



# Cisco License Call Home

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The Cisco License Call Home feature provides a robust set of commands that communicate with the Cisco licensing infrastructure, makes connections and data transfers, and provides interactive prompts to help you install and maintain software licenses. This module describes the tasks and commands used to activate software using the Cisco License Call Home feature, license keys, and Cisco EXEC commands. Activating software from a Cisco device has the benefit of being able to license software without the need for additional application software.

## Finding Feature Information in This Module

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the [“Feature Information for Cisco License Call Home”](#) section on page 13.

Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.

## Contents

- [Information About Cisco License Call Home, page 2](#)
- [How to Configure Cisco License Call Home, page 3](#)
- [Configuration Examples for Cisco License Call Home, page 8](#)
- [Additional References, page 11](#)
- [Feature Information for Cisco License Call Home, page 13](#)



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# Information About Cisco License Call Home

To configure the Cisco License Call Home feature, you should understand the following concept:

- [Cisco License Call Home Interface, page 2](#)

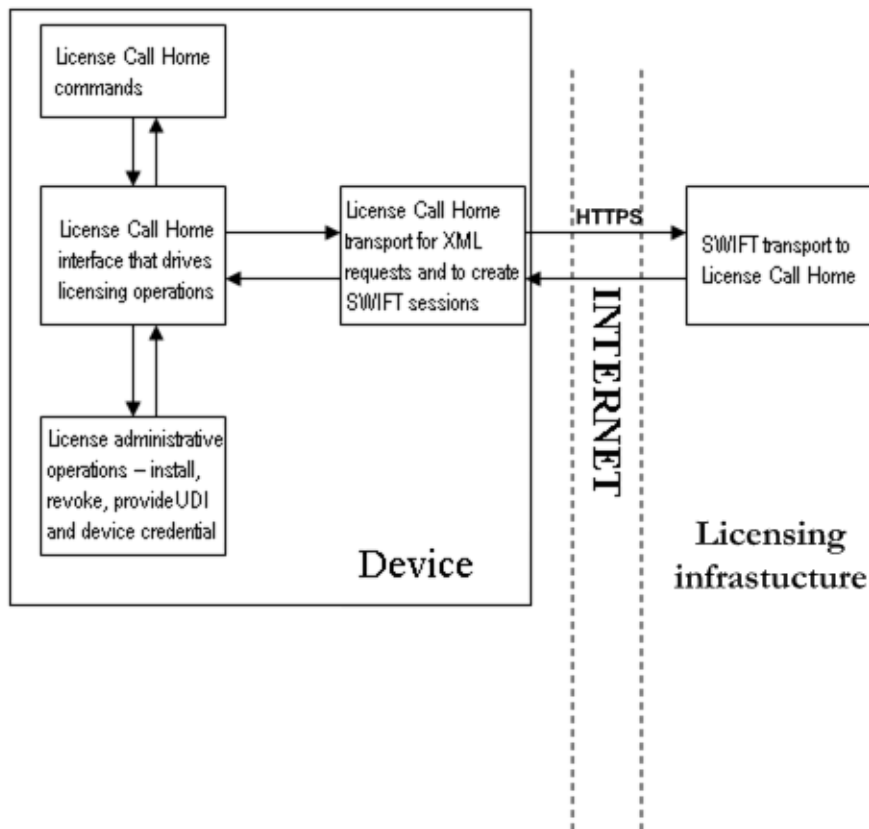
## Cisco License Call Home Interface

The Cisco License Call Home feature allows a Cisco device to communicate with the Cisco licensing infrastructure that provides license generation, fulfillment, and support using a secured Internet connection and retrieve licensing information. The Cisco License Call Home feature provides a robust set of commands that makes connections, transfers data, and provides interactive prompts to help you install and maintain software licenses. Once a PAK has been purchased, the following tasks are easily performed using Cisco License Call Home commands:

- Install or upgrade a license.
- Transfer a license.
- Request that a license be resent.

[Figure 7](#) shows how the Cisco License Call Home feature interfaces to the Cisco back-end licensing system. The architecture shown in [Figure 7](#) allows use of the License Call Home EXEC commands to communicate with the Cisco licensing infrastructure and perform administrative license operations.

**Figure 7** Cisco License Call Home Interface



The Cisco License Call Home feature works as a client-server model and each transaction is a separate connection to the Cisco licensing infrastructure. The Cisco License Call Home feature is interactive in that it displays prompts to obtain required information, and then connect to the Cisco licensing back end to interact with the Cisco licensing infrastructure. A request will always be initiated by a Cisco License Call Home EXEC command, and the response will always be provided by the Cisco licensing infrastructure. Transport of information is managed by processes designed into the Cisco License Call Home feature architecture that provide the URL required to connect to the Cisco licensing infrastructure over the Internet and create a session.

## How to Configure Cisco License Call Home

This section contains the following procedures:

- Installing and Upgrading Licenses Using Cisco License Call Home, page *x*
- Rehosting a License Using Cisco License Call Home, page *x*
- Requesting a License Resend Using Cisco License Call Home, page *x*

## Installing and Upgrading Licenses Using Cisco License Call Home

Perform this task to install a license or upgrade software using the Cisco License Call Home feature.

The Cisco License Call Home feature allows you to use EXEC commands that are part of the Cisco License Call Home feature to connect to the Cisco licensing infrastructure and perform license installation and administrative tasks. The Cisco License Call Home feature allows a Cisco router to communicate with the Cisco licensing infrastructure and retrieve licensing information.

### Restrictions

This task requires the following:

- The router or switch must have an Internet connection and use HTTPS to connect to the Cisco licensing infrastructure. See the [HTTP 1.1 Web Server and Client](#) chapter in the *Cisco IOS Network Management Configuration Guide*, Release 12.4T, for the steps to set up a secure HTTP connection.
- Only certain platforms support the Cisco License Call Home feature and those devices must be running a Cisco IOS crypto K9 image. See the [“Feature Information for Cisco License Call Home” section on page 13](#) for information about platform support.
- You must obtain the license certificate from the Cisco licensing infrastructure before starting.
- You also need a CCO user login account.

### SUMMARY STEPS

1. Obtain the PAK.
2. **enable**
3. **show license call-home pak** *pak-id*

4. **license call-home install pak** *pak-id*
5. **show license feature**

## DETAILED STEPS

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**Step 1** Obtain the PAK.

PAKs are purchasable items, ordered in the same manner as other Cisco equipment, that are used to obtain license files for feature sets on specific classes of Cisco devices.

**Step 2** **enable**

Use this command to enable privileged EXEC mode:

```
Router> enable
```

Enter your password if prompted.

**Step 3** **show license call-home pak** *pak-id*

Use this command to display the SKU list and features available for the PAK provided. The **show license call-home EXEC** command initiates the following processes:

- Connects to the Cisco licensing infrastructure with the PAK submitted.
- Gathers the SKU and feature name associated with the PAK submitted. Warning messages may also be gathered.
- The SKU information and any warning messages are displayed as formatted output on the device command line.

Following is an example of the type of information displayed:

```
Router# show license call-home pak 3XPXR9E7D30
```

```
CCO User name : User1
CCO password  : *****
```

```
Pak Number      : 3XPXR9E7D30
Pak Fulfillment type: SINGLE
```

```

1. SKU Name      : Gatekeeper
   SKU Type      : Product
   Description    : Gatekeeper
   Ordered Qty   : 1
   Available Qty  : 1
   Feature List   :
     Feature name: gatekeeper Count: Uncounted
   Platform Supported : 5400
                       5350
                       2800
                       3800
```

**Step 4** **license call-home install pak** *pak-id*

Use this command to install a license using the Cisco License Call Home feature. Following is a summary of the actions the **license call-home install EXEC** command initiates when it is issued:

- The command displays information about the SKU, which maps to one or more Cisco software features.
- The command activates software that prompts for required fields such as an e-mail address, username and password for CCO login, and SKU quantities.

- The user-entered data is validated and processed and then the license is installed on the device. If data is not validated, warning messages are displayed.

The command displays information and prompts that you must respond to, to complete the license installation, as shown in the following example:

```
Router# license call-home install pak 3XPXR9E7D30

CCO User name: User1
CCO password : *****
Pak Number      : 3XPXR9E7D30
Pak Fulfillment type: SINGLE

1. SKU Name           : Gatekeeper
   SKU Type           : Product
   Description        : Gatekeeper
   Ordered Qty        : 1
   Available Qty      : 1
   Feature List       :
     Feature name:      gatekeeper Count: Uncounted
   Platform Supported : N/A
                       5400
                       5350
                       2800
                       3800
```

Do you want to install the above listed SKU(s)? [yes/no]: **yes**

Please enter the user's detail:

```
First Name : First-name
Last Name  : Last-name
Title     : Software Engineer
Company Name : Cisco Systems
Address1  : 510 McCarthy Blvd.
Address2  [Optional]:
City     : Milpitas
State    : CA
Province [Optional]:
Zipcode  : 95134
Country  : USA
Phone    : 408 526-4000
Fax      [Optional]:
Email    : User1@cisco.com
```

Installing...Feature:gatekeeper...Successful

## Step 5 show license

Use this command to display the list of licensed features.

Following is an example of the type of information displayed:

The following example shows the type of information displayed:

```
Router# show license feature

Feature name : gsmamrnb-codec-pack
Enforcement  : yes
Evaluation   : yes
Clear Allowed :no
Enabled: no
```

## Rehosting a License Using Cisco License Call Home

Perform this task to rehost (revoke and transfer) a license using the Cisco License Call Home feature. The rehost operation is performed using a source and target Unique Device Identifier (UDI).

### SUMMARY STEPS

1. **enable**
2. **license call-home revoke udi** *target-udi*
3. **show license detail**
4. **license install** *stored-location-url* (optional step)

### DETAILED STEPS

---

#### Step 1 **enable**

Use this command to enable privileged EXEC mode:

```
Router> enable
```

Enter your password if prompted.

#### Step 2 **license call-home revoke udi** *target-udi*

Use this command to revoke and transfer a license using source and target UDIs. The license call-home revoke command has three main functions that it performs:

1. Obtains the rehostable SKU from the Cisco licensing infrastructure for this device.
2. Sends the user-selected SKU to the Cisco licensing infrastructure and obtains the permission ticket.
3. Applies the permission ticket to the device and obtains the rehost ticket.

If you have not specified a target UDI, the rehost ticket is stored at the specified URL. If you have specified a target UDI, this command sends the rehost ticket to the Cisco licensing infrastructure with the target UDI, converts it to a license file, and stores it in the URL specified.

Once you enter this command, you are prompted to select from multiple SKUs for rehosting. The command also displays prompts for mandatory information such as the user's e-mail address, login password, and so on, as shown in the following example:

```
Router# license call-home revoke udi AS54XM-AC-RPS:JAE0948QT6R flash:licensetargetudi.xml
```

```
CCO User name: User1
```

```
CCO password : *****
```

```
Retrieving the sku from swift .....
```

```

1. SKU Name           : Gatekeeper
   SKU Type            : Product
   Description         :
   Ordered Qty        : 1
   Available Qty       : 1
   Feature List       :
     Feature name:      gatekeeper Count: Uncounted
   Platform Supported : N/A
                        5400
                        5350
                        2800
                        3800

```

```
3. SKU Name           : Gatekeeper
```

```

SKU Type           : Product
Description        :
Ordered Qty       : 1
Available Qty     : 1
Feature List      :
    Feature name:   gatekeeper Count: Uncounted
Platform Supported : N/A
                   5400
                   5350
                   2800
                   3800

```

```

4. SKU Name       : GSMAMRNB
   SKU Type       : Product
   Description    : Transfer this feature set
   Ordered Qty   : 1
   Available Qty  : 1
   Feature List   :
       Feature name: gsmamrnb-codec-pac Count: Uncounted
Platform Supported : 5400
                   5350

```

5. All of the above

```

Please select the sku number you want to revoke : 4
Retrieving the permission ticket from swift .....

```

```

Installing permission ticket and retrieving rehost ticket.....Done

```

### Step 3 show license detail

Use this command to verify that the license has been transferred. The license type should be evaluation, as the following example shows:

```

Router# show license detail

Index: 1 Feature: gsmamrnb-codec-pack Version: 1.0
License Type: Evaluation
License State: Active, Not in Use, EULA accepted
    Evaluation total period: 8 weeks 4 days
    Evaluation period left: 8 weeks 4 days
Lock type: Non Node locked
Vendor info
License Addition: Additive
License Generation version 135266304
License Priority: Low
Store Index: 0
Store Name: Evaluation License Storage

```

### Step 4 license install *stored-location-url*

(Optional) Use this command to install the revoked license.

## Requesting a License Resend Using Cisco License Call Home

Perform this task to retrieve all licenses this device (device from which this command is run) owns using the **license call-home resend** command.

## SUMMARY STEPS

1. **enable**
2. **license call-home resend** *dest-lic-location*
3. **license install** *stored-location-url* (optional step)

## DETAILED STEPS

### Step 1 **enable**

Use this command to enable privileged EXEC mode:

```
Router> enable
```

Enter your password if prompted.

### Step 2 **license call-home resend** *dest-lic-location*

Use this command to obtain all licenses this device owns and store them in the specified location. Following is a summary of the actions initiated by this command:

- The device credential is retrieved from this device and sent to the Cisco licensing infrastructure.
- This command requests the Cisco licensing infrastructure send all licenses this device owns. The device credential is sent in order to authenticate the ownership of the device.
- The Cisco licensing infrastructure will provide all licenses owned by this device.
- The retrieved licenses are stored in the specified location.

```
Router# license call-home resend flash:licensereresend.lic
```

```
CCO User name: User1
CCO password : *****
Email Address: User1@cisco.com
Getting Licenses from SWIFT .....
Saving it to flash:licensereresend.lic.....Done
```

### Step 3 **license install** *stored-location-url*

(Optional) Use this command to install the resent license.

# Configuration Examples for Cisco License Call Home

This section provides the following configuration examples:

- [Installing and Upgrading Licenses Using Cisco License Call Home:Example, page 8](#)
- [Rehosting a License Using Cisco License Call Home:Example, page 9](#)
- [Requesting a License Resend Using Cisco License Call Home:Example, page 10](#)

## Installing and Upgrading Licenses Using Cisco License Call Home:Example

The **show license call-home pak** command is used to display the SKU list and features available for the PAK provided. Following is an example of the type of information displayed:

```
Router# show license call-home pak 3XPXR9E7D30
```

```

CCO User name : User1
CCO password  : *****

Pak Number           : 3XPXR9E7D30
Pak Fulfillment type: SINGLE

  1. SKU Name           : Gatekeeper
     SKU Type           : Product
     Description        : Gatekeeper
     Ordered Qty        : 1
     Available Qty      : 1
     Feature List       :
         Feature name:      gatekeeper Count: Uncounted
     Platform Supported : 5400
                           5350
                           2800
                           3800

```

## Rehosting a License Using Cisco License Call Home:Example

The **license call-home revoke udi** command is used to revoke and transfer a license using source and target UDIs. The command also displays prompts for mandatory information such as the user's e-mail address, login password, and so on, as shown in the following example:

```
Router# license call-home revoke udi AS54XM-AC-RPS:JAE0948QT6R flash:licensetargetudi.xml
```

```

CCO User name: User1
CCO password  : *****
Retrieving the sku from swift .....

  1. SKU Name           : Gatekeeper
     SKU Type           : Product
     Description        :
     Ordered Qty        : 1
     Available Qty      : 1
     Feature List       :
         Feature name:      gatekeeper Count: Uncounted
     Platform Supported : N/A
                           5400
                           5350
                           2800
                           3800

  3. SKU Name           : Gatekeeper
     SKU Type           : Product
     Description        :
     Ordered Qty        : 1
     Available Qty      : 1
     Feature List       :
         Feature name:      gatekeeper Count: Uncounted
     Platform Supported : N/A
                           5400
                           5350
                           2800
                           3800

  4. SKU Name           : GSMAMRNB
     SKU Type           : Product
     Description        : Transfer this feature set
     Ordered Qty        : 1
     Available Qty      : 1

```

```
Feature List      :  
  Feature name: gsmamrnb-codec-pac Count: Uncounted  
Platform Supported : 5400  
                   5350
```

5. All of the above

```
Please select the sku number you want to revoke : 4  
Retrieving the permission ticket from swift .....
```

```
Installing permission ticket and retrieving rehost ticket.....Done
```

## Requesting a License Resend Using Cisco License Call Home:Example

The **license call-home resend** command is used to obtain all licenses this device owns and store them in the specified location. Following is an example of the type of information displayed:

```
Router# license call-home resend flash:licensereresend.lic
```

```
CCO User name: User1  
CCO password : *****  
Email Address: User1@cisco.com  
Getting Licenses from SWIFT .....
```

```
Saving it to flash:licensereresend.lic....Done
```

# Additional References

The following sections provide references related to the Cisco License Call Home feature.

## Related Documents

Related Topic	Document Title
Cisco License Manager application	<i>User Guide for Cisco License Manager</i>
Cisco Software License Agent	<i>Cisco IOS Software License Agent</i> feature module
GateKeeper licensing	<i>IP-to-IPGwy Feature Guide</i>
Integrated Services Routers licensing	<i>Software Activation on Cisco Integrated Services Routers</i> feature module

## Standards

Standard	Title
None	—

## MIBs

MIB	MIBs Link
None	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

## RFCs

RFC	Title
None	—

## Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	<p><a href="http://www.cisco.com/techsupport">http://www.cisco.com/techsupport</a></p>

# Feature Information for Cisco License Call Home

Table 10 lists the release history for this feature.

Not all commands may be available in your Cisco IOS software release. For release information about a specific command, see the command reference documentation.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS and Catalyst OS software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.



## Note

Table 10 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

**Table 10** Feature Information for Cisco License Call Home

Feature Name	Releases	Feature Information
Cisco License Call Home	12.4(15)XZ 12.4(20)T	<p>The Cisco License Call Home feature provides a robust set of commands that communicate with the Cisco licensing infrastructure, makes connections and data transfers, and provides interactive prompts to help you install and maintain software licenses.</p> <p>In 12.4(15)XZ, this feature was introduced on the Cisco AS5300, AS5350, AS5350XM, AS5400, AS5400HPX, AS5400XM, 2800, 2851, 2821, 2811, 3800, 3825, and 3845 platforms.</p> <p>The following commands were introduced or modified by this feature: <b>license call-home install</b>, <b>license call-home resend</b>, <b>license call-home revoke</b>, <b>license call-home url</b>, <b>show license call-home</b>.</p>

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