

Platform Administration

Cisco provides these tools to manage the Cisco MobilityManager server platform:

- Cisco IPT Platform Administration web pages that provide complete platform administration functions.
- Command Line Interface (CLI) that provides a subset of the platform administration functions.

Refer to these topics for instructions on using the browser-based interface and the command line interface:

- Using the Cisco IPT Platform Administration Web Pages, page 6-1
- Cisco IPT Platform Administration Command Line Interface, page 6-15

Using the Cisco IPT Platform Administration Web Pages

The Cisco IPT Platform Administration web pages allow you to configure and manage the Cisco MobilityManager server platform. You can perform these functions:

- Verify status of platform components—The Status window provides the following read-only hardware and platform information:
 - Platform status—Displays information that was entered during Cisco MobilityManager server installation, including the host name, status of Ethernet ports, IP addresses, memory usage, and CPU utilization.

- Hardware status—Displays information about the hardware platform.
- Configure network settings—You can modify IP address and Dynamic Host Configuration Protocol (DHCP) information that was entered when the application was installed. You can also add Network Time Protocol (NTP) servers and clients and synchronize NTP settings.
- Verify connectivity with other network devices—You can use the Ping utility to verify network connectivity.
- Perform Software Upgrades—You can verify your current version of Cisco MobilityManager server software and upgrade software from a local source (CD-ROM or DVD) or remote source (server on the network).
- Reboot the System—You can reboot your system and continue to use the current software image or reboot your system and start using an alternative software image.

Related Topics

- Login, page 6-2
- Show Status, page 6-3
- Settings, page 6-5
- Software Upgrade Windows, page 6-10
- System Power-off or Reboot, page 6-14

Login

To access Cisco IPT Platform Administration and log in, follow these steps:

Procedure

- Step 1 On the Cisco CallManager Administration window, click Show Navigation.
- Step 2 In the left-hand pane, click Platform Administration.
- **Step 3** On the Cisco IPT Platform Administration Logon window, enter your user name and password.



The user name and password are established during installation.

Step 4 Click Submit.

Show Status

Use these Show Status menu options to view information on platform status and hardware status:

- Platform Status—Displays information that was entered during platform installation, including the host name, status of Ethernet ports, IP addresses, memory usage, and CPU utilization.
- Hardware Status—Displays the platform model, CPU type, memory, object ID, and OS version.

Platform Status

To open the Platform Status window, choose **Show Status > Platform Status**. Table 6-1 describes the fields displayed in the window.

Field	Description
System	
Host Name	Displays the name of the MCS 78xx host where Cisco Platform Administration is installed.
Date/Time	Displays the date and time based on the continent and region that were specified during platform installation.
Locale	Displays the language that was chosen during platform installation.
Time Zone	Displays the time zone that was chosen during installation.
Network	
Status	Indicates whether the port is Up or Down for Ethernet ports 0 and 1.

Table 6-1Platform Status Fields

Field	Description
DHCP	Indicates whether DHCP is enabled for Ethernet ports 0 and 1.
IP Address	Shows the IP address of Ethernet ports 0 and 1.
IP Mask	Shows the subnet mask address of Ethernet ports 0 and 1.
Primary DNS	Displays the IP address of the primary domain name server.
Domain	Displays the name of the platform domain.
Secondary DNS	Displays the IP address of the secondary domain name server.
Gateway	Displays the IP address of the network gateway on Ethernet port 0.
Resources	
СРИ	Displays the percentage of CPU capacity that is idle, the percentage that is running system processes, and the percentage that is running user processes.
Memory	Displays the amount of total memory, free memory, and used memory in KBytes.
Disk/active	Displays the amount of total, free, and used disk space on the active disk.
Disk/inactive	Displays the amount of total, free, and used disk space on the inactive disk.
Disk/logging	Displays the amount of total, free, and disk space that is used for disk logging.

 Table 6-1
 Platform Status Fields (continued)

Hardware Status

To open the Hardware Status window, choose **Show Status > Hardware Status**. Table 6-2 describes the fields displayed in the window.

Field	Description
Hardware Platform	Displays the model identity of the platform server.
Number of Processors	Displays the number of processors in the platform server.
СРU Туре	Displays the type of processor in the platform server.
Memory	Displays the total amount of memory in MBytes.
Object ID	Displays the software object ID.
OS Version	Displays the version of the software operating system that is running on the platform.

Table 6-2Hardware Status Fields

Settings

Use the Settings windows to display and change:

- IP settings
- Host settings
- Network Time Protocol (NTP) settings
- Ping utility

IP Settings

The IP Settings window indicates whether Dynamic Host Configuration Protocol (DHCP) is active on Ethernet connections 0 and 1, lists the related Ethernet IP addresses, and shows the IP address for the network gateway.

To modify the IP settings, follow these steps:

Procedure

Step 1 Choose **Settings > IP Settings**.

- **Step 2** Enter the new value in the appropriate field as described in Table 6-3.
- Step 3 Click Execute.

Field	Description	
Ethernet 0 and Ethernet 1		
DHCP	Indicates whether DHCP is active.	
IP Address	Shows the IP address of the DHCP server.	
IP Mask	Show the IP subnet mask address of the DHCP server.	
Network		
Gateway	Shows the IP address of the network gateway.	

Host Settings

The Host Settings window displays the name and IP address of the platform host. You must set the values as part of the platform installation procedure.

To add a new host, follow these steps:

Procedure

- **Step 1** Choose **Settings > Host Settings**.
- Step 2 Click Add.
- **Step 3** Enter a new host name and IP address.
- Step 4 Click Save.

NTP Settings

The NTP Settings window displays the NTP settings and enables you to configure the platform as either an NTP server or an NTP client. From this window, you can also start and stop the NTP service.

To configure NTP settings, follow these steps:

Procedure

Step 1	Choose Settings > NTP Settings.	
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Step 2 Enter information according to the descriptions in Table 6-4.

Step 3 Click Save.

Table 6-4NTP Settings Fields

Field	Description
NTP Status	
Status	Indicates whether the NTP service is active. Click Start or Stop to control the status of the NTP service.

Field	Description	
NTP Server Configuration (Pla	atform is a client)	
Add/Delete	Add or delete an NTP server.	
	To add an NTP server:	
	1. Click Add.	
	2. Enter the server IP address or hostname.	
	3. Click Save . A confirmation message is presented.	
	4. Click NTP Settings to return the NTP Settings window.	
	To delete an NTP server:	
	1. Check the box to the left of the server entry.	
	2. Click Delete.	
	3. Click Save . A confirmation message is presented.	
	4. Click NTP Settings to return the NTP Settings window.	
Address	Displays the IP address of the NTP server.	
Hostname	Displays the name of the NTP Server.	
Status	Indicates whether the NTP server is active.	

 Table 6-4
 NTP Settings Fields (continued)

Field	Description
NTP Client Configuration (Pla	atform is a server)
Add/Delete	Add or delete an NTP client.
	To add an NTP client:
	1. Click Add.
	2. Enter the IP address and mask or enter the hostname.
	3. Click Save . A confirmation message is presented.
	4. Click NTP Settings to return to the NTP Settings window.
	To delete an NTP client:
	1. Check the box to the left of the entry.
	2. Click Delete.
	3. Click Save . A confirmation message is presented.
	4. Click NTP Settings to return to the NTP Settings window.
Address	Displays the IP address of the NTP client.
Hostname	Displays the name of the NTP client.
Mask	Displays the subnet mask of the NTP client.

Table 6-4	NTP Settings Fields	(continued)
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Ping Utility

The Ping Utility window enables you to send ping messages to another server in the network.

To use the Ping utility, follow these steps:

Procedure

Step 1 Choose **Utilities > Ping**.

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- **Step 2** Enter the destination IP address and number of ping packet to send.
- Step 3 Click Execute.
- **Step 4** The Ping Utility window displays the ping statistics. Click **Cancel** or **Done** to terminate the ping operation.

Software Upgrade Windows

These Software Upgrade windows enable you to upgrade the Cisco IPT platform software from a local or a remote source, show the current software version, and verify individual software components:

- From Local Source
- From Remote Source
- Show Current Version
- Check Component Info



Caution

Before attempting to upgrade the platform software, be sure that all other software upgrades and installations have completed. Check the latest Install/Upgrade log to be sure that no other instance of the Install/Upgrade process exists.

From Local Source

Use the From Local Source window to upgrade the server software from a CD or DVD.

Before You Begin

- Create or obtain the upgrade disk.
- Back up your system data. See the "Backing Up and Restoring the Database" section on page 3-12.

To perform the upgrade, follow these steps:

Procedure

Step 1	Insert the new CD or DVD into the disk drive on the local server that is to be upgraded.
Step 2	Choose Software Upgrade > From Local Source.
Step 3	Enter the required upgrade information, as described in Table 6-5:
Step 4	Click Submit .
	You will see upgrade status messages including a list of previously downloaded images.
Step 5	Click Cancel if you need to terminate the upgrade operation before it is completed.

Table 6-5 Local Source Upgrade Fields

Field	Description
Upgrade Software Directory on CD/DVD	Enter the directory (on the CD or DVD) where the software upgrade is located.
Platform	Choose Linux (default).

From Remote Source

Use the From Remote Source window to upgrade software from a remote network location.

Before You Begin

Back up your system data. See the "Backing Up and Restoring the Database" section on page 3-12.

To upgrade from a remote location, follow these steps:

Procedure

Step 1	Choose Software Upgrade > From Remote Source.
Step 2	Enter the required upgrade information.
	Table 6-6 describes the upgrade information.
Step 3	Click Submit.
Step 4	Choose a software version to download.
Step 5	Confirm the software upgrade.
Step 6	Reboot your system.
	You will see upgrade status messages, including a list of previously downloaded

images.

Field	Description
Remote Software Server	Enter the host name or IP address of the remote server from which software will be downloaded.
Remote User	Enter the name of a user who is configured on the remote server.
Remote User Password	Enter the password that is configured for this user on the remote server.
Upgrade Software Directory	Enter the name of the directory from which software will be downloaded.
Download Protocol	Choose sftp (default) or ftp.
Platform	Choose Linux.

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Show Current Version

From the Show Current Version window, you can view the current version of software that is running on the Cisco IPT Platform.

To view the current software version, follow these steps:

Procedure

Step 1	Choose Software Upgrade > Show Current Version.
Step 2	Click Retrieve to obtain version information.
Step 3	When you have finished viewing the information, click OK .

Check Component Info

From the Check Component Info window you can check these categories of information:

- Installed software packages
- Installation process
- Post-installation process
- Upgrade process
- Contents of a directory or file

To check the component information, follow these steps:

Procedure

- **Step 1** Choose **Software Upgrade > Check Component Info**.
- **Step 2** Choose one of the following types of information:
 - Software Packages
 - Install
 - Post Install
 - Upgrade

Alternatively, enter a file name to retrieve.

Step 3 (Optional) enter the number of lines to retrieve from the file. Entering 0 retrieves the entire file.

- Step 4 Click Retrieve.
- **Step 5** An information window opens. Perform these functions in the information window:
 - Click **Refresh** to retrieve updated information.
 - Click **Cancel** to close the information window.
 - To continue using the IPT Platform Administration pages, select from the menu located on the left side of the window.

System Power-off or Reboot

When you upgrade your software from a local or remote source, the software upgrade downloads to the standby partition in your server. From the Switch Versions and Reboot window, you can switch from the active partition (which is running the older version of software) to the standby partition (containing the upgraded software).

You can also reboot the system that is running the current software version or power down the system completely.

Switch Versions and Reboot

When you upgrade your software from either a local or remote source, the software upgrade is downloads to the standby partition in your server. From this window, you can switch from the active partition (which is running the older version of software) to the standby partition (containing the upgraded software):



Be sure to perform a complete data backup before proceeding with the version switch and reboot.

- To proceed with the software version switch and system reboot, click **Proceed**.
- To cancel the software version switch and system reboot, click Cancel.

From the Reboot Current Version window, you can reboot your system and continue running the same version of software:



Be sure to perform a data backup before proceeding with the system reboot.

- To proceed with the system reboot, click **Proceed**.
- To cancel the system reboot, click Cancel.

Poweroff System

From the Poweroff System window, you can shut your system down safely:



Be sure to backup your system data before starting the shutdown process.

- To start the system shutdown, click Confirm.
- To cancel the system shutdown, click Cancel.

Cisco IPT Platform Administration Command Line Interface

This section describes commands to perform basic platform administration functions. All the commands described in this section are also available using the Cisco IPT Platform Administration web application, as described in the "Using the Cisco IPT Platform Administration Web Pages" section on page 6-1.



Note

It is recommended that you use the command-line interface (CLI) only when the Cisco IPT Platform Administration web application is not available.

The following CLI commands are available:

- file list
- file view
- ping
- restart
- service list
- service start
- service stop
- set hostname
- set ip (DHCP)
- set ip (IP)
- set security
- set task alarm
- set task trace
- show status
- show hw
- show security
- show files activelog
- show files activlog cli.log
- show files inactive log
- show files install
- show files install ks.cfg
- show files install partAlloc
- show files install install.log
- show files install install.post
- tracert

Starting a CLI Session

You can access the Cisco IPT Platform Administration CLI from a local or remote location:

- Access the Cisco IPT Platform Administration CLI directly by using the monitor and keyboard that you used during Cisco MobilityManager installation or by using a terminal server that is connected to the serial port.
- Use SSH to make a secure connection to the Cisco IPT Platform Administration CLI from a client workstation.

Before You Begin

Ensure that the Cisco IPT Platform is installed with the following information configured:

- A primary IP address and hostname
- An administrator ID
- A password

You will need this information to log in to the Cisco IPT Platform Administration CLI.

To start a CLI session, perform these steps:

Procedure

Step 1 Choose one of these options to connect to the CLI:

• From a remote system, use SSH to connect securely to the Cisco IPT Platform Administration CLI. In your SSH client, enter

ssh adminname@hostname

where *adminname* specifies the Administrator ID and *hostname* specifies the hostname that waqs defined during installation.

For example, ssh admin@ipt-1.

• From a direct connection, you receive this prompt automatically:

ipt-1 login:

where ipt-1 represents the host name of the system.

Enter the administrator ID that was defined during installation.

Step 2 Enter the password.

The CLI prompt is presented. The prompt includes the Administrator ID, as in this example:

admin:

You can enter CLI commands.

Related Topics

CLI Basics Ending a CLI Session

CLI Basics

This section contains basic tips for using the command line interface.

Completing Commands

To complete commands, use Tab:

- Enter the start of a command and press **Tab** to complete the command. For example, if you enter **se** and press **Tab**, **set** gets completed.
- Enter a menu command and press **Tab** to display all the commands or menu commands that are available at this menu. For example, if you enter **set** and press Tab you see all the set menu commands. An asterisk (*) identifies the menus.
- If you reach a command and keep pressing **Tab**, the current command line repeats; no additional expansion is available.

Getting Help on Commands

You can obtain two kinds of help on any command:

- Detailed help including a definition of the command and an example of its use
- Short query help including only command syntax

To obtain detailed help from the CLI prompt, enter:

help <command> where <command> specifies the command name or menu command and parameter. See Example 6-1.

To obtain command syntax information from the CLI prompt, enter:

<command> ? where <command> represents the command name or menu command and parameter. See Example 6-2.



Entering a question mark (?) after a menu command is equivalent to pressing the Tab key. The possible command completions are listed.

These examples show typical uses of the help commands.

Example 6-1 Detailed Help Example

admin: help ping
This will send one or more ping packets to a remote destination
Example:
admin:ping www.cisco.com 5
PING www.cisco.com (198.133.219.25) from 172.22.119.166 : 56(84) bytes
of data.
64 bytes from 198.133.219.25: icmp_seq=1 ttl=246 time=0.837 ms
64 bytes from 198.133.219.25: icmp_seq=2 ttl=246 time=0.962 ms
64 bytes from 198.133.219.25: icmp_seq=3 ttl=246 time=1.04 ms
64 bytes from 198.133.219.25: icmp_seq=4 ttl=246 time=0.635 ms
64 bytes from 198.133.219.25: icmp_seq=5 ttl=246 time=0.666 ms

Example 6-2 Query Example

ping? Syntax: ping dest [count] dest mandatory dotted IP or host name count optional count value (default is 4)

Ending a CLI Session

To end the CLI session, enter **quit** at the CLI prompt. The system responds in one of these ways:

- If you are logged in remotely, you are logged off, and the ssh session gets dropped.
- If you are logged in locally, you are logged off, and the login prompt returns, as in this example:

login:

Cisco IPT Platform CLI Command List

 Table 6-7 lists and describes the commands that are available on the Cisco IPT

 Platform Administration CLI.



Some commands may slow down call processing. Refer to the notes in Table 6-7 for more information.

Command	Description			Counterpart in Cisco IPT Platform Administration
ping dest [count]	Execute a ping command to the specified destination.			Utilities > Ping
	dest (man name.	datory): D	estination, the ipV4 or domain	
	count (opt	tional): Nu	mber of pings to execute.	
file list	Lists the l	og files in	a directory.	-
	Sort Modi	fiers:		
	default	dir (nam	e) and files (name)	
	d	date (wil	l override size if requested)	
	S	size		
	r	reverse o	of any sort	
	Display Modifiers:			
	default	file only	/ 2 columns	
	1	long listi	ng with date and size	
	File-spec	-Wild Care	ding	
	file name modifies	will produc	ce a regular listing using the above	
	directories directories	s will prod s	luce a listing showing full path of	
	Syntax:			
	file list activelog [-options] [file-spec]			
	ina	ctivelog [-	options] [file-spec]	
	inst	tall [-optic	ons] [file-spec]	
	options	optional	-tsrl	
	file-spec	optional	file to view	

Table 6-7 CLI Command Description

Command	Description	Counterpart in Cisco IPT Platform Administration
file view	Displays a log file.	
	Sort Modifiers:	
	default dir (name) and files (name)	
	d date (will override size if requested)	
	s size	
	r reverse of any sort	
	Display Modifiers:	
	default file only / 2 columns	
	l long listing with date and size	
	file-spec -wildcarding	
	File name will produce a regular listing using the above modifier	
	directories will produce a listing showing full path of directories	
	Syntax:	
	file view activelog [file-spec]	
	inactivelog [file-spec]	
	install [file-spec]	
	file-spec optional file to view	
	Note file-spec wildcarding is allowed, but must resolve to a single file.	

Table 6-7 CLI Command Description (continued)

Table 6-7	CLI Command Description	(continued)
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Command	Descri	ption	Counterpart in Cisco IPT Platform Administration
set ip	Set or othat ar	change various aspects of network configuration e originally set at installation:	Settings > IP Settings
	• Se	t DHCP on or off	
	• Se	t a new IP address and IP mask	
	• Se	t a new gateway address	
	Syntax		
	set dh	cp iface op	
	iface (mandatory): Interface name {eth0 eth1}	
	op (ma	andatory): Operation {yes no}	
	Ex	ample:	
	se	t dhcp eth0 on	
	set ip i	iface addr mask	
	iface (mandatory): Interface name {eth0 eth1}	
	addr (mandatory): IP address to be assigned	
	mask	(mandatory): IP mask to be assigned	
	Ex	ample:	
	se	t ip eth0 10.10.140.8 255.255.255.0	
	set gw	addr	
	addr (mandatory): IP address to be assigned	
	Ex	ample:	
	se	t gw 10.107.140.1	
	Note	Set ip commands force a system reboot so you should use with caution. You receive a warning asking for confirmation before this command executes.	

Command	Description	Counterpart in Cisco IPT Platform Administration
set password admin	Change the password for the Administrator account (the default and only account) that was set during installation.	-
	You will be prompted to enter and confirm the new password.	
set security orgunit orgname locality state country	Create a new security certificate and key for Tomcat on this machine. The security key gets used if you configured browser access to Cisco IPT platform to use the secure https protocol instead of http.	-
	Note This command does not apply to a Cisco IPT Platform which does not support https.	
	Use the set security command if the original key is compromised or if your certificate has expired. After you create the new key, use show security to display it.	
	Enter spaces between parameters	
	orgunit (mandatory)—Organization unit	
	orgname (mandatory)—Organization name	
	locality (mandatory)—Location	
	state (mandatory)—State	
	country (mandatory)—Country (two letters)	
	Example:	
	admin:set security mydept mycorp SanJose CA US Successful in generating self signed certificate for unitname tomcat Successfully generated self signed certificate for tomcat	

Table 6-7 CLI Command Description (continued)

Table 6-7	CLI Command Description (continued)
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Command	Description	Counterpart in Cisco IPT Platform Administration
service list	List, start, or stop services.	-
service start [service name]		
service stop [service name]		
show files install	View the install logs file list.	In Cisco IPT platform
[filename]	<i>filename</i> (optional): Name of the file to view	Administration, use the Collect Diagnostics command to collect diagnostic files
show hw	Show the hardware platform and serial number.	Show Status > Hardware
show security	Show the Tomcat security key and certificate information.	-
	The security key get used if you configured browser access to Cisco IPT Platform to use the secure https protocol instead of http.	

Command	Description	Counterpart in Cisco IPT Platform Administration
show status	Show the dynamic status of these properties:	Show Status >
	• Host name	Platform Status
	• Date	
	Time Zone	
	Primary DNS	
	Secondary DNS	
	• Domain	
	• Gateway	
	• For Ethernet 0 and Ethernet 1:	
	– DHCP (yes or no)	
	- Status of the interface	
	– IP Address	
	– IP Mask	
	• Resources:	
	- Memory: Total, Free, Used	
	- CPU (percent): Idle, System, User	
	 Disk Usage: Disk/activecomes from partition /, Disk/inactivecomes from partition /partB, Disk/logging comes from partition /common 	
show trace	Displays trace information.	
show version active	Displays the active or inactive Cisco IPT Platform Administration software version.	-
show version inactive		

Table 6-7 CLI Command Description (continued)

Table 6-7	CLI Command Description (continued)
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Command	Description	Counterpart in Cisco IPT Platform Administration
system [parameter]	Restart, switch versions and restart or shut down the server as specified in the parameter:	System Poweroff or Reboot > Reboot
	system restart: Restart current version	Current Version
	system switch-ver: Switch versions and restart	System Poweroff or Reboot > Switch
	system poweroff: Shut down gracefully.	Versions and Reboot
	Note You receive a warning asking for confirmation before this command executes.	System Poweroff or Reboot > Poweroff System
traceroute dest [ethX]	Execute a traceroute command, tracing the path a packet takes to a destination. Use to debug routing problems between hosts:	-
	dest (mandatory): Destination, the (ipV4 or domain name	
	<i>ethX</i> (optional): Source Ethernet interface, eth0 or eth1	