# cisco.



### **Smart Licensing Deployment Guide**

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#### Revised: May 3, 2024

# **Smart Licensing Introduction**

Cisco Smart Software Licensing will make it easier to buy, deploy, track, and renew Cisco software by removing today's entitlement barriers and providing information about your software install base. This is a major change to Cisco's softwar e strategy, moving away from a PAK-based model to a new approach that enables flexibility and advanced consumer-based models.

- · Visibility into devices and software that you have purchased and deployed
- Automatic license activation
- · Product simplicity with standard software offers, licensing platform, and policies
- · Possibility of decreased operational costs

You, your chosen partners, and Cisco can view your hardware, software entitlements, and eventually services in the Cisco Smart Software Manager interface.

All Smart Software Licensed products, upon configuration and activation with a single token, will self-register, removing the need to go to a website and register product after product with PAKs. Instead of using PAKs or license files, Smart Software Licensing establishes a pool of software licenses or entitlements that can be used across your entire company in a flexible and automated manner. Pooling is particularly helpful with RMAs because it eliminates the need to re-host licenses. You may self manage license deployment throughout your company easily and quickly in the Cisco Smart Software Manager.

Through standard product offers, a standard license platform, and flexible contracts you will have a simplified, more productive experience with Cisco software.

# **Quick Start Diagram**



### **Smart Licensing Deployment Modes**

Security is a concern for many customers. The options below are listed in an order from easiest to use to most secure.

- The first option is to transfer usage over the Internet to the Cloud server directly from the devices to the cloud via HTTPs.
- The second option is to transfer files directly over the Internet to the Cloud server through an HTTPs proxy, either Smart Call Home Transport Gateway or off the shelf HTTPs proxy such as Apache.
- The third option uses a customer internal collection device called the "Cisco Smart Software Satellite." The Satellite periodically transmits the information into the cloud using periodic network synchronization. In this instance the only customer system or database transferring information to the cloud is the Satellite. The customer can control what is included in the collector database, which lends itself to higher security.
- The fourth option is to use the Satellite, but to transfer the collected files using manual synchronization at least once a month. In this model the system is not directly connected to the Cloud and an air gap exists between the customers network and the Cisco Cloud.



### **Components Used**

- Cisco 5520, 8540 Series Wireless LAN Controller or virtual Wireless LAN Controller
- 802.11n/ac Access Points
- · Cisco Catalyst Switch
- Client computer (example. laptop) that is Windows or Mac, with an available wired Ethernet port
- Wireless clients (tablets, smartphones, and so on.)

## **Smart Account Creation**

A Customer Smart Account provides the repository for Smart enabled products and enables Users to manage Cisco Licenses. Once they are deposited, Users can activate licenses, monitor license usage and track Cisco purchases. Your Smart Account can be managed by the Customer directly or a Channel Partner or authorized party. All Customers will need to create a Customer Smart Account to fully utilize the license management features of their smart enabled products. The creation of your Customer Smart Account is a one-time setup activity using the link Training Resources for Customers, Partners, Distributors, B2B

After the Customer Smart Account Request has been submitted and the Account Domain Identifier has been approved (if edited), the Creator will receive an email notification informing them that they will need to complete the Customer Smart Account setup in Cisco Software Central (CSC).



### **Ordering on Cisco Commerce Workspacet**

The process of ordering a vWLC, 5520 and 8540 Series Wireless LAN Controller on CCW remains the same. Licenses on existing and newly purchased vWLC, 5520 and 8540 WLCs can be migrated to Smart Accounts by following the instructions in the **License Migration** Section: http://www.cisco.com/c/en/us/td/docs/wireless/technology/mesh/8-2/b\_Smart\_Licensing\_Deployment\_Guide.html#task\_A7D4748711EC4E4784D18D878FC4F39D

## **Cisco Smart Software Manager**

Cisco Smart Software Manager enables you to manage all of your Cisco Smart software licenses from one centralized website. With Cisco Smart Software Manager, you organize and view your licenses in groups called virtual accounts. You use Cisco Smart Software Manager to transfer the licenses between virtual accounts as needed.

You can access CSSM from the Cisco Software Central homepage at https://software.cisco.com/# under the Smart Licensing section. Cisco Smart Software Manager is divided into two main sections: a **Navigation** pane on the top and the main **Work** pane.

Cisco Software Central > Smart Softwa	are Licensing			🛔 Hello,	យ៉ា ខប	Production Tes
Smart Software Man	ager				Feedback	Support Hel
Alerts Inventory Reports En	ail Notification   Satellites   Activity					
Virtual Account: Account S	L Drambuie 👻			Major	<li>Minor</li>	Hide Alerts
General Licenses Pr	oduct Instances Event Log					
Virtual Account Description: S Default Virtual Account: N	SL test 40					
Product Instance Registration The registration tokens below can be	Tokens used to register new product instances to	o this virtual account.				
Token	Expiration Date	Description	Export-Controlled	Created By	Act	ons
ZGQ2ODV/ZWQIZGE2ZC00N.	2015-Dec-26 00:33:19 (in 27 days)	AWS token for testing FTD	Allowed	ydotan	Act	ions +
MGQ5NzA0ZTkiMDA5OS00N_	2015-Dec-22 02:33:48 (in 23 days)		Allowed	erlevin	Act	ons •
ZWI2YTVhMjctMWY5NC00ZG.	2016-Nov-09 20:33:43 (in 346 days)	for zhihong dt testing	Allowed	smartlicuser1	Act	ions +
NTRkZDAzZmY1NmYzNv00N2	2015-Dec-03 23:21:11 (in 5 days)	Ott-Test	Allowed	smartlicuser1	Act	ions +

You can use the **Navigation** pane to do the following tasks:

• Choose virtual accounts from the list of all virtual accounts that are accessible by the user.

General	Lice	Account SL Dra	00	og	
		Aparajita	<b>0</b>		
irtual Accou	unt	ASA	20		
Description:		ASAv_PLR	0		
Default Virtual Accc		ASAv_PLR2			
		Asies-new			
Product Instance		Asies-WNBU	2		
he registration	token:	ASR1K	72	tances to	o this
New Token		ASR1k_Dheeraj	6		
Token		ASR1k_Pavan	<b>~</b>		De
ZGQ2ODVIZW	/QtZGI	ASR1K_REG_SL	0 🚯	days)	AW
MGO5NzA0ZT		ASR1K_Satellite	64 🗣	days)	
	NUM D/	ASR900	0 🕕		
zwi2YTVhMjc	tMWY	ASR901	0 23	(days)	for
NTRkZDAzZm	YtNm\			avs)	Ott

Run reports against your virtual accounts.
 Smart Software Manager

Feedback Support Help

Alerts Inventory	Reports Email Notification Satellites Activity
Reports	
Name	Description
Licenses	Includes a summary of current license counts and usage over selected virtual accounts.
Product Instances	Includes count and listing of current product instances for selected virtual accounts.

• Modify your email notification settings.

Smart Software Manager	Feedback Support Help	
Alerts Inventory Reports Email Notification Satellites Ac	stivity	
Email Notification		
Daily Event Summary		
${\ensuremath{\overline{\mathbf{v}}}}$ Receive a daily email summary containing the events selected below		
Email Address:		
Alert Events:		
S Insufficient Licenses - Usage in account exceeds available licenses	ŝ	
d Licenses Expiring - Warning that term-limited licenses will be expiring	ng. Sent 90, 60, 30, 14, 7, 3 and 1 day prior to expiration.	
Licenses Expired - Term-limited licenses have expired. Only display	yed if Licenses Expiring warning have not been dismissed.	
Product Instance Failed to Connect - Product has not successfully of the second sec	connected during its renewal period	
Product Instance Failed to Renew - Product did not successfully control of the successfully control of the successful	nnect within its maximum allowed renewal period.	
Satellite Synchronization Overdue - Satellite has not synchronized v	within the expected time period.	
Satellite Unregistered and Removed - Satellite failed to synchronize	e in 90 days and has been removed.	
Manage Major and Minor Alerts.		
Smart Software Manager		Feedback Support Help
Alerts Inventory Reports Email Notification Satellites Activity		
Alerts		1763 Major (1013) Minor

₿				
Sev	Message	Source	Action Due	Actions
0	Insufficient Licenses - The Virtual Account "ATTAug10" has a shortage of "CSR 1KV IP BASE 10G" licenses. 2 licenses are required t	ATTAug10	Now	Actions +
0	Insufficient Licenses - The Virtual Account "CRDC_SH_1" has a shortage of "ASR 1000 FoundationSuitesK9 Entitlement " licenses. 1	CRDC_SH_1	Now	Actions +
0	Insufficient Licenses - The Virtual Account "Account SL Drambule" has a shortage of "CSR 1KV SECURITY 10M" licenses. 1 license L	Account SL Drambule	Now	Actions +
0	Insufficient Licenses - The Virtual Account "NCS6k_DT1" has a shortage of "S-NC6-HQOS-RTU-10" licenses. 2 licenses are required	NCS6k_DT1	Now	Actions +
0	Insufficient Licenses - The Virtual Account "NCS6k_DT1" has a shortage of "S-NC6-OAM-RTU-10" licenses. 2 licenses are required to	NCS6k_DT1	Now	Actions +

• View overall account activity, license transactions and event log.

Smart Softwar	re Manager					Feedback	Support Help
Alerts I Inventory   Rep	oorts Email Notificatio	on Satellites Activity					
Activity							
License Transactions	Event Log						
Ð				Search by Lice	nse SKU, License or by	Virtual Account	٩,
Transaction Date	License SKU	License	License Expiration	Count	Virtual Account	Transaction Type	
2015-Nov-27 16:11:33	SL-A901-T	ASR 901 1588BC TIMIN	2016-Jan-26 16:11:33 (DEMO)	2	ASR901	Manual Entry	
2015-Nov-27 16:08:57	SL-A901-A	ASR 901 ADVANCED M	2016-Jan-26 16:08:57 (DEMO)	2	ASR901	Manual Entry	
2015-Nov-27 16:07:31	FLS-A901-4T	ASR 901 GIGE4 CU	2016-Jan-26 16:07:31 (DEMO)	2	ASR901	Manual Entry	
2015-Nov-27 16:07:23	SL-A901-I	ASR 901 IP SECNATPAT	2016-Jan-26 16:07:23 (DEMO)	2	ASR901	Manual Entry	
2015-Nov-27 16:06:58	SL-A901-B	ASR 901 IP BASE	2016-Jan-26 16:06:58 (DEMO)	2	ASR901	Manual Entry	
2015-Nov-27 16:04:28	FLS-A901-4S	ASR 901 GIGE4 SFP	2016-Jan-26 16:04:28 (DEMO)	2	ASR901	Manual Entry	

The following web browsers are supported for Cisco Smart Software Manager:

- Chrome 36.0 and later versions
- Firefox 30.0 and later versions
- Safari 5.1.7
- Internet Explorer 10.0 and later versions



**Note** Javascript 1.5 or a later version must be enabled in your browser.

# Feature Configuration Step-by-Step

#### **Smart Account Creation**

#### Procedure

 Step 1
 Create your Smart Account and virtual accounts as needed at Cisco Software Central (CSC) https://software.cisco.com/

 software/company/smartaccounts/home#accountcreation-account using the reference link http://www.cisco.com/c/en/us/

 buy/smart-accounts.html

Step 2 On this page select End Customer and refer to the Quick Reference Guide

### **License Migration**

After the licenses have been purchased, the customer should contact the Cisco Global Licensing Operations team by email, using the template as shown, with appropriate information to request the migration of their vWLC, 5520, and 8540 license entitlements to the customer's smart portal. Note that this migration may take up to 72 hours. The customer should continue using right-to-use (RTU) licensing until the license migration is complete.

Email template:

To: Licensing@cisco.com

Subject: Smart License Migration for Wireless Controllers

Email Text:

Cisco.com ID: #####

Request: Migrate the following wireless controller licenses to smart licensing.

Smart account domain ID (domain in the form of "xyz.com"): ######

• Smart virtual account name: ######

Serial numbers of the devices on which the licenses were purchased (for non-adder licenses): ######

Number of adder licenses and SKUs that were purchased: ######

PO/SO number: #####

• Virtual accounts are subaccounts that a customer can create inside their company's smart account to virtually separate different entities within organization. Virtual account creation is optional. More information regarding virtual accounts can be found in the General Smart Licensing Question and Answers at: http://www.cisco.com/c/en/us/buy/smart-accounts/software-licensing.html

### **Requesting Demo Licenses**

#### Procedure

The process of obtaining demo licenses is done through TAC. TAC requests Smart Account and Virtual account information from the customer and add demo licenses into the Smart account on behalf of the customer

#### **Configure and Use Smart Licensing**

#### Procedure

Step 1	Enable Smart Licensing on the WLC.
Step 2	Call-home profile configuration (optional)
Step 3	Device registration and entitlements.

# **Registration and Activation**

### **Token Creation**

Token is required to register the product. Registration tokens are stored in the Product Instance Registration Token Table that is associated with your smart account. Once the product is registered, the registration token is no longer necessary and can be revoked and removed from the table. Registration tokens can be valid from 1 to 365 days.

#### Procedure

Virtual Acc	ount: Account S	L Drambuie - This dialog	vill generate the token required to registe	your product instances with your	Smart Account.		
General	Licenses Pr	oduct Instances Description	n: Description	noue			
Virtual Acc	ount	Expire Af	ter: 30	Days			
Default Vir	tual Account: 1	ko S Allow Terms	export-controlled functionality on the pro-	ducts registered with this token	and a second		
Product In: The registration	stance Registration	Tokens Inst used to register new pri	ructions				
New Tok	en	To a	To apply for eligibility to download strong encryption software images:				
Token		Expiration Date	accept the above terms and responsibilitie	95	×		
ZGQ2ODVG	WQIZGE2ZC00N.	2015-Dec-26 00:33:1					
MGQ5NzA0	ZTRIMDA5OS00N.	2015-Dec-22 02:33:4			Create 1	Token C	
ZWI2YTVhA	ŊctMWY5NC00ZG₽	2016-Nov-09 20:33:43 (in 346 days)	for zhhong dt testing	Allowed	smartlicuser1	Actions	
NTRKZDAZZ	mYtNmYzNy00N2.	2015-Dec-03 23:21:11 (in 4 days)	Ott-Test	Allowed	smartlicuser1	Actions	
NTRYODVIY	mUtYmRjMi00MDBj 😰	Expired	Prime Infrastructure validation	Allowed	smartlicuser1	Actions	
Internet	ATTENUNYSOONT D	Expired	ESR 5921	Alicent	smartlicuser1	Action	

**Step 1** In the General tab of virtual account, click New Token.

- **Step 2** In the Create Registration Token dialog box, enter a description and the number of days that you want the token to be valid for. Select the checkbox for export-controlled functionality and accept the terms and responsibilities.
- **Step 3** Click **Create Token** to create token.
- **Step 4** Once the token is created click Copy to copy the newly created token.

### **Enable Smart Licensing and Register Device**

#### Procedure

Step 1To activate Smart Licensing on the WLC go to Management > Software Activation > License Type.Step 2Select Licensing Type as Smart-Licensing from the drop-down menu. Enter the DNS server IP address that will be used to resolve the Smart License and Smart call-home URLs in the call-home profile. Click Apply.

ဂျက်က င၊sco	MONITOR	WLANS	CONTROLLER	WIRELESS	SECURITY	MANAGEMENT	C <u>O</u> MMANDS	HELP	FEEDBACK
Management Summary SNMP HTTP-HTTPS Telnet-SSH Serial Port Local Management User Sessions User Sessions Logs Mgmt Via Wireless Software Activation License Type Smart-License Tech Support	Licensing DNS Serv DNS Serv	Type Sm er rer IP addre	art-Licensing :	•					

Restart the controller under **Commands > Restart** 

- **Note** The following steps are for the Direct Cloud Access deployment mode. For other deployment modes please refer to the section Smart Software Satellite and Transport Gateway Mode and then return to step 3 below to complete registration.
- **Step 3** Go to **Management > Smart-License > Device registration**. Select action as **Registration**. Register the device by entering the copied token ID.

cisco	MONITOR	<u>W</u> LANs		WIRELESS	<u>S</u> ECURITY	MANAGEMENT	C <u>O</u> MMANDS	HELP	FEEDBACK
Management Summary > SNMP HTTP-HTTPS	Device Re Action ( Smart L	Registrati	on ÷ egistration in	the field		*			
Serial Port Local Management Users User Sessions Logs Mgmt Via Wireless Software Activation Licenses License Usage License Usage License Type	Token-i	d	MTQ3MzBhZl %0AODY5Nj	DEtNmJjOC00 J8ZFRaRzYv	DZWM3LWFiC CTRxaUk5K0 %0ANStz	DDktYTVkNmM42 tKcVRZanVVeHE ND0%3D%0A	2TU3ZWQ3LTE 1K2F3SnU1RI	EONDQ4 k0L114W	Njgw TTY
<ul> <li>Smart-License</li> <li>Device registration</li> <li>Status</li> <li>Call-home Configuration Status</li> <li>Tech Support</li> </ul>									

**Step 4** Verify the status of Registration and Authorization under Management > Smart-License > Status.



In the CSSM portal the device will show up under the **Product Instances** tab on the corresponding virtual account that the device was registered with.

Step 5 Once APs join the WLC, entitlements are requested once in 24 hours and the status of entitlements can be viewed under Management > Smart-license > Status.

ululu cisco	MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT	COMMANDS
Management	Status	
Summary SNMP HTTP-HTTPS	Smart-Licensing Parameters In-use V	
Telnet-SSH	Status: AUTHORIZED on Sep 03 10:28:59 2015 UTC	
Serial Port Local Management Users	Description: This entitlement tag was created via Alpha Extension application Count: 2 Version: Test-version1 Status: AUTHORIZED	
User Sessions		
Logs		
Mgmt Via Wireless		
<ul> <li>Software Activation</li> <li>Licenses</li> <li>License Usage</li> <li>License Type</li> </ul>		
<ul> <li>Smart-License</li> <li>Device registration</li> <li>Status</li> <li>Call-home</li> <li>Configuration</li> <li>Status</li> </ul>		
Tech Support	~	

cisco	MONITOR WLANS	<u>C</u> ONTROLLER N	VIRELESS	SECURITY	MANAGEMENT	COMMANDS	1
Management	Status						
Summary SNMP	Smart-Licensing Pa	arameters Summary	~				
HTTP-HTTPS Telnet-SSH Serial Port Local Management Users User Sessions Logs Mgmt Via Wireless Software Activation Licenses License Usage	Smart Licensing is ER Registration: Status: REGISTERE Smart Account: We Viritual Account: De Export-Controlled F Last Renewal Attem Next Renewal Attem License Authorization Status: AUTHORIZE Last Communication Next Communication Next Communication License Usage: License	NABLED D CNG fault unctionality: Allowed upt: None npt: Mar 01 07:26:55 2 :: D n Attempt: SUCCEEDED n Attempt: Oct 03 10:2 Entitlement tag	2016 UTC ) 29:59 2015 L Count Sta	JTC tus			
Smart-License Device registration Status Configuration Status Tech Support	WLC-AP-Join-Tag	(WLC-AP-Join-Tag)		2 AUTHORIZED			

## Smart Software Satellite and Transport Gateway Mode (Optional)

### **Direct Cloud Access through HTTPs proxy or Transport Gateway**

In this deployment mode Cisco Products send usage information over the Internet via a Proxy Server - Smart Call Home Transport Gateway (Free VM Download) or off-the-shelf Proxy (such as Apache). To download, install and setup the Transport Gateway, please refer to http://www.cisco.com/c/dam/en/us/td/docs/switches/lan/smart call home/user guides/SCH Ch4.pdf

On the WLC setup the proxy/Transport Gateway as follows :

- 1. On the Wireless LAN Controller configure HTTP-proxy IP address and Port under Management > Call-home > Configuration as shown:
- 2. Make sure the default TAC Profile is Enabled.
- 3. Click Apply
- 4. Call-home profile configuration can be verified under Management > Smart-license > Call-home > Status

Summary   Summary   SNNP   SNNP   HTTP-HTTPS   Telnet-SSH   Sorial Port   Local Management Users   Vser Sessions   Soloware Activation   Users Sessions   Software Activation   Ductor regions   Configuration   Status   Tech Support     Porfile   Name   Status   Status  <	սիսիս cisco թ	ONITOR <u>W</u> LANS	CONTROLLER	WIRELESS S		r commands	HELP	FEEDBACK
	Management Summary > SNMP HTTP-HTTPS Telnet-SSH Serial Port Local Management Users User Sessions > Logs Mgmt Via Wireless > Software Activation License Type Smart-License Oxfour registration Status > Tech Support	Call Home Co Events Reporting Data Reporting Host HTTP-Proxy TAC Profile Nam TAC Profile Status Name Status Module Reporting Form Url	-privacy-level name ne tus 's email address	Enabled ciscotac-1 Enabled sch-smar Short-te Add	econtri MANAGEMEN  a a a a a a a a a a a a a a a a a a	Port 0		FEEDBACK

# Mediated Access through on-premise Smart Software Satellite (connected or dis-connected mode)

Cisco Smart Software Manager satellite is a component of Cisco Smart Licensing and works in conjunction with Cisco Smart Software Manager (SSM). It helps customers intelligently manage product licenses, providing near real-time visibility and reporting of Cisco licenses they purchase and consume.

For security sensitive customers who do not want to manage their install base using a direct Internet connection, the Smart Software Manager satellite is installed on the customer premises, and provides a subset of Cisco SSM functionality. Once you download and deploy the satellite application, you can perform the following functions locally and securely without sending data to Cisco SSM using the Internet:

- Activate or register a license
- Get visibility to your company's licenses
- Transfer licenses between company entities

Minimum System Requirements (Customer Provided):

- 50-200 GB hard disk
- 8 GB Memory
- 4 vCPUs

The free installation package is available in a number of formats:

• OVA, installable on ESXi 5.0+ server

- ISO bare metal
- Hyper-V for Microsoft Server 2012 virtualized host KVM for Ubuntu and CentOS

To download, install and setup the Smart Software Satellite, please refer to http://www.cisco.com/c/en/us/buy/smart-accounts/ software-manager-satellite.html

On the WLC setup the satellite as follows:

1. On the Wireless LAN Controller configure a new call-home profile by specifying the name, status, module, reporting format and URL of the satellite that has been setup. Click Add



- 2. Make sure the default TAC Profile is **Disabled**.
- 3. Click Apply
- 4. Call-home profile configuration can be verified under Management > Smart-license > Call-home > Status

uluulu cisco ≝o	DNITOR <u>W</u> LANS <u>C</u> ONTROLLER	WIRELESS SECURITY MANAGEMENT	COMMANDS	HELP FEEDBACK
Management	Call Home Configuration			
Summary	Events	Enabled \$		
► SNMP				
HTTP-HTTPS	Reporting Data-privacy-level	normal 🛊		
Telnet-SSH	Penorting Hostname			
Serial Port	Reporting Hostname			
Local Management Users		Ip-address	Port	
User Sessions	HTTP-Proxy		0	
Logs     Mant Min Minelese				
Mgmt via wireless	TAC Profile Name	ciscotac-1		
License Type	TAC Drofile Status	Displied A		
* Smart-License	TAC Profile Status			
Status Call-home	Contact person's email address	sch-smart-licensing@cisco.com		
Status	Profile			
Tech Support	News	A 4 100 4	e 📕	
	Name	Satemite-1		
	Status	Enabled \$	_	
	Module	sm-license-data		
	Reporting Format	(xml \$		
	Url			
	Profile List	Add		
	Profile Name	Module Reporting Format	Url	

## **Smart Licensing HA Support**

Smart Licensing is fully supported with the N+1 stateless as well as SSO mode of High Availability.

In the case of SSO, the active controller performs a group registration using the token ID for itself and the Hot Standby Controller. As a result, when a switch over occurs, the Smart Licensing backend is ready for the standby WLC to continue its duties where the active WLC had stopped, satisfying the HA requirements.

A pair of HA controllers can be identified on the CSSM portal by the 'group' icon next to the WLC as shown:



In the case of box RMA, the customer is required to manually remove the WLC from the CSSM web page so that associated entitlements are released back to the pool of licenses on the Customer Smart Account.

### **CLI Reference**

config licensing smart-license	Configures Smart Licensing on WLC
license smart register <token-id></token-id>	Register WLC with Smart Licensing
license smart deregister	De-registers the device for smart license
config licensing smart-license dns-server <ip-address></ip-address>	Configure DNS server IP address for DNS resolution of URLs in call-home profile

show license	all Displays Details Of A Given License.
	debug-stats Displays Platform Debug Stats of Smart License.
	statistics Displays Smart Licensing Statistics
	status Displays License Status.
	summary Displays Brief Summary Of All License(s).
	tech-support Displays tech-support details of Licensing.
	udi Displays UDI Values For Licenses.
	usage Displays License That Are In-Use.
config call-home	profile Creates a call-home profile
	reporting Configures the privacy level for data reporting
	http-proxy Configures the http proxy for reporting
	events Configures call-home events
	contact-email-addr Configures call-home contact email address
	tac-profile Configures call-home tac profile
show call-home summary	Displays configuration on call-home module
show call-home config-local	Displays call-home configuration on WLC
debug license	core Configures Debugging of Licensing Core
	errors Configures Debugging of Licensing errors
	events Configures Debugging of Licensing events
	info Configures Debugging of Licensing info

# Reference

### **Cisco Smart Licensing**

http://www.cisco.com/c/en/us/products/abt\_sw.html

### **Cisco Smart Software Manager Satellite**

http://www.cisco.com/go/smartsatellite

### **Cisco Smart Software Manager**

http://www.cisco.com/c/en/us/buy/smart-accounts.html

### **Cisco Smart Accounts**

http://www.cisco.com/c/en/us/buy/smart-accounts.html

### **Cisco Privacy and Security Compliance**

http://www.cisco.com/web/about/doing\_business/legal/privacy\_compliance/index.html

### **Cisco Transport Gateway**

User Guide:http://www.cisco.com/c/dam/en/us/td/docs/switches/lan/smart\_call\_home/user\_guides/SCH\_Ch4.pdf

Troubleshooting Guide:http://www.cisco.com/c/dam/en/us/td/docs/switches/lan/smart\_call\_ho%20me/user\_guides/SCH\_Ch5.pdf

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