Displaying System Properties, Statuses, Messages, and Logs

You can display system properties, settings, statuses, messages, and logs to monitor and manage ongoing Prime Performance Manager performance. Properties, settings, statuses, messages, and logs are all accessed through the Prime Performance Manager System menu. The following topics describe how to display this information:

Note If Prime Performance Manager user-based access is enabled (see Setting Up User Access and Security, page 6-1), only Administrator users can view all administration options. Administrative menu options are not visible to Operator and lower users.

System Properties, Statuses, Logs, and Messages Overview

The Prime Performance Manager System menu allows you to display Prime Performance Manager statuses, properties, settings, logs, and messages. Table 11-1 provides an overview to the logs, messages, and information displayed from the System menu.

Table 11-1 System Menu Logs and Messages

Menu > Path	Source	For information, see:
System > Status > • Connected Clients • System Status • System Versions • System Check • Install Locations • IP Access List	Displays the output of these commands: • ppm who • ppm status • ppm version • ppm checksystem • ppm ipaccess	Displaying Connected Clients and System Status, page 11-2.
System > Logs > • Install Log • Patch Log • Console Log • System Check Log • Backup Log • CLI Command Log • Event Automation Log • Security Log • Application Audit Log • Console Log Archives	Displays the contents of these system logs: • cisco_primepm_gw_install.log • ppmPatchLog.txt • sgmConsoleLog.txt • sgmCheckSystemLog.txt • ppmBackupLog.txt • sgmCommandLog.txt • eventAutomationLog.txt • sgmSecurityLog.txt • Tomcat/logs • sgmConsoleLog-archives	Displaying System Logs, page 11-4.
System > Messages	Displays tabular information on system messages, including errors, information, trace, debug, dump, SNMP, and archived messages.	Displaying System Messages, page 11-12.
Administration > System Settings • System Configuration • System Settings • Poller Settings • Web Settings • Report Settings • Backup Times	Displays the contents of these system property files: • Multiple files • System.properties • Server.properties • WebConfig.properties • Reports.properties • ppmBackupLog.txt	Displaying System Settings, page 11-8.

Displaying Connected Clients and System Status

Prime Performance Manager allows you to display connected clients and system status. It also allows you to run a system check. You can also display an updated system status. To display this information, from the System menu, choose **System Status**, then choose one of the following:

- **Connected Clients**—Lists all Prime Performance Manager clients that are currently connected to the Prime Performance Manager gateway. These include:
  - PPM Clients—The Prime Performance Manager registered message observers, for example TrapGeneratorMsgHandler, EventPollerProcessor, and others.
  - Registered Units—The Prime Performance Manager registered unit(s) connected to the gateway.
  - Registered Web Clients—Users who are logged into the server. If user access is enabled (see Setting Up User Access and Security, page 6-1), the username is displayed. Otherwise, only the user hostname and IP address is provided.
  - Linux—Linux users that are logged into the Prime Performance Manager server.
  - Solaris—Solaris users that are logged into the Prime Performance Manager server.

Note You can also use the ppm who command to display connected clients.

- **System Status—**Displays the status of the Prime Performance Manager gateway and units, including version, install date, and hostname, as well as the status of gateway and unit processes, for example:

```
Prime Performance Manager Gateway App Server IS Running.
-- Prime Performance Manager Gateway Database Server IS Running.
-- Prime Performance Manager Gateway Naming Server IS Running.
-- Prime Performance Manager Gateway MessageLog Server IS Running.
-- Prime Performance Manager Gateway DataServer Server IS Running.
-- Prime Performance Manager Gateway JSP Server IS Running.
-- Prime Performance Manager Gateway Launch Server IS Running.
```

Note You can also use the ppm status to display the system status.

- **System Version**—Lists the Prime Performance Manager software versions installed on the gateway and units, plus additional information including installation date, gateway and unit hostname, and SSL status.

Note You can also use the ppm version command to display the Prime Performance Manager software versions.

- **System Check**—Checks the gateway or unit server installation including:
  - Server RAM, CPU, and SWAP
  - TCP/IP address and port usage
  - Disk space usage

Note You can also use the ppm checksystem command to check the system.

- **Install Locations**—Displays the gateway and unit installation location. Output is:

```
SRG=/opt/CSCOppm-gw;export SRG SRU=/opt/CSCOppm-unit;export SRU
```

SRG is the source root gateway directory and SRU is the source root unit directory.

Note You can also use the ppm rootvars command to display the gateway and unit installation location.

- **IP Access List**—Displays the IP addresses that can access the gateway. By default, all IP addresses can access the gateway. You can restrict access to specific IP addresses using the ppm ipaccess command.

Displaying System Logs

Prime Performance Manager provides the following system logs where you can view information about Prime Performance Manager processes and errors. These logs are described in the following topics:

Displaying the Install Log

The install log displays the contents of Prime Performance Manager installation log file for the server to which you are connected that is running Prime Performance Manager. Information includes the date and time of the installation, results of the system requirements check, and the installation sequence.

To display the Install Log, you can:

- Choose **System Logs > Install Log** from the System menu, or
- Run the **ppm installlog** command.

Displaying the Patch Log

The patch log displays the Prime Performance Manager patches that have been installed. To display the Patch Log, you can:

- Choose **System Logs > Patch Log** from the System menu, or
- Run the **ppm patchlog** command.

Note If no patches are installed, a “File does not exist” message is displayed.

Displaying the Console Log

The console log displays the contents of Prime Performance Manager system console log file for the server to which you are connected that is currently running Prime Performance Manager. The console log file contains Prime Performance Manager server error and warning messages, such as those that might occur if the Prime Performance Manager server cannot start. It also provides a history of start-up messages for server processes.

To display the console log, you can:

- Choose **Logs > Console Log** from the System menu, or
- Run the **ppm console** command.

Displaying the System Check Log

The system check log displays the results of the last check of the server where Prime Performance Manager is installed, including RAM CPU, swap space, DNS, TCP/IP port usage, and other properties. To display the console log, you can:

- Choose **Logs > System Check Log** from the System menu, or
- Run the **ppm checksystem** command.

Displaying the Backup Log

The backup log displays the contents of Prime Performance Manager backup log file for the server to which you are connected that is currently running Prime Performance Manager. The default path and filename for the backup log file is /opt/CSCOppm-gw/logs/ppmBackupLog.txt. If you installed Prime Performance Manager in a directory other than /opt, then the backup log file is in that directory.

To display the Backup log, you can:

- Choose **Logs > Backup Log** from the System menu, or
- Run the **ppm backuplog** command.

Displaying the CLI Command Log

The command log displays the contents of the Prime Performance Manager system command log file for the server to which you are connected that is currently running on the Prime Performance Manager server. The command log lists all Prime Performance Manager commands that have been entered for the Prime Performance Manager server, the time each command was entered, and the user who entered the command.

To display the command log, you can:

- Choose **Logs** > CLI **Command Log** from the System menu, or
- Run the **ppm cmdlog** command.

The Prime Performance Manager command log table is displayed. Command log table columns include Timestamp, User Name, and Command. To sort the table, click the column header, for example, to sort by username, click the **User Name** column.

Displaying the Event Automation Log

The event automation log displays the contents of the system event automation log file for the server to which you are connected that is currently running on the Prime Performance Manager server. The system event automation log lists all messages that event automation scripts generate.

The default path and filename for the system event automation log file is /opt/CSCOppm-gw/logs/eventAutomationLog.txt. If you installed Prime Performance Manager in a directory other than /opt, then the system event automation log file is in that directory.

To display the event automation log, you can:

- Choose **Logs > Event Automation Log** from the System menu, or
- Run the **ppm eventautolog** command.

Related Topics

Displaying the Security Log, page 11-6

Displaying the Application Audit Logs, page 11-7

Displaying the Security Log

The security log displays the contents of Prime Performance Manager system security log file for the server to which you are connected that is currently running Prime Performance Manager server. The system security log lists:

- All security events that have occurred for the Prime Performance Manager server.
- The time each event occurred.
- The user and command that triggered the event.
- The text of any associated message.

The default path and filename for the system security log file is /opt/CSCOppm-gw/logs/sgmSecurityLog.txt. If you installed Prime Performance Manager in a directory other than /opt, the system security log file is in that directory.

To display the security log, you can:

- Choose **Logs > Security Log** from the System menu, or
- Run the **ppm seclog** command.

Note You must be an System Administrator to access security log.

The Prime Performance Manager security log table is displayed. Columns include Timestamp, User Name, Message, and Command. To sort the table, click the column header, for example, to sort by user, click the **User Name** column.

Displaying the Application Audit Logs

The application audit logs page displays daily audit files listing all applications that have accessed Prime Performance Manager server. The application audit log lists all access messages that are logged for the Prime Performance Manager server and provides an audit trail of all access to the Prime Performance Manager server through the Prime Performance Manager web interface.

The default path and filename for the application audit log file is /opt/CSCOppm-gw/tomcat/logs/localhost_access_log.*date*.txt. If you installed Prime Performance Manager in a directory other than /opt, then the application audit log file is in that directory.

To display the application audit log, you can:

- Choose **Logs > Application Audit Logs** from the System menu, or
- Run the **ppm who** command.

Displaying the Console Log Archived Messages

The system console archives displays all archived system console messages. To display the console log through the Prime Performance Manager GUI:

- From the System menu, choose Logs, then choose **Console Log Archives**.

Console log messages are archived by timestamps. Each archived file contains all Prime Performance Manager system console messages for a single session for the server to which you are connected that is currently running Prime Performance Manager. If you restart the server, Prime Performance Manager creates a new file.

To view archived messages, click a timestamp. The Console Archive: Last *number* All Messages page displays all console messages that were in the system log at the time specified by the timestamp.

Managing Log Files

You can use the following commands to change the Prime Performance Manager log file location, file size, time mode, and maximum number of archive days:

- **ppm msglogdir**—Changes the location of the system message log directory. By default, all Prime Performance Manager system message log files are located on the gateway at /opt/CSCOppm-gw/logs, and on the unit at /opt/CSCOppm-unit/logs. The command is specific to the each gateway and unit instance. For more information, see ppm msglogdir, page B-47.
- **ppm logsize**— Changes the message log file size. The command is specific to the each gateway and unit instance. For more information, see ppm logsize, page B-39.
- **ppm logtimemode**—Sets the log file time mode for dates. For more information, see ppm logtimemode, page B-41.
- **ppm msglogage**—Sets the maximum number of days to archive all types of log files before deleting them from the server. For more information, see ppm msglogage, page B-46.

Displaying System Properties and Settings

Prime Performance Manager system, server, web, and report properties and settings are stored in the /opt/CSCOppm-gw/properties directory. These properties and settings are described in the following topics:

Displaying System Settings

The Prime Performance Manager system properties file displays server and client properties that control various Prime Performance Manager configuration parameters. System properties are stored in:

```
/opt/CSCOppm-gw/properties/System.properties
```

To access the system properties through the Prime Performance Manager GUI, choose **System Settings** from the Administration menu.

Table 11-2 shows commands that you can use to change system properties.

Table 11-2 Commands to Change System Properties

System Property	Command
BACKUP_RMIPORT	ppm backup, page B-9
BACKUP_SERVER	
BACKUP_WEBPORT	
BADLOGIN_TRIES_ALARM	ppm badloginalarm, page B-13
BADLOGIN_TRIES_DISABLE	ppm badlogindisable, page B-13
CHART_MAX_WINDOW	
CONSOLE_ARCHIVE_DIR_MAX_SIZE	ppm msglogage, page B-46
CONSOLE_LOG_MAX_SIZE	ppm consolelogsize, page B-17
CSV_STRING_DELIMITER	
CW2K_SERVER	ppm datadir, page B-19
CW2K_WEB_PORT	
CW2K_SECURE_WEB_PORT	
FAST_INTERVAL	ppm fastinterval, page B-30
JSP_PORT	ppm jspport, page B-36
LOGAGE	ppm msglogage, page B-46
LOGDIR	ppm msglogdir, page B-47
LOGSIZE	ppm logsize, page B-39
LOGTIMEMODE	ppm logtimemode, page B-41
LOG_TROUBLESHOOTING	ppm maxrepqueries, page B-43

Table 11-2 Commands to Change System Properties (continued)

System Property	Command
PERSISTENCEDIR	ppm datadir, page B-19
PROMPT_CREDS	ppm setpctrapdestination, page B-67
RP_NUM_FAST_POOL_THREADS	ppm numfastthreads, page B-50
RP_NUM_SLOW_POOL_THREADS	ppm numslowthreads, page B-51
SBACKUPDIR	ppm backupdir, page B-11
SERVER_NAME	ppm servername, page B-66
SNMPCONFFILE	ppm snmpconf, page B-69
SSL_ENABLE	ppm ssl, page B-78
TRAP_LIST_ENABLE	ppm uninstall, page B-85

Displaying Poller Settings

The poller settings file contains various properties that control Prime Performance Manager polling, such as the delete aging timeout, status polling interval drift percentage, and many other settings. Poller settings are stored in:

```
/opt/CSCOppm-gw/properties/Server.properties
```

To access the poller settings through the Prime Performance Manager GUI, from the Administration menu, choose **System Settings**, then choose **Poller Settings**.

You can change the SNMP_MAX_ROWS property using the ppm snmpmaxrows command. (See ppm snmpmaxrows, page B-72.) To change other poller settings in the Server.properties file.

Displaying Web Settings

The web settings file contains properties that control the configuration of Prime Performance Manager web interface. For example:

```
MAX_ASCII_ROWS      = 6000

# This is the default page size that is selected
# if a cookie has not been set or the maxPageSize parameeter
# is not found in the request parameters.
MAX_HTML_ROWS       = 200

# The selectable page sizes start at MIN_SELECTABLE_PAGE_SIZE and doubles until
# the MAX_SELECTABLE_PAGE_SIZE value is reached
# (e.g. 25, 50, 100, 200, 400, 800)
MIN_SELECTABLE_PAGE_SIZE = 25
MAX_SELECTABLE_PAGE_SIZE = 800

LOG_UPDATE_INTERVAL = 300
WEB_UTIL            = percent
WEB_NAMES           = display
MAX_EV_HIST         = 15000
```

Web settings are stored in:

```
/opt/CSCOppm-gw/properties/WebConfig.properties
```

To access the web settings through the Prime Performance Manager GUI, from the Administration menu, choose **System Settings**, then choose **Web Settings**. Table 11-3 describes the web settings.

Table 11-3 Web Settings

Web Setting	Description
MAX_ASCII_ROWS	Controls the size of the rows shown the message log archives debug log where contents are placed into one large page without any table rows. The default value is 6000 rows. To modify this setting, see **ppm manage, page B-42.**
MAX_HTML_ROWS	Sets the maximum number of rows for Prime Performance Manager HTML web output, such as displays of statistics reports, status change messages, or SNMP trap messages. The command allows you to set the page size (if you have not explicitly chosen a page size). After you select a page size, Prime Performance Manager remembers your preference until you delete your browser cookies. The default value is 200 rows. To modify this setting, see **ppm maxhtmlrows, page B-42.**
MIN_SELECTABLE_PAGE_SIZE	This setting determines the minimum page size that you can select from the Page Size drop-down menu. The page size values start with the MIN_SELECTABLE_PAGE_SIZE and double until they reach the MAX_SELECTABLE_PAGE_SIZE.
MAX_SELECTABLE_PAGE_SIZE	This setting determines the maximum page size that you can select from the Page Size drop-down menu. The page size values start with the MIN_SELECTABLE_PAGE_SIZE and double until they reach the MAX_SELECTABLE_PAGE_SIZE. To modify this setting, see **ppm maxpagesize, page B-43.**
LOG_UPDATE_INTERVAL	The valid range is 1 second to an unlimited number of seconds. The default value is 300 seconds (5 minutes).
MAX_EV_HIST	The event history logs are the current and archived Prime Performance Manager network status logs for status change and SNMP trap messages. Prime Performance Manager sends the search results to the web browser, where the results are further limited by settings specified by the ppm maxhtmlrows command. The valid range is one row to an unlimited number of rows. The default value is 15,000 rows.

Each of the web configuration commands requires you to be logged in as the root user.

Displaying Reports Settings

The Report Properties file contains various properties that can be enabled/disabled in the Prime Performance Manager server. For example:

```
# Copyright (c) 2011-2013 by Cisco Systems, Inc.
#
STATS_REPORTS       = enable
RPT_1MIN_AGE        = 2
```

```
RPT_DAILY_AGE        = 94
RPT_WEEKLY_AGE       = 730
RPT_MONTHLY_AGE      = 1825

RPT_1MIN_CSV_AGE     = 2
RPT_5MIN_CSV_AGE     = 3
RPT_15MIN_CSV_AGE    = 7
RPT_HOURLY_CSV_AGE   = 14
RPT_DAILY_CSV_AGE    = 94
RPT_WEEKLY_CSV_AGE   = 730
RPT_MONTHLY_CSV_AGE  = 1825

RPT_BULKSTATS_AGE    = 14

RPT_TIMEMODE         = 24
NODE_NAME_TYPE       = dnsname

RPT_1MIN_ENABLED     = false
RPT_5MIN_ENABLED     = false
RPT_15MIN_ENABLED    = true
RPT_HOURLY_ENABLED   = true
RPT_DAILY_ENABLED    = true
RPT_WEEKLY_ENABLED   = true
RPT_MONTHLY_ENABLED  = true

EXP_REPORTS          = noexport

TEST_MODE            = disabled

IFNAME_FORMAT        = both

RPT_CSVNAMES         = ppm
RPT_CSVTYPE          = allnodes

RPT_5MIN_AGE       = 4
RPT_15MIN_AGE       = 7
RPT_HOURLY_AGE       = 7
```

Prime Performance Manager displays the reports settings contents in:

```
/opt/CSCOppm-gw/properties/Reports.properties
```

To access the report settings through the Prime Performance Manager GUI, choose **Report Settings** from the Administration menu.

Displaying Gateway Backup Times

You can display Prime Performance Manager gateway and colocated unit (if installed) backup information by choosing **Administration > System Settings > Backup Times**. Alternatively, you can display the backup information using the ppm getbackuptimes commend. (See ppm getbackuptimes, page B-31.) Displayed backup information includes:

- Last Backup Start—The date and time the gateway backup was started.
- Last Backup Stop—The date and time the gateway backup was completed.
- Next Backup Start—The date and time the next gateway backup will begin.

For information about the Prime Performance Manager backup and restore process, see Chapter 14, "Backing Up and Restoring Prime Performance Manager."

Displaying System Messages

Prime Performance Manager provides a variety of messages to help you monitor errors, user actions, and other information. The following topics describe the available messages.

Note These messages are related to Prime Performance Manager system itself, not to your network.

Displaying Information and Error Messages

Information and error messages recorded in the Prime Performance Manager system log provide information about Prime Performance Manager operations to help you monitor and diagnose problems.

To access the information and error messages through the Prime Performance Manager GUI, choose **Messages** from the System menu.

Table 11-4 describes the information and error message table columns.

Table 11-4 Information and Error Message Information

Column	Description
Period (in heading)	Table collection period, such as *Since Server Restart*.
Timestamp (in heading)	Date and time that Prime Performance Manager last updated the message information.
Row	Unique number identifying each entry in the table.
Time	Date and time the message was logged.
Source	Source for the message, with the format *process.host.id*, where: • *process* is the process that logged the message. • *host* is the hostname of the process that logged the message. • *id* is a Prime Performance Manager ID that uniquely identifies the process that logged the message. This is useful when two or more clients are running on the same node and are connected to the same Prime Performance Manager server.
Task	Task or thread that logged the message.
Message	Text of the message.

You can filter information and error message displays to a single information or error message type. To filter the messages to a single type, click one of the following message types located just above the table header:

- **Error**
- **Info**
- **Trace**

- **Debug**
- **Dump**
- **SNMP**
- **All**
- **Archive**

Additionally, you can reduce the number of messages displayed by clicking **10/Page**, to limit the messages to 10 per page, up to 500 per page. Max/Page displays the maximum number of messages per page. DefPrefs restores the default preferences, and Reload reloads the messages.

Displaying User Actions

User actions recorded in the Prime Performance Manager system log provide information about Prime Performance Manager user activities. To access user actions through the Prime Performance Manager GUI, choose **User Actions** from the System menu.

Table 11-5 describes the user actions table columns. To sort the table, click a column header, for example, to sort by time, click the **Time** column.

Table 11-5 User Actions

Column	Description
Period	Collection period of the table, such as Since Server Restart.
Timestamp	Date and time that the information on the page was last updated by Prime Performance Manager.
Row	Unique number identifying each entry in the table. You cannot edit this field.
Time	Date and time the message was logged.
Class	The type of user action: • Create—Creation event, such as the creation of a seed file. • Delete—Deletion event, such as the deletion of an object or file. • Discover—Discovery event, such as Discovery beginning. • Edit—Edit event. A user has edited an object. • Ignore—Ignore event. A user has flagged a link or linkset as Ignored. • OverWrite—OverWrite event. An existing file, such as a seed file or route file, has been overwritten. • Poll—Poll event, such as an SNMP poll. • Purge—Purge event. A user has requested Discovery with Delete Existing Data chosen, and Prime Performance Manager has deleted the existing Prime Performance Manager database. • LogInOut—Login event. A user has logged into Prime Performance Manager.
Message	Message text.

You can filter the actions to display only a single user action type. To filter the messages, click an action type located just above the table header: **Create**, **Delete**, **Discover**, **Edit**, **Ignore**, **OverWrite**, **Poll**, **Purge**, **LogInOut**.

Additionally, you can reduce the number of messages displayed by clicking **10/Page**, to limit the messages to 10 per page, up to 500 per page. Max/Page displays the maximum number of messages per page. DefPrefs restores the default preferences, and Reload reloads the messages.

Displaying Archived Messages

Prime Performance Manager archives the following messages in system logs: error, informational, trace, debug, dump, user actions, SNMP.

Each archived file contains all Prime Performance Manager system messages for a single session for the server to which you are connected that is currently running on the Prime Performance Manager. If you restart the server, Prime Performance Manager creates a new file.

Messages are archived by timestamp. To view archived messages, click a timestamp. All messages that were in the system log at the time specified in the timestamp are displayed. You might see an entry labeled, *messageLog-old* among a list of files that have timestamps in the filenames. A daily cron job creates the files with the timestamps. The cron job that runs at midnight, searches through the *messageLog.txt* and *messageLog-old.txt* files for all entries from the past day.

The *messageLog-old.txt* file exists only if the size of *messageLog.txt* exceeds the limit set by the ppm logsize command. Prime Performance Manager lists the contents of *messageLog-old.txt* because it could contain important data from the day the message log file rolled over.

To access the archived messages through the Prime Performance Manager GUI, from the System menu. choose **Messages**, then click **Archives**. Table 11-6 describes the archive message information.

Table 11-6 Archived Messages

Description	Information
Index	Message number Prime Performance Manager assigns to the message.
Time	Date and time the message was logged.
Type	Message type: • Action • Debug • Dump • Error • Info • SNMP • Trace
Source	Message source in the format *process.host.id*, where: • *process* is the process that logged the message. • *host* is the hostname of the process that logged the message. • *id* is a Prime Performance Manager ID that uniquely identifies the process that logged the message. This is helpful when two or more clients connected to the same Prime Performance Manager gateway are running on the same device.
Task	Task, or thread, that logged the message.
Message	Text of the message.