Smart Licensing

This chapter contains the following sections:

Smart Licensing Client

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

Prerequisites for Cisco Smart Licensing Client

- Ensure that Call Home is not disabled before using the Smart Licensing Client feature.

Restrictions for Cisco Smart Licensing Client

- You require a virtual account in the Smart Licensing server for registration.

Information About Cisco Smart Licensing Client

Cisco Smart Licensing - An Overview

A new licensing model, based on a single technology, has been designed for Cisco called Smart Licensing that is intended to provide Enterprise Level Agreement-like capabilities for all of Cisco's products.

Smart Licensing is software based licensing end-to-end platform that consists of several tools and processes to authorize customers the usage and reporting of the Cisco products. The feature has the capability to capture the customers order and communicates with Cisco Cloud License Service through Smart Call Home transport media to complete the products registration and authorization on desired performance and technology level.

The Smart Licensing feature is aimed at giving users an experience of a single, standardized licensing solution for all Cisco products.

Transitioning from CSL to Smart Licensing

In the Smart Licensing Model, customers can activate licensed objects without the use of a special software key or upgrade license file. The customers simply activate the new functionality using the appropriate product commands and configurations and the functionality is activated. A software reboot may or may not be required depending on the product capabilities and requirements.

Similarly, downgrading or removing an advanced feature, performance, or functionality would require a removal of the configuration or command.

Once either of these actions has been taken, the change in license state is noted by the Smart Software Manager upon next synchronization and an appropriate action is then taken.

Cisco One Suites

Cisco ONE Suites is a new way for customers to purchase infrastructure software. Cisco ONE offers a simplified purchasing model, centered on common customer scenarios in the data center, wide area network, and local access networks.

How to Activate Cisco Smart Licensing Client

Enable Smart Licensing

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**license smart enable** **Example:** `Device# license smart enable`	Activates Smart Licensing on the device. **Note** When you enable Smart Licensing, the Cisco Software License (CSL) and all licensing calls pass through the Smart Agent. For the 'no' case, if Smart Licensing is already registered, the Smart Agent performs the "license smart deregister" operation that deactivates Smart Licensing.
Step 4	**exit** **Example:**	Exits the global configuration mode.

	Command or Action	Purpose
	`Device# exit`	
Step 5	**write memory** **Example:** `Device# write memory`	Saves the running configuration to NVRAM.
Step 6	**show license all** **Example:** `Device# show license all`	(Optional) Displays summary information about all licenses.

Smart License Disable

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**no license smart enable** **Example:** `Device(config)# no license smart enable`	Deactivates Smart Licensing on the device. **Note** When you enable Smart Licensing, the Cisco Software License (CSL) and all licensing calls pass through the Smart Agent. For the 'no' case, if Smart Licensing is already registered, the Smart Agent performs the "license smart deregister" operation that deactivates Smart Licensing. Reload the device to activate the CSL on the device.
Step 4	**exit** **Example:** `Device(config)# exit`	Exits the global configuration mode.

	Command or Action	Purpose
Step 5	**write memory** **Example:** Device# write memory	Saves the running configuration to NVRAM.
Step 6	**reload** **Example:** Device# reload	(Optional) Restarts the device to enable the new feature set. **Note** Reload the device if you have not reloaded the device after configuring the Cisco One Suites.
Step 7	**show license all** **Example:** Device# show license all	(Optional) Displays summary information about all licenses.

Device Registration

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** Device> enable	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**license smart register idtoken** *idtoken* [**force**] **Example:** Device# license smart register idtoken 123	Registers the device with the back-end server. Token id can be obtained from your virtual a/c in the Smart Licensing server. • **force**: To forcefully register your device irrespective of either the device is registered or not. **Note** The device supplies the token ID to the Cisco server, which sends back a "Device Certificate" that is valid for 365 days.
Step 3	**license smart deregister** **Example:** Device# license smart deregister	Deregisters the device from the backend server.
Step 4	**license smart renew** [**ID** | **auth**] **Example:**	(Optional) Manually renews the ID certification or authorization.

Command or Action	Purpose
Device# license smart renew ID	

Troubleshooting for Cisco Smart Licensing Client

You can troubleshoot Smart Licensing enabling issues using the following commands on the device:

- **show version**
- **show running-config**
- **show license summary**
- **show license all**
- **show license tech support**
- **show license status**
- **debug smart_lic error**
- **debug smart_lic trace**

Configuration Examples for Cisco Smart Licensing Client

Example: Displays summary information about all licenses

Example: Enabling Smart Licensing

Use the **license smart enable** command to confirm if Smart Licensing is enabled.