

Smart License

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About Smart Licensing

CCCSP supports smart licensing. In smart licensing, the purchased licenses are not tied to the hardware and Product Activation Key (PAK). Licenses can be configured by communication to the Smart Manager.

The smart licenses can be configured using the following procedures:

Configure Smart License

Procedure

Step 1 Launch CCCSP GUI and choose **Administration** > **Smart License** > **Configuration**. The **Smart Agent License** page appears.

Step 2 Click **Enable** radio button to configure smart licensing.

Step 3 Enter the details in the fields. See Smart Agent License Fields, on page 2 for field descriptions.

Step 4 Check the **Enable Http(s)** check box.

Step 5 Enter the proxy server address and port number in **Http(s) Proxy Address** field and **Port** fields.

Step 6 Click **Update**.

Smart Agent License Fields

Table 1: Smart Agent License Fields

Parameter	Description
Smart Agent Config	
License Count (multiple of 5)	Activates the requested number of licenses. The count should be multiple of 5. The count should be less than or equal to the maximum call rate that the CCCSP can handle.
License Server url	Enter the Smart Manager server URL that connects to the central licensing server. Use the following URL for registering to cloud CSSM: https://smartreceiver.cisco.com/licservice/license Use an appropriate URL for registering to an on-prem license server.
License Token ID	Specifies the token ID. It can be generated by the license server for the account that the CCCSP instance is registered to.
Enable Http(s) Proxy	Enables the HTTP(S) proxy mode. You can use a web proxy to provide CCCSP with access to CSSM over the Internet.
Http(s) Proxy Address	Sets the HTTP(S) proxy server address for accessing CSSM over the Internet. Enter the complete HTTP URL.
Proxy Port	Sets the port of the Proxy server.

Note Starting from CCCSP release, the following are not supported:

- The https://tools.cisco.com/ destination URL
- The Call home Cisco proprietary secure protocol
- Transport mode selection protocol used to communicate with Smart Software Manager

View the Smart License Summary

The system displays the summary of the configured smart licenses.

Table 2: License Summary

Smart License Client State	Displays the state of the Smart Agent. The following is the list of states: • **Un-Configured**—Smart licensing is not enabled. • **Un-Identified**—Smart licensing is enabled but the Smart Agent has not contacted Cisco Smart Software Manager (CSSM) to register. • **Registered**—The Smart Agent has contacted Cisco Smart Software Manager (CSSM) and registered. • **Authorized**—The Smart Agent enters Authorized state after registration when it receives an incompliance status in response to an entitlement authorization request to the Cisco Smart Software Manager (CSSM). • **Out Of Compliance (OOC)**—The Smart Agent enters out of compliance state after registration when it receives an Out of Compliance (OOC) status in response to an Entitlement Authorization request to the Cisco licensing authority. • **Authorization Expired**—If the device cannot communicate with Cisco for an extended period of time, usually 90 days, the agent goes into the Authorization expired state.
Product Serial Number	It is a unique virtual machine ID.
Product ID	Unique identifier for the CCCSP.
License UDI	Combination of product ID and serial number generated randomly for identifying the CCCSP.
License Server Address	Displays the address of the Smart Manager server provided while configuring.
HTTP Proxy Address	The proxy server address used, if configured, to reach the licensing server.

Licensing State	Displays the licensing entitlement status of this instance. The following are the status: • **Un-Configured :** Smart Licensing is not enabled. In this state, CCCSP operates in an *Unconfigured* mode, and all calls are rejected. • **Un-Identified :** Smart Licensing is enabled. Entitlement information is sent to the Agent. In this state, CCCSP enters Evaluation (EVAL) mode, and the evaluation timer starts on the Agent. Calls are allowed during this period. • **Registered :** Entitlement information is shared with the Smart Agent. CCCSP is registered with the cloud server, but license authorization is not yet completed. CCCSP remains in the *Evaluation (EVAL)* state, and the evaluation timer starts on the Agent. The system can continue to operate in this state even if authorization fails due to connection issues. Registration is valid for one year, Smart Agent handles periodic refresh automatically. • **Eval Expired :** CCCSP enters the *Expired* state when the evaluation period ends. In this state, all calls are rejected. To resume normal operation, users must complete the registration and entitlement process to obtain valid permanent licenses. • **Authorized :** CCCSP registration and entitlement are successfully completed, the system continues to allow calls, and Smart Agent initiates the authorization renewal timer. Upon successful cloud authorization, CCCSP transitions to *Authorized Mode*. The Smart Agent communicates with the Cisco Cloud and attempts to renew the authorization every 30 days. In the event of a renewal failure, CCCSP enters notification listen mode, calls are still allowed, but notification about the failure are generated. This mode may also be entered after a system recovers from an Out-of-Compliance (OOC) state through successful re-entitlement. If authorization renewals continue to fail for 90 consecutive days, the Smart Agent marks the authorization as expired. • **OutOfCompliance:** CCCSP continues to allow calls in this state. It enters the *Out-of-Compliance (OOC)* state when the requested entitlement exceeds the available license count, or when re-entitlement is attempted with more than the available count. In this state, CCCSP operates in notification listen mode. The Smart Agent attempts to renew license for every 15 minutes for the first two hours in case of connection failures, and then reduce the retry interval to once every 4 hours. • **Authorization Expired**: This state is triggered when authorization renewal requests fail continuously for 90 days. The Smart Agent maintains a timer and continue to send authorization renewal requests. CCCSP remains in notification listen mode, and the Agent retries renewals for every 4 hours in case of connection failures with renewal request.

Product License Version	Displays the license version that the product instance is requesting. This is same as the major software version.
Registration Expiry Date	Displays the expiry date and time when the license service identification certificate expires. Once expires, the device reverts to Un-Identified mode.
Next Auth Date	Displays the date and time for the next license renewal.
CPS Count Requested	Displays the number of calls per-second licenses requested. One license is used for every 5 calls per second requested.
Registration Successful	Identifies if registration was a success or failure.
Authorization Successful	Identifies if authorization was a success or failure.
Licensing Agent Status	Identifies if the Smart Agent is enabled or disabled.
Evaluation Mode	Identifies if the product is on evaluation mode.
Latest Failure Reason	Provides the reason due to which the latest license registration failed.