HP Performance Agent

For the Solaris Operating System

Software Version: 5.00

Installation and Configuration Guide

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Introducing Performance Agent

HP Performance Agent captures performance, resource, and transaction data from your Solaris system. Using minimal system resources, the software continuously collects, summarizes, time stamps, and detects alarm conditions in current and historical resource data across your system. You can analyze the data using spreadsheet programs, such as HP Performance Manager, or third-party analysis products. Also, Performance Agent provides data access to Performance Manager and sends alarm notifications to HP Network Node Manager and HP Operations Manager.

The name Performance Manager refers only to versions 4.00 and later. The name Performance Manager 3.xx refers to the product that was formerly known as PerfView.

Performance Agent uses data source integration (DSI) technology to receive, alarm on, and log data from external data sources such as applications, databases, networks, and other operating systems.

The comprehensive data logged and stored by Performance Agent allows you to:

- Characterize the workloads in the environment.
- Analyze resource usage and load balance.
- Perform trend analyses on historical data to isolate and identify bottlenecks.
- Respond to error conditions.
- Perform service-level management based on transaction response time.
- Perform capacity planning.
- Solve system management problems before they arise.

For a comprehensive description of Performance Agent, see the *HP Performance Agent for UNIX User's Manual*.

Before using HP Performance Agent, you must review and accept the license terms and conditions detailed in the readme file available in `/<directory>/<os>/README`, where <*directory*> is your optical media directory.

Installation Requirements

Before installing Performance Agent, make sure that your system meets the requirements described in this section. Certain system and configuration prerequisites are necessary for Performance Agent to operate properly on your system.

Hardware

The supported hardware platforms are listed below:

- Sun SPARC
- x86
- x86_64

Supported Architecture and Operating Systems

The following table lists the supported architecture and operating system versions:

Architecture	Operating System
On 32-bit systems (x86)	• Solaris 10.x Update-5, Solaris 10.x Update-6
On 64-bit systems (x86_64)	• Solaris 10.x Update-5, Solaris 10.x Update-6
On SPARC	• Solaris 9.x • Solaris 10.x Update-5, Solaris 10.x Update-6

Performance Agent supports the LDOMS and Zones (Global and Non-Global) virtual technologies. Performance Agent is supported on Sparse root and Whole root native zones as well.

- Performance Agent installed on Solaris OS (Update 5) on Logical Domains (LDOMs) will not be able to collect disk metrics (BYDSK class of metrics). This problem was resolved in Solaris 10 Update-6 (October 2008) release.
- The minimum support for BYLS class on Solaris 10 is provided in the Update-5 (March 2008) release.

Software

- Performance Agent requires the Sun Solaris 10 operating environments or later for x86.
- It is recommended to have at least the “End User System Support” level of operating system installed on your Sun system. If the “Core System Support” level of operating system is installed on your system, you have to additionally install the following two operating system packages.
  - SUNWlibC
  - SUNWlibms

You can determine which packages are installed by using the `pkginfo` command:

`pkginfo SUNWlibC SUNWlibms`

If the command returns:

```
ERROR: information for "SUNWlibC" was not found
system      SUNWlibms      Sun Workshop Bundled shared libm
```

You have to install the appropriate package (SUNWlibC). The packages can be found on the Sun Solaris distribution media.

Performance Agent is not cluster aware and in the Sun cluster environment, Performance Agent needs to be installed on each individual cluster nodes.

Solaris Patch and Kernel Setting Requirements

Make sure the following Solaris patches (or higher) are available before you install HP Performance Agent:

Solaris Version	Architecture	Patch
9	x86/x64	• 111711 SunOS 5.9 32-bit shared library patch for C++ • 112963 Linker Patch (32-bit) • 111722 SunOS 5.9 Math Library libm patch
	SPARC	• 111712 SunOS 5.9 64-bit shared library patch for C++ • 112963 Linker Patch (32-bit) • 111722 SunOS 5.9 Math Library libm patch
10	x86/x64	• 118345 SunOS 5.10_x86: ld & libc.so. • 1 119964 SunOS 5.10_x86 Shared library patch for C++_x86 • 120754 SunOS 5.10_x86 libmtsk
	SPARC	• 117461 Linker • 120753 libmtsk • 119963 SunOS 5.10: Shared library patch for C++

Set the following minimum kernel parameter values for Solaris 9:

- semsys:seminfo_semmni=30
- semsys:seminfo_semmns=200
- semsys:seminfo_semmsl=100

Disk Space

Performance Agent installs in the `/opt/OV/ and /opt/perf/` directories and creates log and status files in the `/var/opt/OV/ and /var/opt/perf/` directories.

- For first time installation of Performance Agent, 100 MB of disk space is required in the `/opt/OV/ and /opt/perf/` directories.
- For Performance Agent databases and status files, allow for 125 MB of disk space in the `/var/opt/OV/ and /var/opt/perf/` directories.

If you do *not* have enough space in `/opt/perf` and/or `/var/opt/perf` directories, you must install Performance Agent on symbolic links. See Installing Performance Agent on Symbolic Links on page 15.

For a description of how the `parm` file is used to limit and configure log file data storage, see the “parm File” section in Chapter 2 of your *HP Performance Agent for UNIX User’s Manual*.

Communication Protocols

Performance Agent supports only the HTTP(S) 1.1 communication protocol.

If you are installing Performance Agent on a system which has HP Software products such as HP Operations Agent, HP Operations Manager Unix Management Server, HP Performance Manager, HP Performance Insight and OV Internet Service, restart the products after Performance Agent installation is complete.

- If you are adding new hardware or making any configuration changes, stop scopeux and restart for the changes to take effect.
- The default OS daemons and services should be enabled and running.

Install or Upgrade Procedures

Performance Agent comes on a DVD-ROM installation media. The size of the product is approximately 70 MB, including the product documentation.

If you previously installed a version of Performance Agent or GlancePlus on the system, stop any performance tools or processes that might be running. For instructions see, Stopping Active Performance Tools or Processes on page 13. For installation instructions, refer to the section, Installing Performance Agent on page 14.

If you are also running the GlancePlus product on your system, be sure to update GlancePlus to the same release version as Performance Agent. Both Performance Agent and GlancePlus must always be the same version.

Stopping Active Performance Tools or Processes

1. Log in as user **`root`**.
2. Run `perfstat` to check for active performance tools by typing:

   `/opt/perf/bin/perfstat`

   If `perfstat` reports any active performance tools such as GlancePlus, stop them. (Make sure that users have exited these tools before doing so.)
3. If a previously installed version of Performance Agent is running, stop the process by typing:

   `/opt/perf/bin/mwa stop`

Customized configuration files such as the `parm`, `alarmdef` and `ttd.conf` as well as any customized log files are *not* overwritten by the new installation. The new configuration files are installed in the `/opt/perf/newconfig` directory.

4. If you stop `ttd`, you must also stop any ARM-instrumented applications that are running before you restart `ttd` and Performance Agent processes. Run `perfstat` again to ensure that no performance tools or processes are active. When all tools or processes have been stopped, proceed with the installation.

Installing Performance Agent

While installing Performance Agent and upgrading Performance Agent to the current version, the data communication protocol to be used is set to HTTP. For a detailed description of `install.ovpa` options, see install.ovpa Script on page 17.

If you have HP Operations Manager installed on your system, see Installing Performance Agent with Operations Manager Installed on Your System on page 16.

The daemons used for HTTP data communication are always installed and active on your system.

To install Performance Agent:

1. Log in as user **`root`**.
2. Insert your installation DVD-ROM into the drive. The DVD-ROM is automatically mounted on Sun Solaris systems.
3. Change to the DVD-ROM directory by typing:

   `cd /`*<directory>*

   where <*directory*> is your DVD-ROM directory.
4. Type **`ls`** to verify that you are in the correct directory. You will see the `install.ovpa` script, the `readme.ovpa` file, and the `paperdocs` and `rpmtools` directory listed on the screen.
5. Run the install script.

   To install using the HTTP communication protocol, type:

   `./install.ovpa`

   The `install.ovpa` script checks for Operations Manager 7.xx agent installed on your system as described in Installing Performance Agent with Operations Manager Installed on Your System on page 16.

The `install.ovpa` script automatically starts all Performance Agent processes in its configured communication mode. If you do *not* want Performance Agent to start automatically, run the install script with the option `-R`. See The install.ovpa Script on page 17 for a detailed description of

`install.ovpa` options. The Performance Agent processes are also started or stopped automatically if you reboot or shutdown. See Starting and Stopping Performance Agent on page 21.

6 Exit the DVD-ROM directory by typing:

```
cd /
```

7 You can unmount the DVD-ROM by typing:

```
eject
```

Performance Agent installation is now complete. Go to Chapter 2, Starting and Running HP Performance Agent, for details on other tasks you need to perform to get Performance Agent up and running.

For instructions to install HP Operations Agent, see the Installation Guide for HP Operations Agent available at the following URL:

http://h20230.www2.hp.com/selfsolve/manuals

Installing Performance Agent on Symbolic Links

If you do *not* have enough space in `/opt/OV/`, `/opt/perf`, `/var/opt/perf`, or `/var/opt/OV/` directories, select an alternative directory (or directories) and symbolically link `/opt/OV/`, `/opt/perf`, `/var/opt/perf`, or `/var/opt/OV/` to these directories.

For example:

`ln -s /`*<dir>*`/var/opt/perf /var/opt/perf`

and/or

`ln -s /`*<dir>*`/opt/perf /opt/perf`

where <*dir*> stands for directory of your choice. During the installation process, the `install.ovpa` script finds symbolic link(s) and will continue with the installation, showing on-screen message(s):

```
NOTE: Found symbolic link for /opt/perf -> /<dir>/opt/perf
Installation will continue on this symbolic link
```

```
NOTE: Found symbolic link for /var/opt/perf -> /<dir>/var/opt/
perf
Installation will continue on this symbolic link
```

For more information and specific details about this version of Performance Agent, see the *Release Notes* available in the HP Software Product Manuals doc server web site **http://h20230.www2.hp.com/selfsolve/manuals**.

Installing Performance Agent with Operations Manager Installed on Your System

While installing Performance Agent, the data communication protocol used is set to HTTP.

See install.ovpa Script on page 17 for a detailed description of `install.ovpa` options.

The presence of Operations Manager 8.xx agent on your system does not affect the default installation behavior of Performance Agent. During first time installation of Performance Agent on systems that have Operations Manager 8.xx agent installed, Performance Agent is started in the HTTP mode. If you are upgrading, Performance Agent is started in the HTTP mode. For more information on how Performance Agent is installed, see Installing Performance Agent on page 14.

Deploying Performance Agent Using Operations Manager

If you are using HP Operations Manager for UNIX 8.x, HP Operations Manager for UNIX 9.0, or HP Operations Manager for Windows 8.10, you can deploy HP Performance Agent from the management server to a Windows managed node.

For details on deploying Performance Agent from the HP Operations Manager for UNIX mangement server see *HP Performance Agent Deployables for the HP-UX 11i v3, Linux 2.6 (RHEL 5.3 x64) and Solaris Operating Systems for HP Operations Manager for UNIX 8.x and 9.0*.

For details on deploying Performance Agent from the HP Operations Manager for Windows mangement server see the HP Operations Manager for Windows *Online Help*.

install.ovpa Script

To install Performance Agent, you must run the `install.ovpa` script. This section describes the installation script command line options, which can be used for more advanced installations. The syntax of the command is as follows:

`install.ovpa [-a admin] [-hR]`

The command line options have the following meaning:

`-a admin`	Use `admin` file for the `pkgadd`. By default the script creates and uses its own `admin` file. See *admin(4)* for more details.
`-h`	Display this message and exit.
`-R`	Do *not* start Performance Agent upon successful installation. By default, Performance Agent is automatically started.

All required product packages are installed by default.

Removing Performance Agent

If you need to remove Performance Agent from a system, use the `ovpa.remove` script that is in the `/opt/perf/bin/` directory. However, before removing Performance Agent, make sure you archive any log files that were created. These files contain performance data for that system and can be used to extract or view data at a later time.

To uninstall Performance Agent from a system, do the following:

1. Log in as user **`root`**.
2. Change the directory path by typing:

   `cd /opt/perf/bin/`

3. Type **`ls`** to verify that the `ovpa.remove` script is available in this directory.
4. Run the uninstall script.

   To uninstall, type:

   `./ovpa.remove`

   A message displays, as follows:

   `"Do you want to remove the selected packages <y/n>?"`

   You need to confirm if you want to remove the packages. Answer **`y`** (yes) to confirm that you want to remove the packages.

   A new message displays, as follows:

   `"Do you want to remove OVPA configuration and logfiles in the /var/opt/perf/datafiles and /var/opt/perf directory?"`

   You need to confirm if you want to remove the Performance Agent configuration and logfiles. Answer **`N`** (no) if you want to keep the configuration and log files at the original location.

Note that these files will *not* be overwritten by a new Performance Agent installation. The new configuration files are uploaded to the `/opt/perf/newconfig` directory.

The script supports following command line options for a more flexible product removal. The syntax of the command is as follows:

ovpa.remove [-fhn] [-a admin]

`-f`	Force removal. Do not prompt for confirmation before removing the product (non-interactive mode).
`-a admin`	Use `admin` file for the `pkgrm`. By default the script creates and uses its own `admin` file. See *admin(4)* for more details.
`-h`	Help: Displays this usage message.
`-n`	Do not remove. Only display the removal parameters and exit.

It is possible that some product packages may remain installed on the system. If those packages are shared across other HP Software products and are required by other tools, then they will be removed only when the last tool requiring them is also removed.

2 Starting and Running HP Performance Agent

To log data from other sources using data source integration (DSI), read the *HP Performance Agent for UNIX Data Source Integration Guide*.

Starting and Stopping Performance Agent

When installation is complete, HP Performance Agent can be started. If you ever need to stop, start, or restart HP Performance Agent, the ovpa and mwa scripts let you stop or restart currently running processes.

It is recommended that you use the `ovpa` script to enable Performance Agent to use the HTTP data communication protocol.

The following table lists the different services that are started for the HTTP protocol.

Table 1

Services started for HTTP protocol

`scopeux`

`coda`

`perfalarm`

`midaemon`

Services started for HTTP protocol

ttd

ovc

ovbbccb

Before you start Performance Agent, check to see if any processes are running by typing:

/opt/perf/bin/perfstat

Using the ovpa or mwa script

To start Performance Agent and its processes using ovpa or mwa:

1. Log in as **root**.
2. Type: **/opt/perf/bin/ovpa start** for HP Performance Agent
   /opt/perf/bin/mwa start for mwa

   The ovpa start or mwa start script starts Performance Agent and all its processes, including the scopeux (data collector), midaemon (measurement interface daemon), ttd (transaction tracking daemon), coda, ovc, ovbbccb and the alarm generator. As the script executes, the status of the processes that are started is displayed on the screen.

You can stop Performance Agent processes while they are running and restart them using the ovpa script or mwa script and appropriate options.

- ovpa stop or mwa stop stops all Performance Agent processes except ttd (the transaction tracking daemon), ovc and ovbbccb. These processes must always be left running. If Operations Manager agent is running on the system, ovpa stop does not stop the coda daemon.

If you must stop ttd, any ARM-instrumented applications that are running must also be stopped before you restart ttd and Performance Agent processes.

- The command ovpa stop scope stops scope, and it also stops midaemon if no other application is attached to midaemon.

Individual components can be reinitialized as well with the `ovpa restart` or `mwa restart` option. Changes to configuration files will *not* take effect on your system unless the corresponding process is restarted.

- `ovpa restart server` or `mwa restart server` causes `coda` to stop and then start, temporarily disabling alarming and access for clients such as Performance Manager, and rereads the `datasources` file. It also stops and then restarts the `perfalarm` process and rereads the `alarmdef` file.
- `ovpa restart` or `mwa restart` causes `scopeux` and the server processes to temporarily stop and then start. It reads the `parm` file as well as forces the transaction daemon `ttd` to reread its configuration file `ttd.conf`.
- `ovpa restart alarm` or `mwa restart` alarm causes the `perfalarm` process to temporarily stop and then start and reread the `alarmdef` file, so that if you have made changes to the file, the new alarm definitions will take effect without restarting all Performance Agent processes. This action does *not* disrupt any other processes.

Starting and Stopping Automatically

The process of starting Performance Agent automatically whenever the system reboots and to stop when the system shuts down is controlled by the file `/etc/init.d/ovpa`.

To disable Performance Agent to start or stop automatically, edit the file `/etc/default/ovpa` and change the line `MWA_START=1` to `MWA_START=0`. For more information about the `/etc/default/ovpa` file, see The /etc/default/ovpa File on page 23.

The files `/etc/init.d/ovpa` as well as `/etc/default/ovpa` are removed when Performance Agent is removed from a system and are *not* overwritten when Performance Agent is patched or updated.

The /etc/default/ovpa File

The `/etc/default/ovpa` file is available with Performance Agent. The file contains various environment variables that control the behavior of Performance Agent when starting it. The file is a source file for the following scripts:

- `/opt/perf/bin/ovpa` Performance Agent control script

- `/etc/init.d/ovpa` Performance Agent auto-start script

The file is removed only when Performance Agent is removed from a system and is *not* overwritten when Performance Agent is updated. When Performance Agent is updated, a copy of the default `/etc/default/ovpa` file is left in the `/opt/perf/newconfig` directory under the name `ovpa.default` so that your customized copy does *not* get affected.

The environment and shell variables that can be modified to change the default behavior of Performance Agent are listed below.

- `MWA_START` controls the auto-start of Performance Agent whenever your system reboots. The variable can have one of the following values:

0 do *not* start Performance Agent at the system boot

1 start Performance Agent at the system boot

- `The MWA_START_COMMAND` contains a variable that is used to start Performance Agent whenever your system reboots. Normally, the variable is set to `/opt/perf/bin/mwa start`.

Status Checking

Several status files are created in the `/var/opt/perf/` and `/var/opt/OV/` directories when Performance Agent is started. You can check the status of all or some Performance Agent processes using the `perfstat` command.

The following status files contain diagnostic information you can use to troubleshoot problems that may arise with the Performance Agent processes.

```
/var/opt/perf/status.scope
/var/opt/perf/status.perfalarm
/var/opt/perf/status.ttd
/var/opt/perf/status.mi
/var/opt/OV/log/coda.txt
```

Every time the Performance Agent process writes a message to its status file, it checks to see if the file is larger than one MB. If it is, the file is renamed to `status.filename.old` and a new status file is created.

Examples Directory

The `/opt/perf/examples` directory contains examples of configuration files, syntax files, and sample program files that can be used to customize your HP Performance Tools. For example, the `/opt/perf/example/ovpaconfig/` subdirectory contains sample alarm definitions and examples of `parm` file application-specific parameters. For more information, see the `/opt/perf/examples/README` file.

Communicating Across Firewall

A firewall can be defined as a method for filtering the flow of data between one network and another. Performance Agent now supports HTTP 1.1 based communications interface for data access between clients such as Performance Manager and Reporter and server applications, in addition to the previously supported communication mechanism through a packet-filtering network firewall.

Performance Agent supports certificate-based secure (HTTPS) data communication only in the HP Operations Manager 8.xx environment. For more information, see Using Certificates on page 33.

The HTTP based interface is flexible, because it can use proxies, requires fewer ports and is firewall friendly.

The following section explain how to configure HTTP communication across a firewall:

- Communicating in the HTTP Environment

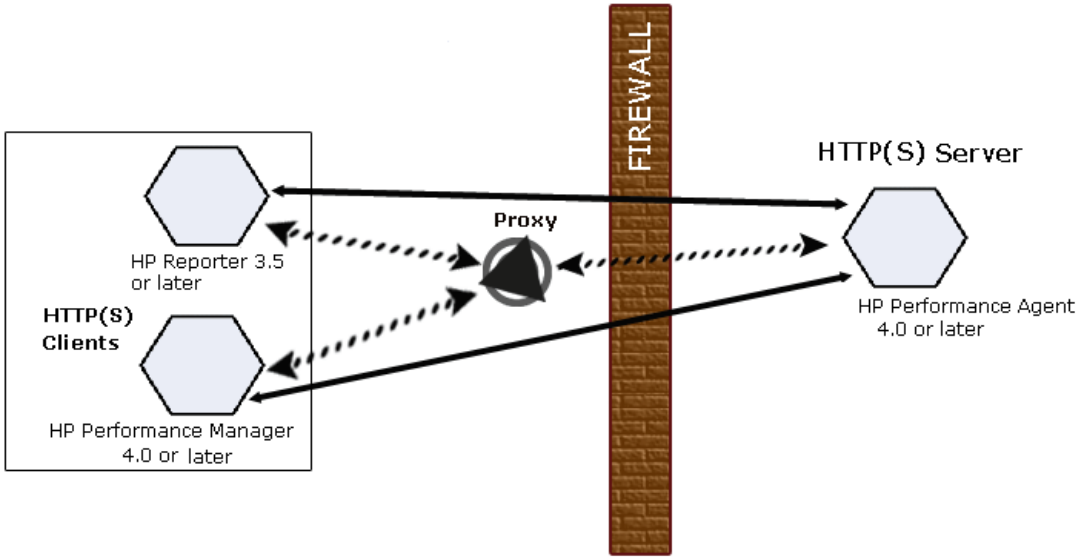
The name Performance Manager 3.xx refers to the product that was formerly known as PerfView.

Communicating in the HTTP Environment

It is important to know which system initiates the communication (client) and which receives communication requests (server), so that the firewall rules can be set up. In a typical remote communication, a client, using the source port, connects to a server that is listening on the destination port on a remote system.

The following figure shows how Performance Agent communicates with Reporter (version 3.50 or later) and Performance Manager (version 4.00 or later) through a firewall. Performance Agent is an HTTP or HTTPS server. Reporter and Performance Manager 4.xx are HTTP clients. Performance Manager 5.00 can be an HTTP or HTTPS client. If an HTTP proxy is used, Reporter and Performance Manager communicate with Performance Agent through the proxy.

Figure 1



Configure Performance Agent Ports

You can configure Performance Agent ports in a firewall environment in the following ways:

On a Performance Agent system using BBC5, by default, the BBC communication broker uses port 383 and `coda` uses a dynamically allocated port.

Configure Port Settings for the BBC Communication Broker

You can configure the port settings of the default port used by the BBC communication broker. Use the `ovconfchg` command to change the port settings on the Performance Agent system. You can use one of the following options:

— **`ovconfchg -ns bbc.cb -set SERVER_PORT <`***`port`***`>`**

— **ovconfchg -ns bbc.cb.ports -set PORTS <*domain*>:<*port*>**

Example: **ovconfchg -ns bbc.cb.ports -set PORTS xyz.abc.com:50383**

The second option is the preferred way of changing ports.

Restart ovpa using the following command:

```
ovpa restart server
```

Configure Two-Port Communication

By default, `coda` daemon uses a dynamically chosen second port, in addition to port 383 used by the BBC communication broker. You can configure the port settings of `coda` to listen at a port of your choice using the `ovconfchg` command. Type the following commands:

```
ovconfchg -ns coda.comm -set SERVER_PORT <portnumber>

ovpa restart server
```

Using a dynamic port when connecting to Performance Agent remotely through a firewall can be difficult, because you may not know which firewall ports to open.

Configure Single-Port Communication

On the Performance Agent system, the BBC communication broker uses port 383 and `coda` uses a port that is dynamically allocated. You can configure the port settings for `coda` to share the same port used by the communication broker using the `ovconfchg` command. Type the following commands:

```
ovconfchg -ns coda.comm -set SERVER_BIND_ADDR localhost

ovpa restart server
```

To enable two-port communication from single-port communication, type the following command:

```
ovconfchg -ns coda.comm -set SERVER_BIND_ADDR
```

Verify Port Settings

To verify the port settings, type the following command:

```
perfstat -d
```

The output displays the following information:

- Port number of the port used by `Coda`
- Port number of the port used by `BBC communication broker`
- The port settings configured
- Whether secure communication is enabled
- Whether `coda` metric collection is enabled

For example:

```
Datacomm configuration :
------------------------
 Coda Port                            49552 (Dynamic)
                                      Two port Communication
 BBC communication broker port             383
 SSL security                              NONE
 Coda Metric Collection(Prospector)        Disabled
```

Configure HTTP Clients in a Firewall Environment

In the following ways configure HTTP clients in a firewall environment:

To access data from Performance Agent nodes, only one port needs to be opened on the HTTP server (Performance Agent) side.

Configuring HTTP Clients (Reporter/Performance Manager) with HTTP Proxy

It is recommended that you use HTTP proxies when communicating through a firewall. This simplifies the configuration by using proxies that are often already in use in your environment. The firewall must be open for exactly one port if proxies are to be used in both directions. To access data collected by Performance Agent, ports for the HTTP server (Performance Agent) and the HTTP client (Reporter and Performance Manager) must be opened.

It is recommended that you do not change the default 383 port.

When an HTTP proxy is used, Reporter and/or Performance Manager for Windows and UNIX need to be configured to specify the proxy to be used to contact Performance Agent.

To configure Performance Manager versions 5.00 and later, and Reporter 3.7x, type the following command,

ovconfchg -ns bbc.http -set PROXY proxy:port+(a)-(b)

The variables *a* and *b* are lists of hostnames, networks, and IP addresses that apply to the proxy. Multiple proxies may be defined for one PROXY key using the ";" or "," delimiter. "–" before the list indicates that those entities do not use this proxy, "+" before the list indicates that those entities do use this proxy. The first matching proxy is used.

To configure Reporter versions 3.60 and earlier, and Performance Manager 4.xx,

edit the `/var/opt/OV/conf/BBC/default.txt` configuration file.

In the `[DEFAULT]` section of the `default.txt` file, locate the lines that relate to the `PROXY` and set the `PROXY` parameter as follows.

PROXY web-proxy.hp.com:8088-(localhost, *.hp.com) + (*)

In this example, the proxy `web-proxy` will be used with port 8088 for every server (*) except requests for the local machine (localhost) and requests internal to HP (matching *.hp.com, for example **www.hp.com**.

Configuring HTTP Clients (Reporter/Performance Manager) without HTTP Proxy

If HTTP proxies are not available, additional configuration settings are required on the HTTP clients (Reporter and Performance Manager system).

If Reporter and Performance Manager for Windows are installed on the same system and both access Performance Agent in parallel, you can specify a port range as described in this section. If they are running on different systems, you can specify a single port for each. Depending on the versions of Performance Manager and Reporter you are using select from the following options:

Configure Performance Manager 5.00 and later, and Reporter 3.7x as follows:

Type the following command,

ovconfchg -ns bbc.http -set CLIENT_PORT *<port range>*

In this instance <*port range*> is the range of ports you want to use.

Example:

ovconfchg -ns bbc.http -set CLIENT_PORT 14000-14003

Configure Reporter versions 3.60 and earlier, and Performance Manager 4.xx as follows:

Edit the `/var/opt/OV/conf/BBC/default.txt` file as follows.

1. Locate the lines that apply to `CLIENT_PORT` and uncomment the line `;CLIENT_PORT =`.
2. Specify the port range for the `CLIENT_PORT` parameter. Example:

   `CLIENT_PORT =` *<port range>*

   In this instance *<port range>* is the range of ports you want to use. Example:

   `CLIENT_PORT = 14000-14003`

Verify Firewall Configuration

To verify your configuration, use the command:

ovcodautil -ping -n <*system name***>**

The output of this command indicates the status of your communication settings.

Configuring Systems with Multiple IP Addresses

If your environment includes systems with multiple network interfaces and IP addresses and you want to use a dedicated interface for the HTTP-based communication, you can use the parameters `CLIENT_BIND_ADDR` and `SERVER_BIND_ADDR` to specify the IP address that should be used.

- If you have multiple network interfaces and IP addresses on the Performance Agent (Server) system, specify the `SERVER_BIND_ADDR` parameter as follows:

  ovconfchg -ns bbc.http -set SERVER_BIND_ADDR <IP Address>

- If you have multiple network interfaces and IP addresses on the Performance Manager 5.00 (client) system, specify the `CLIENT_BIND_ADDR` parameter as follows:

  ovconfchg -ns bbc.http -set CLIENT_BIND_ADDR <IP Address>

- If you have multiple network interfaces and IP addresses on the Reporter/ Performance Manager 4.xx system, specify the `CLIENT_BIND_ADDR` parameter.

  Edit the `/var/opt/OV/conf/BBC/default.txt` file as follows:

  — Locate the lines that apply to `CLIENT_BIND_ADDR` and uncomment the line

  ```
  ;CLIENT_BIND_ADDR =
  ```

  — Specify the IP address for the `CLIENT_BIND_ADDR` parameter.

Configuring Secure Communication

Performance Agent supports certificate-based secure communication and client authentication based communication.

Using Certificates

Performance Agent supports certificate-based secure data communication only in the HP Operations Manager 8.xx environment.

To configure secure communication on your Operations Manager setup, see the *HP Operations Manager for UNIX Firewall Concepts and Configuration Guide*. For more information on Operations Manager 8.xx HTTPS agent, see the *HP Operations Manager HTTPS Agent Concepts and Configuration Guide*.

If you already configured HTTPS communication in the Operations Manager 8.xx environment, make the following changes to configure secure communication between Performance Agent and Performance Manager 5.00.

Reporter and Performance Manager 4.xx do not support certificate-based secure communication.

On the Performance Agent system, set `SSL_SECURITY` to `REMOTE` for `coda`. Type the following commands:

```
ovconfchg -ns coda -set SSL_SECURITY REMOTE

ovcodautil -config
```

Using Client Authentication

Performance Agent enables optional authentication of client connections from products such as, Performance Manager or Reporter (Service Reporter). The authentication capability allows you to specify, for a given Performance Agent instance, which hosts are allowed to make client connections to that instance.

The Client Authentication feature enables/disables connections from any version of the Performance Manager and Reporter clients. Your client software does *not* need to be updated for you to take advantage of this feature.

For authorized clients the authentication process is transparent, their client connection proceeds as it has with previous versions of Performance Agent. Unauthorized clients receive a message indicating denial of service, for example:

```
Could not connect to Performance Agent data source on host
<hostname>.
```

Enabling Authentication with the authip File

Authentication is enabled by the presence of a file called `authip`. On systems where HTTP communication is enabled, the `authip` file exists in the `/var/opt/OV/conf/perf/` directory. The `authip` file lists hosts from which client connections are to be permitted.

- If the `authip` file exists in the default directory, its contents determine which hosts are permitted client connections. Clients running on the same host as the Performance Agent instance are automatically authenticated, which means the clients do *not* need an entry. A zero-length `authip` file dictates that only clients running on the Performance Agent host can connect.
- If the `authip` file does *not* exist in the default directory, no authentication is performed and any client will be allowed to connect, as was the case with prior Performance Agent versions.

The `authip` file is checked each time a client attempts to register for service with Performance Agent. Performance Agent does *not* need to be restarted for changes to the `authip` file to become effective.

An existing authorized client session can continue its current connection despite a subsequent change in the server's `authip` file, which would otherwise disqualify it, until the client takes an action that requires re-registration with Performance Agent. Thus, an authorized Performance Manager connection continues to be permitted, regardless of changes in the Performance Agent `authip` file, until the data source to the Performance Agent host has been closed. If there is then an attempt to reopen the data source, the `authip` file is reread and the connection is denied.

In the case of Performance Manager registration for alarms, a previously authorized client will continue to receive alarms until the data source has been removed (not just closed) by the client. If you want to force removal of a client from the server's alarm generator database from the Performance Agent side, use the command:

agsysdb -delpv <host>

The Performance Agent client authentication capability requires that your network be able to resolve the client entries in the `authip` file. Depending on the nature of the entries, this may require name services such as those provided by DNS, NIS, or `/etc/hosts` files.

A good test is to ensure that you can successfully "ping" each `authip` entry from the Performance Agent host. Client authentication works through a firewall with the same proviso that the client entries in the `authip` file be pingable from the Performance Agent host.

Formatting the authip File

The `authip` file must conform to the following format:

- One client host may be listed per line.
- Client entries can be in any one of the following formats:
  - Fully qualified domain name
  - Alias
  - IP address (must be in IPv4 dotted quad format)
- Client entries can have no embedded spaces.
- A line containing a `#` in the first column is taken as a comment, and is ignored.
- Blank or zero-length lines are ignored.
- The IP address may *not* have a leading zero. For example, the IP address 23.10.10.10 cannot be represented as `023.10.10.10`.

  Thus, given the following `/etc/hosts` entry:

  ```
  123.456.789.1 testbox testbox.group1.thecompany.com
  ```

  any one of the following entries in the `authip` file would enable clients from the `testbox` host to connect:

  ```
  #============ Examples of authip file entries ==============
  #
  # Use of an IP address
  ```

```
123.456.789.1

#
# Use of an alias
testbox

#
# Use of a fully qualified domain name
testbox.group1.thecompany.com

#============ End of examples of authip file entries ========
```

Configuring Data Sources

Performance Agent uses the coda daemon to provide collected data to the alarm generator and the Performance Manager analysis product. The coda daemon uses the HTTP data communication mechanism. Each data source consists of a single log file set.

The data source list that coda accesses is maintained in the datasources configuration file that resides in the /var/opt/OV/conf/perf/ directory.

When you first start up Performance Agent after installation, a default data source named SCOPE is already configured and provides a scopeux log file set. To add other data sources, you can configure them in the datasources file. If you no longer want to view the Performance Agent or DSI log file data from Performance Manager, or process alarms for the log file, you can modify the datasources file to remove the data source and the path to the log file set. When you restart the coda daemon, it reads the datasources file and makes the data available over datacomm linkages to analysis tools for each data source it finds. Restart coda as described in Datasources Configuration File Format on page 37.

You can also remove the log file set if you no longer need the data. If you remove the log file set but do not remove the data source from datasources, coda will skip the data source.

You might also choose to stop logging DSI data to a log file set but keep the coda daemon open so you can view the historical data in Performance Manager. In this case, stop the dsilog process but do not delete the data source from the datasources file.

Datasources Configuration File Format

Each entry you place into the datasources configuration file represents a data source consisting of a single log file set. The entry specifies the data source name and location. Fields are case-insensitive except for the log file path name. The syntax is:

```
datasource=datasource_name logfile=logfile_set
```

- **datasource** is a keyword and it is case-insensitive. **datasource_name** is the name used to identify the data source. For example, the data source name used in alarm definitions or by analysis software. Data source names must be unique. They are translated into upper case. The maximum length for a data source name is 64 characters.
- **logfile** is a keyword. **logfile_set** is the fully-qualified name identifying the DSI log file (created by the `dsilog` process, ending in `.log`), and is case-sensitive.

Following are two examples of the `datasources` file's data source entries:

```
DATASOURCE=SCOPE LOGFILE=/var/opt/perf/datafiles/logglob
datasource=ASTEX logfile=/tmp/dsidemo/log/astex/ASTEX_SDL
```

After updating `datasources`, run the following command to make the new data sources available through `coda`:

```
/opt/perf/bin/ovpa restart server
```

Examine the contents of the `/var/opt/OV/log/coda.txt` file to check if the `coda` daemon was activated or for error messages.

For specific examples of configuring DSI data sources, see "Configuring Data Sources" in Chapter 4 of the *HP Performance Agent for UNIX Data Source Integration Guide*.

Parm File

The `parm` file is a text file that specifies configuration of the `scopeux` data collector including log file maximum sizes, interesting process threshold definitions, and application definitions. Comments in the file provide an overview of the various settings.

The `parm` file is provided with Performance Agent in the `/opt/perf/newconfig/` directory and is copied into the `/var/opt/perf/` directory during installation, if there is not an existing `/var/opt/perf/parm` file. For a complete description of the `parm` file and its parameters, see the "Parm File" section in Chapter 2 of the *HP Performance Agent for UNIX User's Manual*.

Defining Alarms

If you plan to use alarms to monitor performance, you need to specify the conditions that generate alarms in a set of alarm definitions in the Performance Agent `alarmdef` file which is a text file. When Performance Agent is first installed, the `alarmdef` file contains a set of default alarm definitions. You can use these default definitions or customize them to suit your needs.

For instructions on defining alarms, see Chapter "Performance Alarms," in your *HP Performance Agent for UNIX User's Manual*. This chapter also describes the alarm definition syntax, how alarms work, and how alarms can be used to monitor performance.

Performance Agents Documentation

Performance Agent software includes the following documents. You can view the Adobe Acrobat format (`*.pdf`) documents online and print them as needed. ASCII text (`*.txt`) documents are printable. You can view a text file on your screen using any UNIX text editor such as `vi`.

Table 2

Document	File Name	Location
HP Performance Agent for Sun Solaris Systems Installation & Configuration Guide	`ovpainst.pdf`	`/opt/perf/paperdocs/ovpa/C/`
HP Performance Agent for UNIX User's Manual	`ovpausers.pdf`	`/opt/perf/paperdocs/ovpa/C/`
HP Performance Agent for UNIX Data Source Integration Guide	`ovpadsi.pdf`	`/opt/perf/paperdocs/ovpa/C/`
HP Performance Agent for UNIX & GlancePlus Tracking Your Transactions	`tyt.pdf`	`/opt/perf/paperdocs/ovpa/C/`
Application Response Measurement (ARM) API Guide	`arm2api.pdf`	`/opt/perf/paperdocs/arm/C/`
HP Performance Agent Sun Solaris Metric Definitions	`metsun.txt`	`/opt/perf/paperdocs/ovpa/C/`
HP Performance Agent metrics list by Data Class for all operating systems	`mettable.txt`	`/opt/perf/paperdocs/ovpa/C/`

ASCII Text Files

To print a `.txt` file, type:

`lp -dprintername` *filename*

For example,

```
lp -dros1234 metsun.txt
```

Configuring Coda

Coda is a lightweight data collection agent for HP Operations Agent. It is a subset of Performance Agent and acts as a communication conduit for Performance Agent. All the configuration parameters are configured under the namespaces coda and coda.comm using the command `ovconfchg`.

Coda Namespace

Parameters in coda namespace	Description	Default Value
DISABLE_PROSPECTOR	Used to disable data collection from coda datasource in a coexistence environment of HP Operations Agent and Performance Agent	false

Parameters in coda namespace	Description	Default Value
ENABLE_PROSPECTOR	Used to enable data collection from coda datasource in a standalone environment of Performance Agent	false
SSL_SECURITY	Used to enable secure communication from coda	NONE
RESPONSE_SIZE_LIMIT	Used to specify the maximum amount of memory allocated by coda	104857600 (100 megabytes)

DISABLE_PROSPECTOR

Use this option to specify the data collection preferences through coda when both the HP Operations Agent and Performance Agent are installed. The default value is `false`. The format is as follows:

`ovconfchg -namespace coda -set DISABLE_PROSPECTOR` <*value*>

- `true`: `coda` will not collect data for the Coda datasource
- `false`: `coda` will collect the data for the Coda datasource

ENABLE_PROSPECTOR

Use this option to specify the data collection preferences through coda when Performance Agent is installed. The default value is `false`. This parameter is ignored in a coexistence scenario. The format is as follows:

`ovconfchg -namespace coda -set ENABLE_PROSPECTOR` <*value*>

- `true`: `coda` will collect data for the Coda datasource
- `false`: `coda` will not collect data for the Coda datasource

To verify if coda prospector is enabled, run the following command:

ovcodautil -dumpds coda

SSL_SECURITY

Use this option to enable secure communication through coda. The default value is `NONE`. The format is as follows:

ovconfchg -namespace coda -set SSL_SECURITY <*value*>

- `NONE`: `coda` does not require SSL connections for either the local or remote clients
- `REMOTE`: `coda` requires all remote connections to use SSL
- `ALL`: `coda` requires all connections (both local and remote) to use SSL

Use this parameter only when certificates are present on the system. Certificates will be installed only if HP Operations Agent 8.xx is present on the system.

RESPONSE_SIZE_LIMIT

Use this command to specify the maximum amount of memory allocated by the coda daemon for a query response. The default value is `104857600 (100megabytes)`. The format is as follows:

ovconfchg -namespace coda -set RESPONSE_SIZE_LIMIT <*value*>

If the specified limit is exceeded the following error message appears:

```
Response exceeds memory limits, use several smaller requests
```

Coda Communication Namespace (coda.comm)

The following table lists the configuration parameters for the namespace coda.comm:

Parameters in coda.comm namespace	Description	Default Value
SERVER_PORT	Used to configure port settings	0
SERVER_BIND_ADDR	Used to specify bind address for the server port	INADDR_ANY
LOG_SERVER_ACCESS	If set to 'true', coda logs every access to the server providing the information about sender's IP address, requested HTTP address, requested HTTP method, and response status.	false
RESPONSE_TIMEOUT	Used to specify the maximum number of seconds to wait for a response	300

SERVER_PORT

You can configure the port settings of the default port used by coda. The default value for this port is 0. If the port is set to 0, the operating system assigns the first available port number. Use the ovconfchg tool to change the port settings on the Performance Agent system. Run the command:

ovconfchg -namespace coda.comm -set SERVER_PORT <*port no*>

SERVER_BIND_ADDR

Use this option to specify the bind address for the server port. When the value is set to localhost, all the communication to coda server takes place through `ovbbccb`. The format is as follows:

ovconfchg -namespace coda.comm -set SERVER_BIND_ADDR <*Bind address*>

LOG_SERVER_ACCESS

You can enable or disable the access to server using this option. If this option is set to `true`, coda records every access to the server, providing information about the sender's IP address, requested HTTP address, requested HTTP method, and response status. This value typically is not be changed.

ovconfchg -namespace coda.comm -set LOG_SERVER_ACCESS <*value*>

RESPONSE_TIMEOUT

Use this option to specify the maximum number of seconds to wait for a response. The default value is `300`. The format is as follows:

ovconfchg -namespace coda.comm -set RESPONSE_TIMEOUT <*value*>

If the specified limit is exceeded the following error message appears:
`Wait time expired`

PROXY

Use this option to configure the proxy. The format is as follows:

ovconfchg -ns bbc.http -set PROXY proxy:port+(a)-(b)

Where, the variables *a* and *b* are comma separated lists of hostnames, networks, and IP addresses that apply to the proxy.

Multiple proxies may be defined for one PROXY key using the ";" or "," delimiter. "-" before the list indicates that those entities do not use this proxy, "+" before the list indicates that those entities use this proxy. The first matching proxy is used.

For example:

ovconfchg -ns bbc.http -set PROXY srv1.abc.com:8088+*

Single-Port Communication

Use the following options to enable single-port communication in coda:

```
ovconfchg -ns coda -set SSL_SECURITY REMOTE/ALL
ovconfchg -ns coda.comm -set SERVER_BIND_ADDR localhost
```

Multi-Port Communication

This is the default communication method. Use the following option to enable multi-port communication in coda:

```
ovconfchg -ns coda.comm -set SERVER_BIND_ADDR ""
```

There are two methods to find out single-port and multi-port communication in `coda`:

- Use this option to verify if the port is used for communication from the local host machine:

  `bbcutil -reg`

  Enter the following:

  ```
  BasePath=/Hewlett-Packard/OpenView/Coda/
  Protocol=HTTPS
  BindAddress=localhost
  Port=59814
  Authentication=NONE
  ```

  If the value returned is `local host` or `127.0.0.1`, it is used for communication.

  Enter the following:

  ```
  BasePath=/Hewlett-Packard/OpenView/Coda/
  Protocol=HTTPS
  BindAddress=ANY
  Port=381
  Authentication=NONE
  ```

  If the value returned is `any` other value other than `local host`, then it is multi-port communication.

`bbcutil` is present in the <*Install Dir*>/`bin` directory.

- Use this option to verify if the port used for communication from a system other than local host:

  ovcodautil -n <*hostname*> **-ping**

  Here is an example:

  ovcodautil -n ovphpt4 -ping

  Enter the following:

  Ping of '**OvBbcCb**' at: 'http://ovphpt4:383/Hewlett-Packard/OpenView/BBC/ping' successful

  Ping of '**Coda**' at: 'http://ovphpt4:383/Hewlett-Packard/OpenView/Coda/' successful

  Enter the following:

  ovcodautil -n ovphpt4 -ping

  Ping of '**OvBbcCb**' at: 'http://ovphpt4:383/Hewlett-Packard/OpenView/BBC/ping' successful

  Ping of '**Coda**' at: 'http://ovphpt4:62581/Hewlett-Packard/OpenView/Coda/' successful

  The port numbers are different in the two outputs.

Communication Broker Namespace (bbc.cb)

Parameters in bbc.cb namespace	Description	Default Value
SERVER_PORT	Used to configure port settings	383
SERVER_BIND_ADDR	Used to specify bind address for the server port	INADDR_ANY

SERVER_PORT

You can configure the port settings of the default port used by the communication broker. The default value for this port is 383. Use the ovconfchg tool to change the port settings on the Performance Agent system. The format is as follows:

ovconfchg -namespace bbc.cb -set SERVER_PORT <*port no*>

If a port is already defined in the communication broker port namespace (bbc.cb.ports), the operating system assigns it as the default port and overrides the SERVER_PORT value.

SERVER_BIND_ADDR

Use this option to specify the bind address for the server port. The format is as follows:

ovconfchg -namespace bbc.cb -set SERVER_BIND_ADDR <*Bind address*>

Communication Broker Port Namespace (bbc.cb.ports)

Parameter in bbc.cb.ports namespace	Description	Default Value
PORTS	Used to define the list of ports for all the communication brokers in the network that may be contacted by the applications on this host.	383

PORTS

This configuration parameter must be same on all the nodes. To change the port number of a communication broker on a particular host, the hostname must be added to the parameter, for example:

```
name.hp.com:8000
```

You can use an asterisk as a wild card to denote the entire network

```
*.hp.com:8001
```

You can use a comma or a semicolon to separate entries in a list of hostnames, for example:

```
name.hp.com:8000, *.hp.com:8001
```

In this example, all the hostnames ending with hp.com will configure their BBC communication broker to use port 8001 except the host “name”, which will use port 8000. All the other ports use the default port 383.

You can also use the IP addresses and asterisk (*) to specify the hosts, for example:

```
15.0.0.1:8002, 15.*.*.*:8003
```

Run the following command to set ports

ovconfchg -namespace bbc.cb.ports -set PORTS <*port no*>

HTTP namespace (bbc.http)

Parameters in bbc.http namespace	Description	Default Value
RESPONSE_TIMEOUT	Used to specify the maximum number of seconds to wait for a response	300
CLIENT_PORT	Used to specify bind port for the client requests	0

RESPONSE_TIMEOUT

Use this option to specify the maximum number of seconds to wait for a response. The default value is `300`. The format is as follows:

`ovconfchg -namespace bbc.http -set RESPONSE_TIMEOUT` <*value*>

CLIENT_PORT

Use this option to specify the bind port for the client requests. The default value is `port 0`. The operating system assigns the first available port. This parameter is ignored for the requests to the localhost.

On a Windows system, this parameter should be defined on a large value because Windows system does not immediately release ports for reuse.

PROXY

Use this option to specify the proxy and port to be used for the specified hostname.

The format is as follows:

`proxy:port+(a)-(b);proxy2:port2+(a)-(b); ...;`

In this instance, the variables *a* and *b* are comma or semicolon separated lists of hostnames that apply to the proxy.

```
a: for which the proxy shall be used
```

```
b: for which the proxy shall not be used
```

The first matching proxy is chosen.

You can also use the IP addresses instead of hostnames. For example, 15.*.*.* is also valid, provided the correct number of dots and colons are specified.

Glossary

A

alarm

An indication of a period of time in which performance meets or exceeds user-specified alarm criteria. Alarm information can be sent to an analysis system (such as Performance Manager) and to Operations Manager. Alarms can be identified in historical data log files using the `utility` program.

alarm generator

Handles the communication of alarm information. It consists of `perfalarm` and the `agdb` database. The `agdb` database contains a list of Performance Manager analysis nodes (if any) to which alarms are communicated, and various on/off flags that you set to define when and where the alarm information is sent.

alarmdef file

The file containing the alarm definitions in which alarm conditions are specified.

application

A user-defined group of related processes or program files. Applications are defined so that performance software can collect performance metrics for and report on the combined activities of the processes and programs.

application log file

See **logappl**.

C

coda daemon

A daemon that provides collected data to the alarm generator and analysis product data sources including `scopeux` log files or DSI log files. `coda` reads the data from the data sources listed in the `datasources` configuration file.

D

data source

Consists of one or more classes of data in a single `scopeux` or DSI log file set. For example, the Performance Agent SCOPE data source is a `scopeux` log file set consisting of global data. See also **datasources file**.

datasources file

A configuration file residing in the `/var/opt/OV/conf/perf/` directory. Each entry in the file represents a `scopeux` or DSI data source consisting of a single log file set. See also **coda** and **data source**.

data source integration (DSI)

The technology that enables Performance Agent to receive, log, and detect alarms on data from external sources such as applications, databases, networks, and other operating systems.

default.txt

A communications configuration file used to customize communication parameters for HP Software applications.

device

A device is an input and/or output device connected to a system. Common devices include disk drives, tape drives, DVD-ROM drives, printers, and user terminals.

device log file

See **logdev**.

DSI

See **data source integration**.

DSI log files

Log files containing self-describing data that are created by Performance Agent's DSI programs.

E

extract

The Performance Agent program that allows you to extract (copy) data from raw or previously extracted log files and write it to extracted log files. It also lets you export data for use by analysis programs.

extracted log file

A log file created by the `extract` program. It contains user-selected data ranges and types of data. An extracted log file is formatted for optimal access by the workstation analysis tool, Performance Manager. This file format is suitable for input to the `extract` and `utility` programs and is the preferred method for archiving performance data.

G

GlancePlus

GlancePlus (or Glance) is an online diagnostic tool that displays current performance data directly to a user terminal or workstation. It is designed to assist you in identifying and troubleshooting system performance problems as they occur.

global

A qualifier that implies the whole system.

global log file

See **logglob**.

I

interesting process

A process becomes interesting when it is first created, when it ends, and when it exceeds user-defined thresholds for cpu use, disk use, response time, and so on.

L

log file set

A collection of files that contain data collected from one source.

logappl

The raw log file that contains measurements of the processes in each user-defined application.

logdev

The raw log file that contains measurements of individual device (such as disk and `netif`) performance.

logglob

The raw log file that contains measurements of the system-wide, or global, workload.

logindx

The raw log file that contains additional information required for accessing data in the other log files.

logproc

The raw log file that contains measurements of selected “interesting” processes. A process becomes interesting when it is first created, when it ends, and when it exceeds user-defined thresholds for CPU use, disk use, response time, and so on.

logtran

The raw log file that contains measurements of transaction data.

M

midaemon

The Performance Agent program that translates trace data into Measurement Interface counter data using a memory based MI Performance Database to hold the counters. This database is accessed by collector programs such as `scopeux`.

mwa script

The Performance Agent script that has options for starting, stopping and restarting Performance Agent processes such as the `scopeux` data collector, `midaemon`, `ttd`, `coda`, `ovc`, `ovbbccb`, and the alarm generator. See also the `mwa` man page.

O

ovbbccb

The Operations Manager Communication Broker for HTTP(S) based communication controlled by `ovc`. See also **`coda`** and **`ovc`**.

ovc

The Operations Manager controlling and monitoring process. In a standalone OVPA installation, `ovc` monitors and controls `coda` and `ovbbccb`. If Performance Agent is installed on a system with Operations Manager for UNIX 8.x agent installed, `ovc` also monitors and controls Operations Manager for UNIX 8.x processes. See also **`coda`** and **`ovbbccb`**.

ovpa script

The Performance Agent script that has options for starting, stopping and restarting Performance Agent processes such as the `scopeux` data collector, alarm generator, `ttd`, `midaemon`, `ovc`, `ovbbccb`, and `coda`. See also the `ovpa` man page.

Performance Manager

Provides integrated performance management for multi-vendor distributed networks. It uses a single workstation to monitor environment performance on networks that range in size from tens to thousands of nodes.

P

parm file

The Performance Agent file containing the parameters used by `scopeux` to customize data collection.

perfstat

A program that displays the status of all performance processes in your system.

PerfView

See **Performance Manager**.

process

Execution of a program file. It can represent an interactive user (processes running at normal, nice, or real-time priorities) or an operating system processes.

process log file

See **logproc**.

R

raw log file

Summarized measurements of system data collected by `scopeux`. *See* **logappl**, **logproc**, **logdev**, **logtran**, and **logindx**.

real time

The actual time in which an event takes place.

resize

Changes the overall size of a log file using the `utility` program's `resize` command.

run file

Created by the `scopeux` collector to indicate that the `scopeux` process is running. Removing the `run` file causes `scopeux` to terminate.

S

scopeux

The Performance Agent data collector program that collects performance data and writes (logs) it to raw log files for later analysis or archiving. *See also* **raw log files**.

scopeux log files

See **raw log files**.

status.scope file

Created by the `scopeux` collector to record status, data inconsistencies, and errors.

system ID

The string of characters that identifies your system. The default is the host name as returned by `uname -n`.

T

transaction log file

See **logtran**.

transaction tracking

The technology used in Performance Agent that allows information technology (IT) resource managers to measure end-to-end response time of business application transactions.

ttd.conf

The transaction configuration file where you define each transaction and the information to be tracked, such as transaction name, performance distribution range, and service level objective.

U

utility

The Performance Agent program that allows you to open, resize, scan, and generate reports on raw and extracted log files. You can also use it to check `parm` file and `alarmdef` file syntax, and obtain alarm information from historical log file data

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