



## CHAPTER 4

# Getting Started with Cisco License Manager

---

This section provides information about the initial setup of Cisco License Manager. It includes the recommended steps for quickly adding users and devices, and for obtaining and deploying licenses. It includes these topics:

- [Before You Begin, page 4-1](#)
- [Getting Started Flowcharts, page 4-2](#)
- [Getting Started Checklist, page 4-4](#)
- [How to Configure Your Cisco Devices, page 4-4](#)
- [Logging In to Cisco License Manager, page 4-7](#)



### Note

---

If you are using Cisco License Manager for the first time, see the [“Getting Started Checklist”](#) section on [page 4-4](#) for detailed task descriptions.

---

## Before You Begin

Before you use Cisco License Manager to acquire, deploy, and centrally track and manage your Cisco licenses, you should do the following:

1. Verify that you have completed the tasks in [Chapter 2, “Preparing for Installation.”](#)
2. Install Cisco License Manager as described in [Chapter 3, “Installing Cisco License Manager.”](#)
3. Verify that your e-mail address and Cisco.com account username and password are correct in your user profile. This information is used to receive e-mails from Cisco.com. For details, see the [“Editing User Profile Information”](#) section on [page 6-3](#).
4. Configure your Cisco devices to allow Cisco License Manager to manage Cisco licenses. For details, see the [“Configuring Your Cisco Device to Authenticate Cisco License Manager”](#) section on [page 4-4](#).

For information about enabling the Cisco License Agent on your device, see your Cisco IOS or device documentation. If the license agent is not enabled on the devices, Cisco License Manager can still manage licenses by using Telnet or Secure Shell (SSH).

5. If you are running Cisco License Manager on the Solaris platform, the embedded HTML browser is not used. A Mozilla browser is used to display the online help and reports. Verify that the Mozilla browser is present on your path.

**Related Topics**

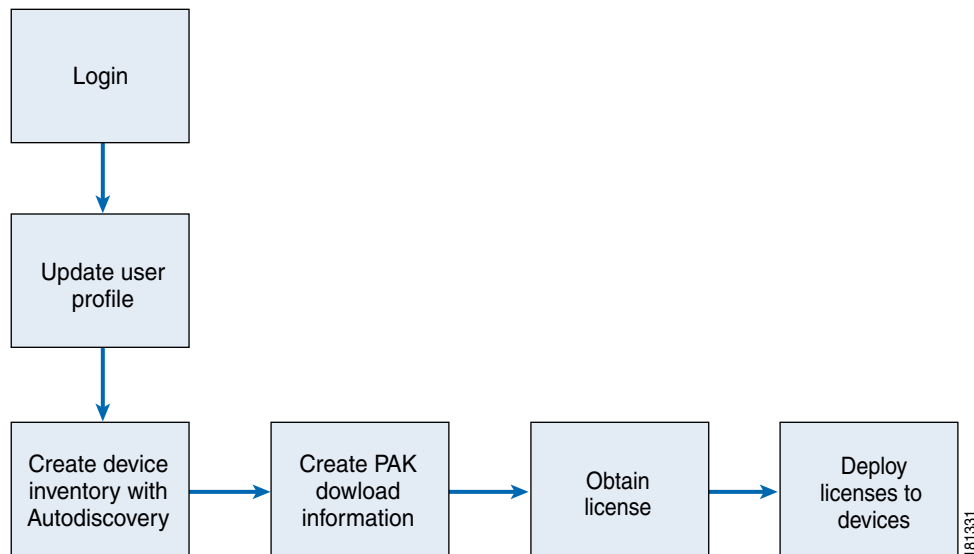
- [How to Configure Your Cisco Devices](#), page 4-4
- [Adding Cisco Devices to Your Inventory](#), page 7-1
- [Organizing Devices by Using Device Groups](#), page 7-11

## Getting Started Flowcharts

Many features make Cisco License Manager an easy tool for planning and managing your device licenses.

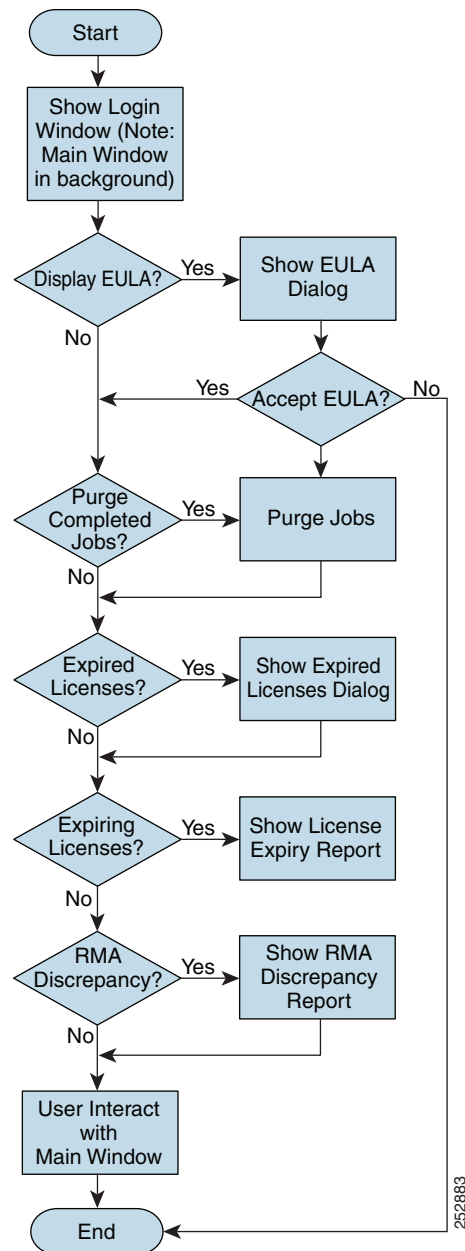
To find out how the Cisco License Manager GUI starts up, see [Figure 4-1](#).

**Figure 4-1** Quick Start Flowchart



To find out how to get started, see [Figure 4-2](#). This flowchart references all the features of Cisco License Manager. Note that not all tasks that appear in the flowchart are required; for example, creating device groups is optional.

Figure 4-2 Getting Started Flowchart

**Related Topics**

- [How to Manage Users, page 6-2](#)
- [How to Manage Devices, page 7-1](#)
- [How to Manage PAKs, page 7-20](#)
- [How to Manage Licenses, page 8-1](#)

## Getting Started Checklist

Use the following sequence of tasks to learn how to use Cisco License Manager to add a device quickly to your inventory and how to deploy a license to it.

If you want to group your devices and PAKs, you might want to set up your device groups and product authorization key (PAK) folders first.

Check	Task
	<a href="#">Before You Begin, page 4-1</a>
	<a href="#">Logging In to Cisco License Manager, page 4-7</a>
	<a href="#">Adding Cisco Devices to Your Inventory, page 7-1</a>
	<a href="#">Updating Device Information, page 7-18</a>
	<a href="#">Adding a PAK, page 7-20</a>
	<a href="#">Viewing Download Information About PAKs, page 7-26</a>
	<a href="#">Getting a License by Using the License Assistant, page 8-1</a>
	<a href="#">Viewing License Properties, page 8-13</a>
	<a href="#">Deploying a License, page 8-5</a>

### Related Topics

- [Organizing Devices by Using Device Groups, page 7-11](#)
- [Managing PAKs by Using Folders, page 7-22](#)

## How to Configure Your Cisco Devices

- [Configuring Your Cisco Device to Authenticate Cisco License Manager, page 4-4](#)
- [Configuring Your License Agent, page 4-6](#)
- [Authentication Methods, page 4-6](#)

## Configuring Your Cisco Device to Authenticate Cisco License Manager

Cisco License Manager communicates with devices by using HTTP, HTTPS, Telnet, or Secure Shell (SSH version 2 only).

- If you are using Telnet or SSH as the connection method, use the **logging host** *server-IP-address* global configuration command to configure the Cisco devices for direct notification to Cisco License Manager.

**Note**

---

When using Telnet and SSH as the connection methods, Cisco License Manager can discover devices that are configured to be authenticated through a TACACS+ server. If you configured your devices and the TACACS+ server with customized login prompts, you must modify the Cisco License Manager `AAAPrompts.properties` file with this information so that Cisco License Manager can correctly interpret information from these devices. For details, see the [“Creating the AAAPrompts.properties File for Customized TACACS+ and Device Login Prompts”](#) section on page 9-5.

---

- If you are using HTTP or HTTPS as your connection method, you must enable your device to recognize Cisco License Manager and enable Cisco License Manager to authenticate your device. These optional steps are necessary only if you want to use authentication on your device.

**Procedure**

---

**Step 1** Configure the device to always use HTTP or HTTPS to authenticate incoming requests.

**For HTTP:**

- Enable the HTTP server in the Cisco IOS software by entering the **ip http server** global configuration command.

**For HTTPS:**

- Enable the HTTPS server in the Cisco IOS software by entering the **ip http secure-server** global configuration command.
- Set the secure HTTPS server port number for listening by entering the **ip http secure-port 443** global configuration command.

**Note**

---

You must use the default secure server port (443) so that the License Agent on the device can communicate with the Cisco License Manager server.

---

**Step 2** Configure the License Agent by using the **license agent listener http plaintext /lic-agent authenticate** global configuration command.

For details, see the [“Configuring Your License Agent”](#) section on page 4-6.

**Step 3** Specify a particular authentication method for the HTTP server to use by using the **ip http authentication** global configuration command.

For detailed information about these commands, see your Cisco IOS software documentation.

---

**Related Topics**

- [Before You Begin, page 4-1](#)
- [Authentication Methods, page 4-6](#)
- [How to Manage Devices, page 7-1](#)

## Configuring Your License Agent

To receive license-related notifications and alerts from your device, enter this global configuration command at the prompt:

```
license agent notify URL-path username password
```



### Note

For the *URL-path* argument, copy the URL from NOTIFY\_URL in the clm.properties file, and replace the hostname portion of the URL with the Cisco License Manager server IP address.

### Related Topics

- [Configuring Your Cisco Device to Authenticate Cisco License Manager, page 4-4](#)
- [Authentication Methods, page 4-6](#)
- [How to Manage Devices, page 7-1](#)

## Authentication Methods

By specifying the **ip http authentication** global command, you can enable a particular method to be used for login authentication when a client connects to the HTTP servers:

- Enable password—The “enable” password method is the default HTTP server authentication method. If the enable password is used as the HTTP server login authentication method, the client connects to the HTTP server with a default privilege level of 15.

When the enable password is used to authenticate an HTTP request, you can leave the username blank and enter the enable password.

- Authentication, authorization, and accounting (AAA) network security services—If the device is set up to use AAA network security services to authenticate an HTTP request, enter the AAA username and password.
- Local username and password—If the device is set up to use the local username and password to authenticate an HTTP request, enter the local username and password.



### Note

If the local username and password are set up on the device, your user privilege level must be at least 15; for example, “user name xxx privilege 15 password yyy.”

The corresponding username and password pairs that you configure on a router are used during device creation or discovery in Cisco License Manager, and the information is placed in the inventory. You can also add usernames and passwords in the Add Device Login window when you discover devices by using Autodiscovery, the Discover Device Assistant, or when you manually add a device to the inventory. You can globally change device usernames and passwords on a per-device group basis.

### Related Topics

- [Configuring Your Cisco Device to Authenticate Cisco License Manager, page 4-4](#)
- [Configuring Your License Agent, page 4-6](#)
- [How to Manage Devices, page 7-1](#)

# Logging In to Cisco License Manager

You can log in to Cisco License Manager to acquire, deploy, centrally track, and manage your Cisco licenses.

## Before You Begin

- Install the Cisco License Manager client application.
- Obtain your username and password from the administrator.

After the installation setup, only the administrator can log in to Cisco License Manager by using the administrator username and password specified during setup. Once logged in to Cisco License Manager, the administrator can create other user accounts. To set up access for other users, see the “[How to Manage Users](#)” section on page 6-2.



### Tip

To set up the profile for the administrator or set up access for other users, see the “[Editing User Profile Information](#)” section on page 6-3.

## Restrictions

- You might not be able to log in if the server does not support the client version that you are using. For details about the server and client workstation requirements, see the release notes: [http://www.cisco.com/en/US/products/ps7138/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps7138/prod_release_notes_list.html).
- The GUI supports up to 50 simultaneous users.

## Procedure

- Step 1** Log in to the Cisco License Manager GUI:
- For the Windows platform, choose **Start > All Programs > Cisco License Manager > CLM Server > Configure Server** to change the port after installation.
  - For the Solaris platform, launch the `$CLM_HOME/bin/clm_ui.sh` command.
- The Login window appears.
- Step 2** Enter information in the following fields, and click **OK**.

Field	Description
Username	Login name for the user.
Password	Password for the user.
Server Host	IP address or fully qualified name of the server. Can be left blank if the client is working from the server host. Default is localhost.
Server Port	Port where Cisco License Manager Server can be accessed. Port default is set to 1099. Port is set during setup.

Once your username and password are accepted, the Cisco License Manager end-user license agreement (EULA) for the Cisco devices appears.



---

**Note** If you are the administrator and need to change the port after installation, run the `$CLM_INSTALL_DIR\bin\runSetup.bat` program. If you are an operator, contact your administrator for details.

---

- Step 3** Select your acceptance or nonacceptance of the devices license agreement.
- If you accept the agreement, you are prompted with the EULA for Device window each time you log in to Cisco License Manager.
- Once you accept the license agreement, the Cisco License Manager main window appears.



---

**Note** Before you can receive license information from Cisco.com, you must add the required contact information to the administrator user profile. Choose **Tools > User Manager**, and see the [“How to Manage Users” section on page 6-2](#).

---

- If you do not accept the license agreement, the Cisco License Manager application terminates.
- Step 4** When you log in, a Purge Jobs dialog box might appear. If you want to purge all completed jobs from the View Job Status dialog box, click **Yes**. Once purged, these jobs cannot be retrieved.
- 

#### Related Topics

- [How Cisco License Manager Supports User Roles, page iii-ix](#)
- [Manage Users Explorer, page 5-14](#)
- [How to Manage Users, page 6-2](#)