



Release Notes for Cisco License Manager Release 2.0

November 30, 2007

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Introduction

Cisco License Manager is a software application that assists you in obtaining licenses from Cisco, deploying the licenses to the Cisco devices in your network, discovering the devices, and managing and viewing your inventory of licenses and devices. Cisco License Manager is used with Cisco devices that require Cisco licensing. New or upgraded Cisco devices should be registered, and a product authorization key (PAK) must be provided to obtain licenses from Cisco.

This application provides the following two external interfaces, which enable you to perform several licensing tasks from a central location:



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- Application programming interface (API)—A programmatic interface that enables client programs to invoke functions implemented on the back-end server, allowing you to integrate Cisco License Manager into your systems. You can also use the API to write custom programs to perform your licensing tasks using either Java or Perl.
- Graphical user interface (GUI)—A standalone Java application that provides an end-user interface used to invoke functions implemented on the back-end server.

**Note**

You can use the Cisco IOS command-line interface (CLI) to license your devices. Refer to your device documentation for more information.

Cisco License Manager includes the following features:

- Intuitive and easy to use GUI
- Maintenance of an up-to-date inventory of deployed licensed features on the network through notifications and optional polling
- Simplified license transfers from one device to another
- Agentless device communication using ssh or Telnet
- Improved detailed license reporting to help with audit compliance
- Full-functionality Java and Perl SDK
- Enhanced security with role-based access control and per-user access control lists for the managed network devices and PAKs
- Completely automated license management through a simple rule-based policy interface
- Troubleshooting capabilities and X.733 based alerts

These notes cover Cisco License Manager Release 2.0. This release includes new and enhanced features described in the next section.

System Requirements

Make sure that your system meets the Cisco License Manager server and client requirements described here:

- [Server Requirements, page 2](#)
- [Client Requirements, page 3](#)

**Note**

For network and port requirements, see the [User Guide for Cisco License Manager](#).

Server Requirements

The following table provides details of the recommended software and hardware requirements for the Cisco License Manager server. These recommended requirements support the maximum data capacity (30,000 Cisco devices in the network). Also use these requirements if you are installing the server and client on the same host.

Table 1 *Server Recommended Software and Hardware Requirements*

Requirement Type	Recommended Requirement
Processor	Intel Pentium 4 3.2 GHz or equivalent CPU-based machine Sun UltraSPARC IIIi or equivalent CPU-based machine
Software	Operating system <ul style="list-style-type: none"> Windows Server 2003 R2 Standard Edition Windows XP Professional Solaris 10 (SPARC system only)
RAM	2 GB
Disk	10 GB

Client Requirements

The following table provides details of the recommended software and hardware requirements for the Cisco License Manager client workstation.

Table 2 *Client Workstation Recommended Software and Hardware Requirements*

Requirement Type	Recommended Requirement
Processor	Intel Pentium 4 3.2 GHz or equivalent CPU-based machine Sun UltraSPARC IIIi or equivalent CPU-based machine
Software	Operating system <ul style="list-style-type: none"> Windows Server 2003 R2 Standard Edition Windows XP Professional Solaris 10 (SPARC system only)
RAM	1 GB
Disk	10 GB
Network connectivity	Server must be reachable from the client software.
Java requirements	Version 1.5

Devices Supported

[Table 3](#) lists supported Cisco devices and the corresponding Cisco IOS software release.

Table 3 **Supported Devices and Cisco IOS Software Release**

Device	Cisco IOS Software Release
Cisco Catalyst 3750-E Switch family	Cisco IOS Software Release 12.2(35)SE and later
Cisco Catalyst 3560-E Switch family	Cisco IOS Software Release 12.2(35)SE and later

Third-Party Software Included

Cisco License Manager includes Java Runtime Environment (JRE) 1.5 in both the Server package and the Client package.

Installing Cisco License Manager Release 2.0

This section describes how to download and install the Cisco License Manager Release 2.0 software.

- [Download the Cisco License Manager Software Packages, page 4](#)
- [Install the Cisco License Manager Using the Installation GUI, page 5](#)

This section also describes how to uninstall the software if necessary.

- [Uninstall Cisco License Manager, page 6](#)



Note

For installation considerations, required installation preparations, and upgrading from Cisco License Manager 1.0, refer to the [User Guide for Cisco License Manager Release 2.0](#). For how to install the Java SDK, see Chapter 1 in the [Java API Reference Guide for Cisco License Manager Release 2.0](#); for the Perl SDK, see Chapter 1 in the [Perl API Reference Guide for Cisco License Manager Release 2.0](#).

Download the Cisco License Manager Software Packages

To download the software packages for Cisco License Manager, complete the following steps:

- Step 1** From the appropriate server host or client workstation, access <http://www.cisco.com/go/clm> and click **Download Software**.



Note

This software is also available in the Software Download area on Cisco.com. To access this area on Cisco.com, you must be a registered Cisco.com user.



- Step 2** Click the zip file to download it to the appropriate host or workstation.
- Step 3** Verify the software and image information and click **Next**.
- Step 4** To accept the Software Download Rules and begin the software download, click **Accept**.
- Step 5** Download and save the Cisco License Manager zip file to your host or workstation. This zip file includes both the server and client package.

Cisco License Manager is free. There is no charge to download, install, or use it.

- Step 6** Locate the saved file on the host or workstation and unzip the file to your local drive or disk.

Install the Cisco License Manager Using the Installation GUI

To install Cisco License Manager on the host or workstation using the installation GUI, complete the following steps:

- Step 1** Navigate to the folder where you unzipped the Cisco License Manager file.
- Step 2** Double-click **clm_installer.bat** to start the installation program. A welcome message appears.
- Step 3** Click **Next**.
-  **Note** Throughout the installation, if you want to change something on a previous screen, click **Previous**. Click **Cancel** to stop the installation.
Caveat: In the current release, clicking Cancel causes . Let the installation complete, and then uninstall and reinstall. See [Open Caveats](#) for more information.
- Step 4** Review the license agreement and indicate your agreement by selecting the appropriate radio button. After you choose to accept the terms of the license agreement, click **Next**.
- Step 5** Select the options you want to install:
- a. To install both the server and client packages, click **Next**. All check boxes should be checked.
 - b. To install only the server package, uncheck Cisco License Manager Client and click **Next**. The Cisco License Manager Server check box should be the only one checked.
 - c. To install only the client package, uncheck Cisco License Manager Server and click **Next**. The Cisco License Manager Client check box should be the only one checked.
- Step 6** Select the installation directory:
- To choose the default installation directory, click **Next**.
 - To choose a different installation directory location, click **Choose** to navigate to the desired location. Select the appropriate directory and click **Next**.
-  **Note** If you made a mistake while choosing a different directory, click **Restore Default Folder** and the default installation directory is restored.
- Step 7** If you selected to install the client package only, proceed to [Step 12](#). If you are installing the server or the combined server and client configuration, continue with the next step.
- Step 8** If you want to change the server port, event listening port, and the HTTP file server port, enter port numbers within the range from 1024 to 65535. Enter nothing if you want to accept the default port settings.
- To use secured communication between the Cisco License Manager server and the client, check **SSL enable**.
- Click **Next**.

The server listens to the TCP/IP port to receive service requests from the client program and to receive events from the Cisco devices in the network.

- Step 9** If you have SSL-enabled Cisco devices and want Cisco License Manager to communicate with those devices, click **Yes**. Choose a certificate file for SSL authentication between Cisco License Manager and the Cisco devices by clicking **Choose**, navigating to the certificate file location, and clicking **Next**.

If you do not have SSL-enabled Cisco devices, click **No** and **Next**.

- Step 10** Enter the administrator password in the Password field. Reenter the password in the Confirm Password field. If these match, click **Next**.



Tip Remember to store your administrator password in a safe place. If you cannot remember your password, you will have to reinstall Cisco License Manager.

- Step 11** Enter your SMTP e-mail server using either the IP address or the hostname and domain name, and click **Next**. Example: my_mail_server.domain.com.

You may see a message stating that your e-mail server cannot be reached. If you want to continue, click **OK**. If you want to reenter the e-mail server, click **Previous** and reenter a server name.



Tip If your e-mail server cannot be reached, try one of the following troubleshooting actions:

- Verify the spelling of the e-mail server name.
- Try to ping the e-mail server using another program to see if it is reachable.
- Skip this step and update the e-mail server after the installation.

- Step 12** Review the preinstallation summary information and click **Install** to confirm the installation selections you have made. If you need to reenter install information, click **Previous**.

- Step 13** Select one of the options:

- Click **Yes, restart my system** to restart the system and complete the installation.
- Click **No, I will restart my system myself** if you want to restart later.

In order to complete the installation, you need to restart your system.

- Step 14** Click **Done** to complete the installation and exit the program.

Uninstall Cisco License Manager

To uninstall Cisco License Manager, complete the following steps:



Tip We recommend that you back up Cisco License Manager before uninstalling or upgrading.

**Note**

For a Windows platform, only a user with an Administrator role can uninstall the application. For a Solaris platform, only the root can uninstall the application.

Step 1

Close all Cisco License Manager command and GUI windows and stop the Cisco License Manager server.

**Caution**

If you do not close these windows, the Cisco License Manager package will not uninstall completely. Any files that are referenced by open windows are not removed during the uninstallation.

Step 2

From a Windows platform, select **Start > All Programs > Cisco License Manager > Uninstall**.

Step 3

From a Solaris platform, run **\$CLM_HOME/bin/runUninstallCiscoLicenseManager**.

Caveats

This section lists open caveats and caveats from the previous release that have been fixed in this release.

Open Caveats

The following caveats are open in this release. If needed, use the recommended workaround procedure.

Bug ID	Description
CSCsl40582	<p>Symptom: If you click Cancel during installation, the incomplete installation prevents Cisco License Manager from being uninstalled or reinstalled normally. Specifically, if you try to uninstall, you are told that Cisco License Manager is not installed, and if you try to reinstall, you are told that Cisco License Manager is already installed.</p> <p>Conditions: Clicking Cancel during installation.</p> <p>Workaround:</p> <p>To avoid the problem, do not click Cancel during installation. Let the installation complete, then uninstall normally and reinstall if desired.</p> <p>If clicking Cancel has caused an incomplete installation, follow the steps below to remedy the problem, then reinstall.</p> <p>On Windows</p> <ol style="list-style-type: none"> 1. Remove Cisco License Manager from the Registry: Open a command window and run the appropriate command, depending on the installation: <ul style="list-style-type: none"> – Server and GUI client installation: <pre>reg delete "HKLM\Software\Cisco Systems\CLM2.0"</pre> – Server installation only: <pre>reg delete "HKLM\Software\Cisco Systems\CLM2.0\Server"</pre> – GUI client installation only: <pre>reg delete "HKLM\Software\Cisco Systems\CLM2.0\Client"</pre> 2. Delete the Cisco License Manager folder. <p>On Solaris</p> <ol style="list-style-type: none"> 1. Remove Cisco License Manager from the Registry by running the appropriate command, depending on the installation: <ul style="list-style-type: none"> – Server and GUI client installation: <pre>pkgrm -n CSCOc1m20; pkgrm -n CSCOc1m20gui</pre> – Server installation only: <pre>pkgrm -n CSCOc1m20</pre> – GUI client installation only: <pre>pkgrm -n CSCOc1m20gui</pre> 2. Delete the Cisco License Manager folder.

Bug ID	Description
CSCsI53128	<p>Symptom: Cisco License Manager discovery through SSH may not discover valid license-enabled devices which have been set up with the SSH transport protocol.</p> <p>Conditions: Happens rarely, usually when there is latency in the network. Most likely to occur the first time discovery is run through SSH. Subsequent discovery of SSH devices works normally.</p> <p>Workaround: If discovery is unable to find license-enabled devices set up with the SSH transport protocol, stop and restart the Cisco License Manager server, then run discovery through SSH again.</p>
CSCsI55297	<p>Symptom: When you terminate an asynchronous job, if you do not dismiss the Terminate Job dialog with OK or Cancel before the asynchronous job completes, the GUI may terminate.</p> <p>Conditions:</p> <ol style="list-style-type: none"> 1. Start an async job such as Poll Licenses or Download PAK. 2. Invoke the Terminate Job dialog to terminate the job. The Terminate Job dialog comes up and you let it stay up long enough for the job you are trying to cancel to complete. The GUI then may then terminate. <p>Solution: To avoid this problem, when you invoke the Terminate Job dialog to terminate an async job, make sure to execute or dismiss the dialog box (click OK or Cancel) before the job has time to complete.</p>

Resolved Caveats

The following Release 1 caveats are resolved in this release.

Bug ID	Description
CSCsg79171 resolved	<p>Symptom Failure to uninstall Cisco License Manager 1.0 package successfully using \$CLM_HOME\Uninstaller\Uninstall Cisco License Manager.exe.</p> <p>Conditions</p> <ol style="list-style-type: none"> 1. When using Uninstall Cisco License Manager.exe, no product windows open. 2. The uninstallation executable is launched, but is unresponsive. <p>Workaround</p> <ol style="list-style-type: none"> 1. Run \$USER_INSTALL_DIR\bin\clm_stop to stop the Cisco License Manager Server and close all command windows. 2. Go to the installation folder and manually remove the folder. 3. Open a command window and run regedit to remove the Cisco License Manager Windows registries. 4. When the Registry Editor window appears, navigate to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems\CLM1.0 and remove the folder. 5. To remove all system environment variables, right-click the My Computer icon on your desktop, select Properties menu and click the Advanced tab. Click Environment Variables and do the following: <ul style="list-style-type: none"> – In the User variables table, click the PATH variable, then click Edit and remove the Cisco License Manager file paths. – In the System variables table, click CISCO_LM_HOME and CISCL_LM_CLIENT_HOME entries (if applicable), then click Delete. 6. Remove the uninstallation registry XML file (created by Cisco License Manager third-party installation software) at C:\Program files\Zero G Registry, by selecting .com.zerog.registry.xml and deleting it. 7. Restart the system.
CSCsf09294 closed	<p>Symptom When you launch the Cisco License Manager Server or Cisco License Manager Setup program, a window with the title "InstallAnywhere is preparing to install" appears.</p> <p>Conditions When you click the Cisco License Manager Server or Cisco License Manager Setup icon, a launch window displaying the title "InstallAnywhere is preparing to install" appears. This is misleading and seems to imply that Cisco License Manager is being reinstalled; instead, InstallAnywhere is actually preparing to launch the application.</p> <p>Workaround None. The misleading title of the launch window does not affect the functionality of the Cisco License Manager Server or Cisco License Manager Setup program and can be ignored.</p>

Troubleshooting

For troubleshooting information, refer to the *User Guide for Cisco License Manager Release 2.0* or the online help in the GUI application.

Cisco License Manager 2.0 Documentation Set

The following table lists the Cisco License Manager Release 2.0 documentation.

Table 4 **Product Documentation**

Document	Location
<i>Home page for Cisco License Manager documentation (all releases)</i>	On Cisco.com at http://www.cisco.com/en/US/products/ps7138/tsd_products_support_series_home.html
<i>Release Notes for Cisco License Manager Release 2.0</i>	On Cisco.com at http://www.cisco.com/en/US/products/ps7138/prod_release_note09186a00808f84de.html
<i>Finding Documentation for Cisco License Manager Release 2.0</i>	<ul style="list-style-type: none"> • Adobe Acrobat PDF on SDK CD • On Cisco.com at http://www.cisco.com/en/US/products/ps7138/products_documentation_roadmap09186a00808f7c00.html (in HTML and PDF format)
<i>User Guide for Cisco License Manager Release 2.0</i>	On Cisco.com at http://www.cisco.com/application/pdf/en/us/guest/products/ps8295/c1626/ccmigration_09186a00808c04d8.pdf
<i>Java API Reference Guide for Cisco License Manager Release 2.0</i>	<ul style="list-style-type: none"> • Adobe Acrobat PDF on SDK CD • On Cisco.com at http://www.cisco.com/en/US/products/ps7138/products_programming_reference_guide_book09186a00808e2dce.html (in HTML and PDF format)
<i>Perl API Reference Guide for Cisco License Manager Release 2.0</i>	<ul style="list-style-type: none"> • Adobe Acrobat PDF on SDK CD • On Cisco.com at http://www.cisco.com/en/US/products/ps7138/products_programming_reference_guide_book09186a00808e2f0e.html (in HTML and PDF format)
Online Help	In the user interface, click Help to display help in a separate window.

Documentation Corrections and Additions

Correction: The Adobe Acrobat PDF versions of the Java API Reference Guide for Cisco License Manager Release 2.0 and Perl API Reference Guide for Cisco License Manager Release 2.0 on the SDK CD do not have the latest system requirements (Chapter 1, Installation, System Requirements). For correct requirements, please see the versions of these guides on Cisco.com or [System Requirements](#) in these notes.

Addition: Policy Management topic in online help: In the New Policy window under Feature Filter, you will not see a PAK if you are not the owner of the PAK or in the PAK's access control list (ACL), even if you are an ADMIN. For you to see a list of all available PAKs, the owner of the PAKs must add you to each PAK's ACL list.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

This document is to be used in conjunction with the documents listed in the “[Cisco License Manager 2.0 Documentation Set](#)” section.

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