



## Information About Smart Licensing

The Smart Licensing Client feature is a standardized licensing platform that simplifies the Cisco software experience and helps you understand how Cisco software is used across your network. Smart Licensing is the next generation licensing platform for all Cisco software products.

This document provides an overview of the Cisco Smart Licensing Client feature and describes the several tools and processes required to complete the products' registration and authorization. See the following topics to know more about Smart Licensing:



**Note** If you want to learn more about licensing for the enterprise routers running on Cisco IOS XE Release 17.4.1 or later, or if you are looking for licensing information for the Cisco Catalyst 8000 Series routers, see the [Smart Licensing Using Policy for the Cisco Enterprise Routing Platforms](#).

- [Overview of Smart Licensing, on page 1](#)
- [Benefits of Smart Licensing, on page 2](#)
- [Prerequisites, on page 2](#)
- [Restrictions for Smart Licensing, on page 2](#)
- [License Evaluation in Smart Licensing, on page 3](#)
- [Deployment Options for Smart Licensing, on page 4](#)

## Overview of Smart Licensing

Cisco Smart Licensing is a flexible licensing model that provides you with an easier, faster, and more consistent way to purchase and manage software across the Cisco portfolio and across your organization. And it's secure – you control what users can access. With Smart Licensing you get:

- **Easy Activation:** Smart Licensing establishes a pool of software licenses that can be used across the entire organization—no more PAKs (Product Activation Keys).
- **Unified Management:** My Cisco Entitlements (MCE) provides a complete view into all of your Cisco products and services in an easy-to-use portal, so you always know what you have and what you are using.
- **License Flexibility:** Your software is not node-locked to your hardware, so you can easily use and transfer licenses as needed.

To use Smart Licensing, you must first set up a Smart Account on Cisco Software Central (<http://software.cisco.com/>).

For a more detailed overview on Cisco Licensing, go to <https://cisco.com/go/licensingguide>.

You, your chosen partners, and Cisco personnel can view your hardware, software entitlements, and eventually services by using the Cisco Smart Software Manager interface. The following lists certain key operations that you can perform using the CSSM portal:

- Create, manage or view virtual accounts.
- Create and manage Product Instance Registration Tokens.
- Transfer licenses between virtual accounts or view licenses.
- Transfer, remove or view product instances.
- Run reports against your virtual accounts.
- Modify your email notification settings.
- View overall account information.

## Benefits of Smart Licensing

- Visibility into devices and software that you have purchased and deployed
- Product simplicity with standard software offers, licensing platform, and policies
- Better and educated purchase decisions that could lead to lower operational costs
- Easier deployment with automatic license activation that negates the use of product activation keys

## Prerequisites

Before you enable or migrate to Smart Licensing, ensure that:

- You have a smart account, and access to the Cisco Smart Software Manager portal. To create and access a smart account, go to [Smart Accounts](#). Click **Get a Smart Account**, to get started.
- You have registered your device in CSSM. To register your device, see the [Generating a New Token from Cisco Smart Software Manager](#) and [Registering Device using the id Token](#) section.
- You have configured the Layer 3 connectivity to the CSSM Smart Software Manager satellite.

## Restrictions for Smart Licensing

- In IOS XE Release 16.10.1a, the Smart Licensing feature is applicable only for users whose routers directly connect to the CSSM portal, or whose routers connect to a satellite server.
- To access the CSSM portal, use Chrome 32.0, Firefox 25.0, Safari 6.0, or later releases. Ensure that Javascript 1.5 or later is enabled in your browser.

- For IOS XE, DLC is not supported on ASR 1000 Series RP2 Platforms running non-universal K9 images. As a workaround, migrate to an intermediate release, such as IOS XE 16.3, 16.6, or 16.9, before you migrate to IOS XE 16.10.1a.
- If you want to [Migrate from Traditional Licensing to Smart Licensing](#), the following releases of Smart Software Manager satellite are not supported in the following releases:
  - Releases earlier than 4.1.0
  - Releases 6.0.x
  - Releases 6.1.x
- When you configure the Call Home profile and you specify the HTTP transport URL, it is recommended that you use the host name. IP address is not supported for HTTP transport URL.
- The registration to CSSM fails if you use HTTP to communicate with the CSSM. Functionality that worked previously will no longer work. Ensure that you use only HTTPS to communicate with the CSSM.
- If you are using devices running on Cisco IOS XE release 17.2.1, when you switch from the autonomous mode to the controller mode or vice versa, your Smart Licensing registration does not work. You must reregister for your Smart Licenses to work.
- You cannot use the Web UI to configure SLP related commands for Cisco CSR1000V or Cisco ISRv 17.3.x and earlier versions.

## License Evaluation in Smart Licensing

**Table 1: Feature History**

Release	Description
Cisco IOS XE 16.10.1a	Smart Licensing was made mandatory for all the routing platforms.
Cisco IOS XE 16.11.1a	You have 365 days to register your device with the CSSM without being restricted or receiving evaluation expiration messages.

When you boot an SL-only image, Smart Licensing is automatically enabled, and the licenses for your device go into the Evaluation or EVAL mode. You have 90 days of device usage to register your device in CSSM. During this period, the existing features work as expected for ISR and ASR routers. As long as the device is used, the evaluation timer counts down. The evaluation period applies to the whole device rather than to individual features or entitlements. When the evaluation period expires for a device, it cannot be reset. After the 90 days time period, these licenses move to the Expired or EVAL EXPIRED state.

Cisco CSR 1000V and Cisco ISRv do not have an evaluation period of 90 days. Until the license is in the EVAL mode, the throughput remains at a default of 1Mbps.

In IOS XE Release 16.11.1a, you have 365 days to register your device with the CSSM without being restricted or receiving evaluation expiration messages. For more information, see [Suppression of Evaluation Expiration Messages in Cisco IOS XE Release 16.11.1a and Later Releases](#)

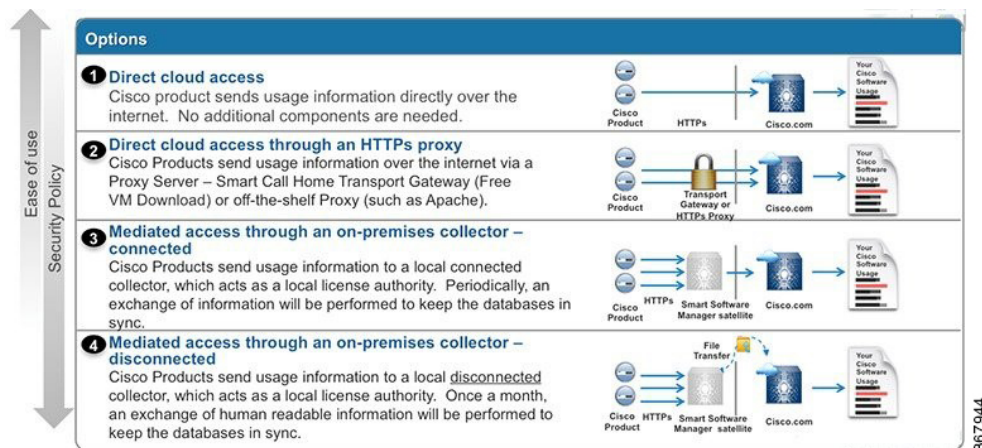


**Note** If you boot up a device after performing a rollback from a Cisco IOS XE 17.3 image to a Cisco IOS XE 16.9 image, the licenses that were in use, move to the Evaluation state. Note that Cisco IOS XE 17.3 is an SL-only version, and the available license states in this version are **Evaluation**, **Authorized**, and **Out Of Compliance** only.

## Deployment Options for Smart Licensing

The following illustration shows the various options available for deploying Smart Licensing. Since security is one of the most important aspects for any user, the image lists the deployment options from the easiest option to the most secure one:

**Figure 1: Smart Licensing Deployment Options**



1. **Direct Cloud Access:** This deployment option allows you to transfer usage over the Internet to the Cloud server directly from the devices to the cloud via HTTPs.
2. **Direct cloud access through a HTTPs proxy:** The deployment option allows you to transfer files directly over the Internet to the Cloud server through an HTTPs proxy. That is, either using Smart Call Home Transport Gateway or using HTTPs proxy such as Apache.
3. **Mediated access through an on-premises collector-connected:** The third deployment option uses an internal collection device called as the “Cisco Smart Software Satellite.” The Satellite, which is available at your end, periodically transmits the information into the cloud using periodic network synchronization. In this deployment option, the only system or database transferring information to the cloud is the Satellite. You can thus control what is included in the collector database, which provides greater security.
4. **Mediated access through an on-premises collector-disconnected:** The fourth deployment option is where you use the Satellite, but only to transfer the collected files using manual synchronization (at least once a month). In this option, the system is not directly connected to the Cloud and an air gap exists between your network and the Cisco Cloud.