. See Enable or Disable Notifications About Software Updates, on page 15. All software updates are packaged in .ubf files. A large update can contain individual smaller updates, from which you can choose what you want to install. When you install an update, Cisco EPN Manager does the following:

- Verifies that the file publisher is Cisco Systems and the file has not been tampered with.
- Automatically installs any other updates that are required.

If you have connectivity to http://www.cisco.com, you can download and install the updates directly from Cisco.com. If you do not have internet connectivity, copy the update from a server that has the necessary connectivity and install it from there.

See the Cisco EPN Manager Installation Guide for installation instructions for maintenance packs. For point patch installation instructions, see the readme file provided with the patch file on the Software Download page on Cisco.com.

# **View the Installed Product Software Version**

Use one of these methods to check the Cisco EPN Manager product version:

- From the Web GUI, click the Settings icon at the top right of the page, and choose **Help** > **About Cisco EPN Manager**.
- From the CLI, view the contents of the file named

#cat /opt/CSCOlumos/installedComponentsVersions.xml

To use the CLI, see Establish an SSH Session With the Cisco EPN Manager Server.

# View Installed Software Updates

If you are not logged in to the web GUI, you can view a pop-up window that lists the software updates by clicking **View Installed Updates** from the login page.

If you are logged in to the web GUI, you can view the software updates in two ways:

- From the **About Cisco EPN Manager** page, by clicking the settings icon at the top right of the page and clicking **About Cisco EPN Manager**, and then clicking **View Installed Updates**. (The **View Installed Updates** link is also available from the login page.)
- By choosing Administration > Licenses and Software Updates > Software Update (this method provides the most detail).

The Software Update page displays two tabs:

- Installed Updates—Updates that Cisco EPN Manager is currently using.
- Uploaded Update Files—Update files that have been uploaded to the server (including those that are not being used). The Corresponding Updates field lists any prerequisite updates that were also uploaded.

If an update file has not yet been installed, it can be deleted. Select the file and click the **Delete** button.

# **Enable or Disable Notifications About Software Updates**

By default, Cisco EPN Manager displays information about all available updates in the **Software Updates** page. Because the list can be quite long, you may want to adjust what is displayed and the updates for which you are notified. You can also disable all notifications and re-enable them later.

Configure your software update notification settings.

- a) Choose Administration > Settings > System Settings, then choose General > Software Update.
- b) Under **Notification Settings**, select or deselect the update categories. To disable all notifications, make sure no categories are selected. For an explanation of the categories, see What Are Software Updates?, on page 14
- c) Click Save.