

# **Managing Gateways and Units Using the CLI**

The following topics tell you how to start, stop, and restart Prime Performance Manager gateways and units with parameters, and how to display their status and software versions:

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### **Root User Login**

Starting, stopping, or restarting Prime Performance Manager gateways and units requires you to log in as the root user.

To log in as the root user, enter:

login: root
Password: root-password

If you are already logged in, but not as the root user, use the su command to change your login to root:

# su

# Password: root-password



As the root user, you can harm your operating environment if you are not aware of the effects of the commands that you use. If you are an inexperienced UNIX user, limit your root user activities to the tasks described in this guide.

## **Command Summary**

You can use the following CLI commands with parameters to start and stop the Prime Performance Manager gateway and units:

ppm start gw—Starts all processes on the gateway.

ppm restart gw—Restarts all processes on the gateway.

```
ppm start unit—Starts all processes on the unit.

ppm restart unit—Restarts all processes on the unit.

ppmstart both—Starts all processes on the gateway and unit.

ppm restart both—Restarts all processes on the gateway and unit.

ppm stop gw—Stops all process on the unit.

ppm stop unit—Stops all process on the unit.
```

### **Starting Gateways and Units**

Before you start a Prime Performance Manager gateway or unit, verify that:

- You have IP connectivity to the Prime Performance Manager gateway and unit.
- The unit server has IP connectivity to the devices that you want to monitor.
- SNMP is enabled on each device.
- If you will run Y.1731 and Ethernet Flow Point reports, devices must have Telnet and SSH enabled.
- If you will run CSV-based reports, the device must be configured with Prime Performance Manager drop location and the same need to be updated in BulkStats.properties, which is located in /opt/CSCOppm-unit/properties/. For more information, see Setting Up Bulk Statistics Reports, page 7-36.

Prime Performance Manager includes a gateway and a unit component. You must start both components. If the gateway and unit are installed on the same machine, the ppm start command will start the gateway and unit automatically.



During Prime Performance Manager, the installer allows you to start the gateway and unit after Prime Performance Manager is installed. These procedures only need to be performed if you did not start the gateway and unit after installation, or you stopped the gateway and unit for other reasons.

Complete the following steps to start a Prime Performance Manager gateway and unit if the unit is installed on the same machine as the gateway.

- **Step 1** Log in as the root user. See Root User Login, page 2-1.
- **Step 2** To start the gateway and unit (if installed), enter:

/opt/CSCOppm-gw/bin/ppm start

The gateway components are started:

```
Starting Prime Performance Manager Gateway App Server...

-- Prime Performance Manager Gateway Launch
Server IS Started.

-- Prime Performance Manager Gateway Database
Server IS Started.

-- Prime Performance Manager Gateway Naming
Server IS Started.

-- Prime Performance Manager Gateway MessageLog
Server IS Started.

-- Prime Performance Manager Gateway DataServer
Server IS Started.

Prime Performance Manager Gateway JSP/WebServer
Server IS Started.
```

If a unit is installed on the same machine, the unit components are started:

```
Starting Prime Performance Manager Unit App Server...
-- Prime Performance Manager Unit Launch Server IS Started.
```

```
-- Prime Performance Manager Unit Database Server IS Started.

-- Prime Performance Manager Unit Naming Server IS Started.

-- Prime Performance Manager Unit MessageLog Server IS Started.

-- Prime Performance Manager Unit DataServer Server IS Started.

-- Prime Performance Manager Unit JSP/Web Server IS Started.

Prime Performance Manager Unit App Server IS Started.
```

The gateway web component is started and web URL is displayed:

```
Starting Prime Performance Manager Gateway Web Server On Port 4440...

-- Prime Performance Manager Gateway Web Server IS Started.

Connect Web Browser To Gateway:

http://gatewayhostname:4440
```

If any gateway or unit component is not started, a message similar to the following appears:

```
-- Prime Performance Manager Gateway Launch Server NOT Started.
```

The message can be displayed for any gateway or unit component. If it appears, review the sgmConsoleLog.txt to determine the cause and apply the appropriate fixes. sgmConsoleLog.txt is located in the /opt/CSCOppm-gw/logs/ or /opt/CSCOppm-unit/logs directories.

Complete the following steps to start a Prime Performance Manager unit installed on a machine separate from the gateway:

- **Step 1** Log into the unit server as the root user. See Root User Login, page 2-1.
- **Step 2** To start the unit, enter:

/opt/CSCOppm-unit/bin/ppm start

The unit components are started:

```
Starting Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit Launch Server IS Started.

-- Prime Performance Manager Unit Database Server IS Started.

-- Prime Performance Manager Unit Naming Server IS Started.

-- Prime Performance Manager Unit MessageLog Server IS Started.

-- Prime Performance Manager Unit DataServer Server IS Started.

-- Prime Performance Manager Unit JSP Server IS Started.

Prime Performance Manager Unit App Server IS Started.
```



The ppm start command starts the gateway and automatically starts the unit if it is installed on the same machine. This occurs regardless of whether you initiate the command from the gateway install directory (/opt/CSCOppm-gw/bin/) or the unit install directory /opt/CSCOppm-unit/bin/. If the gateway and unit are installed on the same machine and you want to start only the gateway, enter **ppm start gateway**. Similarly, if you want to start only the unit, enter **ppm start unit**.

### **Stopping Gateways and Units**

Complete the following steps to stop a Prime Performance Manager gateway and unit if the unit is installed on the same machine as the gateway:

- **Step 1** Log in as the root user. See Root User Login, page 2-1.
- **Step 2** To stop the gateway, enter:

```
/opt/CSCOppm-gw/bin/ppm stop
```

The gateway components are stopped:

```
Stopping Prime Performance Manager Gateway App
-- Prime Performance Manager Gateway App
Stopping Prime Performance Manager Gateway Launch
-- Prime Performance Manager Gateway Launch
Stopping Prime Performance Manager Gateway Web
-- Prime Performance Manager Gateway Web
Server...
Server Stopped.
```

If a unit is installed on the same server as the gateway, the unit components are stopped:

```
Stopping Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit App Server Stopped.

Stopping Prime Performance Manager Unit Launch Server...

-- Prime Performance Manager Unit Launch Server Stopped.
```

Depending on how quickly the gateway and unit can be shut down, you might see the following messages indicating additional time is needed to shut down the unit components:

```
Waiting for Prime Performance Manager Unit App Server to stop [10 more ] Waiting for Prime Performance Manager Unit App Server to stop [9 more ] Waiting for Prime Performance Manager Unit App Server to stop [8 more ] Waiting for Prime Performance Manager Unit App Server to stop [7 more ]
```



The ppm stop command stops the gateway and automatically stops the unit if it is installed on the same machine. This occurs regardless of whether you initiate the command from the gateway install directory (/opt/CSCOppm-gw/bin/) or the unit install directory /opt/CSCOppm-unit/bin/. If the gateway and unit are installed on the same machine and you want to stop only the gateway, enter **ppm stop gateway**. Similarly, if you want to stop only the unit, enter **ppm stop unit**.

Complete the following steps to stop a Prime Performance Manager unit installed on a machine separate from the gateway:

- **Step 1** Log in to the unit as the root user. See Root User Login, page 2-1.
- **Step 2** To stop the unit, enter:

```
/opt/CSCOppm-unit/bin/ppm stop
```

The unit components are stopped:

```
Stopping Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit App Server Stopped.

Stopping Prime Performance Manager Unit Launch Server...

-- Prime Performance Manager Unit Launch Server Stopped.
```

### **Restarting Gateways and Units**

Complete the following steps to start a Prime Performance Manager gateway:

- **Step 1** Log in as the root user. See Root User Login, page 2-1.
- **Step 2** To restart the gateway and unit (if installed), enter:

```
/opt/CSCOppm-gw/bin/ppm restart
```

First, the gateway components are stopped:

```
Stopping Prime Performance Manager Gateway App
-- Prime Performance Manager Gateway App
Server Stopped.

Stopping Prime Performance Manager Gateway Launch
-- Prime Performance Manager Gateway Launch
Stopping Prime Performance Manager Gateway Web
-- Prime Performance Manager Gateway Web
Server Stopped.
```

If a unit is installed on the same server as the gateway, the unit components are stopped:

```
Stopping Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit App Server Stopped.

Stopping Prime Performance Manager Unit Launch Server...

-- Prime Performance Manager Unit Launch Server Stopped.
```

Depending on how quickly the gateway and unit can be shut down, you might see the following messages indicating additional time is needed to shut down the unit components:

```
Waiting for Prime Performance Manager Unit App Server to stop [10 more] Waiting for Prime Performance Manager Unit App Server to stop [9 more] Waiting for Prime Performance Manager Unit App Server to stop [8 more] Waiting for Prime Performance Manager Unit App Server to stop [7 more]
```

#### Next, the gateway components are started:

```
Starting Prime Performance Manager Gateway App Server...

-- Prime Performance Manager Gateway Launch Server IS Started.

-- Prime Performance Manager Gateway Database Server IS Started.

-- Prime Performance Manager Gateway Naming Server IS Started.

-- Prime Performance Manager Gateway MessageLog Server IS Started.

-- Prime Performance Manager Gateway DataServer Server IS Started.

-- Prime Performance Manager Gateway JSP Server IS Started.

Prime Performance Manager Gateway App Server IS Started.
```

If a unit is installed on the same machine, the unit components are started:

```
Starting Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit Launch Server IS Started.

-- Prime Performance Manager Unit Database Server IS Started.

-- Prime Performance Manager Unit Naming Server IS Started.

-- Prime Performance Manager Unit MessageLog Server IS Started.

-- Prime Performance Manager Unit DataServer Server IS Started.

-- Prime Performance Manager Unit JSP Server IS Started.

Prime Performance Manager Unit App Server IS Started.
```

#### The gateway web component is started and web URL is displayed:

```
Starting Prime Performance Manager Gateway Web Server On Port 4440...
```

```
-- Prime Performance Manager Gateway Web Server IS Started.
Connect Web Browser To Gateway:
http://gatewayhostname:4440
```



The ppm restart command restarts the gateway and automatically restarts the unit if it is installed on the same machine. This occurs regardless of whether you initiate the command from the gateway install directory (/opt/CSCOppm-gw/bin/) or the unit install directory /opt/CSCOppm-unit/bin/. If the gateway and unit are installed on the same machine and you want to restart only the gateway, enter **ppm restart gateway**. Similarly, if you want to restart only the unit, enter **ppm restart unit**.

Complete the following steps to restart a Prime Performance Manager unit installed on a machine separate from the gateway:

- **Step 1** Log into the unit server as the root user. See Root User Login, page 2-1.
- **Step 2** To restart the unit, enter:

/opt/CSCOppm-unit/bin/ppm restart

The unit components are stopped:

```
Stopping Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit App Server Stopped.

Stopping Prime Performance Manager Unit Launch Server...

-- Prime Performance Manager Unit Launch Server Stopped.
```

Then the unit components are started:

```
Starting Prime Performance Manager Unit App Server...

-- Prime Performance Manager Unit Launch Server IS Started.

-- Prime Performance Manager Unit Database Server IS Started.

-- Prime Performance Manager Unit Naming Server IS Started.

-- Prime Performance Manager Unit MessageLog Server IS Started.

-- Prime Performance Manager Unit DataServer Server IS Started.

-- Prime Performance Manager Unit JSP Server IS Started.

Prime Performance Manager Unit App Server IS Started.
```

### **Displaying Gateway and Unit Status**

Use the ppm status command to view the status of a Prime Performance Manager gateways and units. Gateway and unit component status will be either running or not running. Should a component have a not running status, view the sgmConsoleLog.txt to determine the cause. sgmConsoleLog.txt is located in the /opt/CSCOppm-gw/logs/ or /opt/CSCOppm-unit/logs directories.

Complete the following steps to view the gateway and unit status:

- **Step 1** Log in as the root user or admin user. See Root User Login, page 2-1.
- **Step 2** To view the status of the gateway and unit, if the unit is installed on the same machine as the gateway, enter:

/opt/CSCOppm-gw/bin/ppm status

### The gateway status is displayed, for example:

```
______
Prime Performance Manager Gateway Version:
                                   1.4.0.6
Prime Performance Manager Gateway Build Date: Thu Mar 22 02:03 EST 2012
Prime Performance Manager Gateway Install Date: Fri Mar 23 04:49 EDT 2012
Prime Performance Manager Gateway IP Address: nnn.nnn.nnn
Prime Performance Manager Gateway SSL Support: Installed [Disabled]
______
  sgmMsgLogServer: 1.4.0.6Thu Mar 22 02:03 EST 2011
                1.4.0.6Thu Mar 22 02:03 EST 2011
  sqmDataServer:
______
Prime Performance Manager Gateway App Server IS Running.
    - Prime Performance Manager Gateway Database Server IS Running.
                                           Server
   -- Prime Performance Manager Gateway Naming
                                                  IS
                                         Server IS Running.
   -- Prime Performance Manager Gateway MessageLog
   -- Prime Performance Manager Gateway DataServer Server IS Running.
                                          Server IS Running.
   -- Prime Performance Manager Gateway JSP
   -- Prime Performance Manager Gateway Launch
                                          Server IS Running.
Last Restart:
   Thu Mar 22 04:51:47 EDT 2011
Linux Uptime:
16:31:23 up 329 days, 9:24, 1 user, load average: 1.12, 1.30, 1.28
Current Time: 2012/03/23 16:31:23 EST
If a unit is installed on the same machine, the unit status is displayed, for example:
______
```

```
Prime Performance Manager Unit Version:
                                     1.4.0.6
Prime Performance Manager Unit Build Date: Thu Mar 22 02:03 EST 2012
Prime Performance Manager Unit Install Date: Fri Mar 23 04:51 EDT 2012
Prime Performance Manager Unit IP Address: nnn.nnn.nnn
Prime Performance Manager Unit SSL Support: Installed [Disabled]
______
  samMsaLoaServer:
                  1.4.0.6 Thu Mar 22 02:03 EST 2012
  sqmDataServer:
                  1.4.0.6 Fri Mar 23 04:51 EDT 2012
______
Prime Performance Manager Unit App Server IS Running.
   -- Prime Performance Manager Unit Database
                                            Server IS Running.
   -- Prime Performance Manager Unit Naming
                                           Server IS Running.
   -- Prime Performance Manager Unit MessageLog Server IS Running.
   -- Prime Performance Manager Unit DataServer Server IS Running.
   -- Prime Performance Manager Unit JSP
                                            Server IS Running.
   -- Prime Performance Manager Unit Launch
                                            Server IS Running.
Last Restart:
   Thu Mar 22 02:03:47 EDT 2012
Linux Uptime:
16:31:30 up 329 days, 9:24, 1 user, load average: 1.17, 1.30, 1.28
Current Time: 2012/03/23 16:31:23 EST
```

Complete the following steps to view the status of a unit installed on a machine separate from the gateway:

- **Step 1** Log into the unit server as the root or admin user. See Root User Login, page 2-1.
- **Step 2** To view the status of the unit, enter:

/opt/CSCOppm-unit/bin/ppm status

#### The unit status is displayed, for example:



The ppm status command provides the gateway and unit status if the unit is installed on the same machine. This occurs regardless of whether you initiate the command from the gateway install directory (/opt/CSCOppm-gw/bin/) or the unit install directory /opt/CSCOppm-unit/bin/. If the gateway and unit are installed on the same machine and you want to view only the gateway status, enter **ppm status gateway**. Similarly, if you want to view only the unit status, enter **ppm status unit**.

### **Displaying Gateway and Unit Software Versions**

Complete the following steps to view the Prime Performance Manager software version installed on gateways and units:

- Step 1 Log in as the root user or admin user. See Root User Login, page 2-1.
- **Step 2** To view the Prime Performance Manager version installed on the gateway and unit, if the unit is installed on the same machine as the gateway, enter:

/opt/CSCOppm-gw/bin/ppm version

The gateway version details are displayed, for example:

The gateway status is displayed, for example:

```
Prime Performance Manager Gateway Version: 1.4.0.6

Prime Performance Manager Gateway Build Date: Thu Mar 22 02:03 EST 2012

Prime Performance Manager Gateway Install Date: Fri Mar 23 04:49 EDT 2012

Prime Performance Manager Gateway IP Address: nnn.nnn.nnn

Prime Performance Manager Gateway SSL Support: Installed [Disabled]

sgmMsgLogServer: 1.4.0.6Thu Mar 22 02:03 EST 2011

sgmDataServer: 1.4.0.6Thu Mar 22 02:03 EST 2011
```

Current time is: 2012/03/23 17:42:57 EST

If the unit is installed on the same machine, the unit version details are displayed, for example:

```
Prime Performance Manager Unit Version: 1.4.0.6
Prime Performance Manager Unit Build Date: Thu Mar 22 02:03 EST 2012
Prime Performance Manager Unit Install Date: Fri Mar 23 04:51 EDT 2012
Prime Performance Manager Unit IP Address: nnn.nnn.nnn
Prime Performance Manager Unit SSL Support: Installed [Disabled]
```

```
sgmMsgLogServer: 1.4.0.6 Thu Mar 22 02:03 EST 2012
sgmDataServer: 1.4.0.6 Fri Mar 23 04:51 EDT 2012
Current time is: 2012/03/23 17:42:58 EST
```

To view the Prime Performance Manager version on a unit installed on a machine separate from the gateway:

- **Step 1** Log into the unit server as the root or admin user. See Root User Login, page 2-1.
- **Step 2** To view the Prime Performance Manager version installed on the unit, enter:

/opt/CSCOppm-unit/bin/ppm version

The unit Prime Performance Manager version is displayed, for example:

```
Prime Performance Manager Unit Version: 1.4.0.6
Prime Performance Manager Unit Build Date: Thu Mar 22 02:03 EST 2012
Prime Performance Manager Unit Install Date: Fri Mar 23 04:51 EDT 2012
Prime Performance Manager Unit IP Address: nnn.nnn.nnn
Prime Performance Manager Unit SSL Support: Installed [Disabled]

sgmMsgLogServer: 1.4.0.6 Thu Mar 22 02:03 EST 2012
sgmDataServer: 1.4.0.6 Fri Mar 23 04:51 EDT 2012

Current time is: 2012/03/23 17:42:58 EST
```



The ppm version command provides the Prime Performance Manager gateway and unit version if the unit is installed on the same machine. This occurs regardless of whether you initiate the command from the gateway install directory (/opt/CSCOppm-gw/bin/) or the unit install directory /opt/CSCOppm-unit/bin/. If the gateway and unit are installed on the same machine and you want to view only the Prime Performance Manager version installed on the gateway, enter **ppm version gateway**. Similarly, if you want to view only the Prime Performance Manager version installed on the unit status, enter **ppm version unit**.

### **Limiting Client Access to Servers**

Following Prime Performance Manager installation, all client IP addresses can connect to the gateway. You can limit client access to the server by creating the ipaccess.conf file and entering the client IP addresses that want to give access to the gateway. Prime Performance Manager allows connections from only those clients and the local host.

If the file exists but is empty, Prime Performance Manager allows connections only from the local host. (Prime Performance Manager always allows connections from the local host.)

Complete the following steps to create the ipaccess.conf file and add the client IP addresses that you want to allow access to the gateway:

- **Step 1** Log into Prime Performance Manager server as the root user.
- **Step 2** Change to the bin directory:
  - cd /opt/CSCOppm-gw/bin
- **Step 3** Create the ipaccess.conf file:
  - To create the ipaccess.conf file and add a client IP address to the list, enter:
    - ./ppm ipaccess add
  - To create the ipaccess.conf file and open the file to edit it directly, enter:
    - ./ppm ipaccess edit

By default, the ipaccess.conf file is located in Prime Performance Manager /opt/CSCOppm-gw/etc installation directory. If you installed Prime Performance Manager in a different directory, then the default directory is located in that directory.

- **Step 4** Add the ipaccess.conf entries:
  - Begin comment lines with a pound sign (#).
  - Lines without a pound sign are Prime Performance Manager client IP addresses. Enter one address per line.
  - Wildcards (\*) are allowed, as are ranges (for example, 1-100). For example, if you enter the address \*.\*.\*, all clients can connect to Prime Performance Manager server.
- **Step 5** After you create the ipaccess.conf file, you can use the full set of Prime Performance Manager ipaccess keywords to work with the file. The keywords are:
  - clear—Remove all client IP addresses from the ipaccess.conf file and allow connections from any Prime Performance Manager client IP address.
  - list—List all client IP addresses currently in the ipaccess.conf file. If no client IP addresses are listed (that is, the list is empty), connections from any Prime Performance Manager client IP address are allowed.
  - rem—Remove the specified client IP address from the ipaccess.conf file.
  - sample—Print out a sample ipaccess.conf file.

For more information, see ppm ipaccess, page B-35.

Step 6 After ipaccess.conf entries are complete, you must restart the gateway for the changes to take effect. See Restarting Gateways and Units, page 2-5.