CHAPTER 9

Postinstallation Administrative Tasks

This section provides information about administrator postinstallation tasks. Only administrators can perform these tasks. This chapter contains the following sections:

- Back Up and Restore, page 9-1
- Import, page 9-4
- Run the Setup Program, page 9-6
- Stop or Restart the Server, page 9-6
- Understand Naming Rules, page 9-7

Tip Only the Cisco License Manager Server package provides the following utilities: import and export, backup and restore, setup, device authentication updates, and Cisco License Manager Server programs.

Back Up and Restore

Cisco License Manager provides a utility for backing up and restoring inventory data and server configuration files. This section provides the following information:

- Understanding the Backup and Restore Utilities, page 9-1
- Back Up Cisco License Manager, page 9-2
- Restore Cisco License Manager, page 9-2
- Multihost Cisco License Manager Backup and Restore, page 9-3

Understanding the Backup and Restore Utilities

Cisco License Manager performs the following sequence of events during the backup operation:

1. Stops the Cisco License Manager server.
2. Backs up all data files from the environment directory and saves them to an archival location.
3. Copies the properties files.
4. Restarts the Cisco License Manager server.

Back Up Cisco License Manager

Cisco License Manager provides an administrator-only utility that backs up the database data and server configuration files. These backup files are used when you need to restore a previous database and configuration. Periodic backups are recommended.

The backup utility is located in $CISCO_LM_HOME\bin\clm_backup.bat.

You can back up the files to a specific directory. For example, you can back up the files to the C:\ directory, or you can choose a specific directory such as C:\program files\cisco systems\clm_backup.

Note The backup and restore utilities are supported only on the same host. You cannot back up data from one Cisco License Manager server to another.

Note Verify that your server is running before you initiate the backup procedure.

To back up the database data and server configuration files, complete the following steps:

Step 1 Login to the Cisco License Manager server.

Step 2 For a Windows platform, type the following from a DOS command window:

***$CISCO_LM_HOME*/bin/clm_backup.bat** *password absolute_backup_directory_path*

The *password* parameter is the Cisco License Manager administrator password. The *absolute_backup_directory_path* is the location where the backup files are to be stored.

Note This utility can be run only by the administrator.

When the batch script has run, a completion message appears.

Step 3 For a Solaris platform, type the following from a command window:

***$CISCO_LM_HOME*/bin/clm_backup.sh** *password absolute_backup_directory_path*

The *password* parameter is the Cisco License Manager administrator password. The *absolute_backup_directory_path* is the location where the backup files are to be stored.

Note This utility can be run only by the administrator.

When the batch script has run, a completion message appears.

Restore Cisco License Manager

Cisco License Manager provides an administrator-only utility that restores the database data and server configuration files. The files used in the restore utility are created when you back up the Cisco License Manager server.

The restore utility is located in $CISCO_LM_HOME\bin\clm_restore.bat.

Note Verify that your server is running before you initiate the restore procedure.

To restore the database data and server configuration files, complete the following steps:

Step 1 Login to the Cisco License Manager server.

Step 2 For a Windows platform, type the following from a DOS command window:

***$CISCO_LM_HOME*/bin/clm_restore.bat** *password absolute_backup_directory_path*

The *password* parameter is the Cisco License Manager administrator password. The *absolute_backup_directory_path* is the location where the back up files are stored.

Note This utility can be run only by the administrator.

When the batch script has run, a completion message appears.

Step 3 For a Solaris platform, type the following from a command window:

***$CISCO_LM_HOME*/bin/clm_restore.sh** *password absolute_backup_directory_path*

The *password* parameter is the Cisco License Manager administrator password. The *absolute_backup_directory_path* is the location where the backup files are to be stored.

Note This utility can be run only by the administrator.

When the batch script has run, a completion message appears.

Multihost Cisco License Manager Backup and Restore

In environments where moving equipment or hosts from isolated network domains is restricted, Cisco License Manager may be deployed on two hosts—one on the isolated network (Example: Cisco License Manager server 1) and the second one in the network domain with Internet connectivity (ex: Cisco License Manager server 2). Cisco License Manager installed in the isolated network (Cisco License Manager server 1) has connectivity to network devices and discovers Cisco devices with licensing capability and builds an inventory of licenses in the network. Then the customer can back up the Cisco License Manager database using the following script:

`clm_backup.bat` *password absolute_backup_directory_path*

Where *password* is the Cisco License Manager administrator password and *absolute_backup_directory_path* is the location where the backup files will be stored

If IP address information is considered sensitive due to security concerns, invoke the following command to mask IP addresses during the backup.

`clm_backup.bat` *password absolute_backup_directory_path -mask ipaddr*

To back up all data on an isolated Cisco License Manager Server and restore it on a domain Cisco License Manager Server, complete the following steps:

Step 1 Log in to the isolated Cisco License Manager host (C:\CLMServer1).

Step 2 For a Windows platform, type the following from a DOS command window:

```
clm_backup.bat cisco C:\CLMServer1 -mask ipaddr
```

Note This utility can be run only by the administrator.

When the batch script has run, a completion message appears.

Step 3 Copy this database file to physical media and take it to the domain Cisco License Manager host (C:\CLMServer2).

Restore its database using the database backup from the isolated host with the following:

clm_restore.bat *password absolute_backup_directory_path -mask hostInfo*

The *password* parameter is the Cisco License Manager administrator password. The *absolute_backup_directory_path* is the location where the backup files are to be stored.

For example, the following script restores Cisco License Manager from the backup stored at C:\CLMServer1:

clm_restore.bat *cisco C:\CLMServer1 –mask hostInfo*

Note This utility can be run only by the administrator.

When the batch script has run, a completion message appears.

Step 4 Restart the Cisco License Manager server.

Now Cisco License Manager server 2 (C:\CLMServer2) has information about all devices in the isolated network and their unique device identifiers (UDIs).

Step 5 Connect to the license server on the Cisco Website from Cisco License Manager server 2 and obtain and save the licenses associated with the isolated network.

Step 6 Back up the database on Cisco License Manager server 2 using the following command:

clm_backup.bat *cisco C:\CLMServer2*

Step 7 Take a copy of this database on physical media to the isolated network and restore Cisco License Manager server 1's (C:\CLMServer1) database using the database backup of Cisco License Manager server 2 with the following command:

clm_restore.bat *cisco C:\CLMServer2 –mask hostInfo –mask ipaddr*

When the batch script has run, a completion message appears.

Import

Users can use the Cisco License Manager Import utility to import a device's license information to the Cisco License Manager database. This is useful for those devices whose licenses have not been obtained using Cisco License Manager.

- Import into Cisco License Manager, page 9-5

- Import CiscoWork Devices into Cisco License Manager, page 9-5

Import into Cisco License Manager

The import utility allows the user to import the license information into the Cisco License Manager database. The import utility is **`$CISCO_LM_HOME/bin/clm_import.bat`**.

clm_import.bat *admin_password* **`licensefile`** *license_file_path* **-udi** *DEVICE_UDI_STRING*

where:

admin_password is the Cisco License Manager administrator password.

license_file_path is the file path that you create when you receive the .lic file by e-mail from the Cisco Product License Registration Portal. You must copy the contents of the .lic file to a new file on the system and pass the new file path as the argument to the clm_import.bat utility.

DEVICE_UDI_STRING is the UDI of the device.

Sample command:

clm_import.bat *password -licensefile c:\licensefile -udi FTX1211Y0J6*

Note After running the Cisco License Manager import script, log into the GUI and poll licenses for all the imported devices. This action updates both the license status and the device status for all the imported devices.

Import CiscoWork Devices into Cisco License Manager

The import utility is a batch script that imports CiscoWork devices into Cisco License Manager inventory.

Note Before running this import utility, the CiscoWork system must have system environment **`DCRCLIFILE`** set up there already. Otherwise, it returns an error message "*LMS environment DCRCLIFILE is not set up yet. Please set this environment variable before running this utility*". **`DCRCLIFILE`** is a text file which has the line "admin $password", where $password is the value of LMS repository admin's password.

If Cisco License Manager and CiscoWork solutions are on same machine, go to %INSTALL_DIR%/bin directory, and run the **`%INSTALL_DIR%/bin directory`** script. Usage:

`runLMSDeviceImport.bat` *LMS_INSTALL_DIR LMS_REPOSITORY_USER_NAME CLM_ADMIN_PASSWORD CLM_SERVER_HOST CLM_SERVER_PORT_NUMBER*

If Cisco License Manager and CiscoWork solution are on different machines, use the %INSTALL_DIR%/tool/LMS.zip zip file.

a. Copy the zip file to the CiscoWork system
b. Unzip the folder, which creates the *LMS* directory
c. Go to the subdirectory *bin*
d. Run the import utility **runLMSDeviceImport.bat**

Note For Solaris and Linux, run **runLMSDeviceImport.sh**

`runLMSDeviceImport.bat` *lms_install_idr lms_repository_user_name CLM_admin_password CLM_server_host CLM_server_port_number*

lms_install_dir is the directory of CiscoWork solution.

lms_repository_user_name is the CiscoWork repository username.

CLM_admin_password is the Cisco License Manager administrator password

CLM_server_host is Cisco License Manager server host name.

CLM_server_port_number is Cisco License Manager Server rmi port number

Sample: **runLMSDeviceImport.bat** *c:/ciscowork_dir lms_root clm_admin clm_server1 1099*

Run the Setup Program

You can run the setup program to update any of the installation options. Cisco strongly recommends that you run this program if you elected to run the silent installation or if you were unable to answer any of the questions during the installation. The silent installation uses the command-line interface (CLI).

To run the setup program, complete the following steps:

Step 1 To run the setup program from a Windows platform, choose **Start > All Programs > Cisco License Manager > CLM Server > Configure Server**. To run the setup program from a Linux or Solaris platform, run the batch script **$CLM_HOME/bin/clm_Setup.sh**.

Step 2 Enter the administrator password and click **Next**.

Step 3 You can change any of the following options:

- Server or event listening port
- Device communication protocol
- E-mail service
- Administrator password
- HTTP file server port
- SSL enable

Step 4 Enter the required information and click **Done**.

Stop or Restart the Server

Before you can log into Cisco License Manager, the server must be running. After installation, the server is automatically started.

- To stop the Cisco License Manager server using the Windows platform, choose **Start > All Programs > Cisco License Manager > CLM Server > Stop Server**.

- To start the Cisco License Manager server using the Windows platform, choose **Start > All Programs > Cisco License Manager > CLM Server > Start Server**.
- To stop the Cisco License Manager server using the Solaris platform, run the **$CLM_HOME/bin/clm_stop.sh command**.
- To start the Cisco License Manager server using the Solaris platform, run the **$CLM_HOME/bin/clm_start.sh** command.

Understand Naming Rules

This section contains the following information about naming rules:

- Naming Rules, page 9-7
- Allowable Characters for Names and Descriptions, page 9-8

Naming Rules

The following table lists the rules for usernames, passwords, and other user information. These rules apply to users configured using **Manage > Manage Users** and to users configured by using the API **login** command.

Note The same rules apply to a folder name, device group, device ID, and PAK ID.

Type	Rules
Username	• 1 to 64 ASCII characters in the range from x021 to x07A • Case sensitive
User password	• 1 to 64 ASCII characters in the range from x021 to x07A • Case sensitive
First name Last name Company name	• No length limit • Case sensitive • Any alphanumeric character and the underscore
E-mail address	Valid e-mail address to receive notifications from the Cisco License Manager server. To configure this in User Manager, see "Edit a User's Profile Information" section on page 6-2.

Type	Rules
Cisco username	Must contain at least one letter and no spaces. May contain numbers.
Cisco password	Strong passwords have the following characteristics: • Contain both uppercase and lowercase characters (for example, a–z, A–Z) • Contain digits and punctuation characters as well as letters (for example, 0–9, !@#$%^&*()_+|~ =\`{}[]:";'<>?,./) • Are at least five alphanumeric characters long • Are not a word in any language, and are not slang, dialect, or jargon • Are not based on personal information, names of family members, and so forth

Allowable Characters for Names and Descriptions

The following table lists the allowable characters for device, PAK, and other names and descriptions in most dialog boxes.

Note A device name can be displayed differently from the hostname. When adding devices, users can customize device names in Cisco License Manager. When a device is discovered, the hostname is used. The device name is local to Cisco License Manager.

The length limit for most fields is 64 characters (range from hexadecimal 21 to 7A).

Character Description	Characters
Alphanumeric—uppercase and lower case	A–Z, a–z, 0–9
Asterisk	*
Colon (do not use for usernames)	:
Comma (do not use for usernames)	,
Dollar sign	$
Full stop (period)	.
Equals	=
Exclamation point	!
Hyphen, dash, minus sign	-
Left and right curly brace	{ }
Left and right parenthesis	( )
Left and right square bracket	[ ]
Low line (underscore)	_

Character Description	Characters
Percent sign	%
Question mark	?
Semicolon	;
Solidus (forward slash)	/
Space (do not use for usernames)	
Tilde[1]	~
Vertical line[1]	|

1. Tildes and vertical lines are not permitted for PAK folder names.

Note Do not use the Enter key in any description fields.