

HP OpenView Performance Agent

for the HP-UX operating system

Release Notes

Software version: 4.60/ February 2007

This document provides an overview of the changes made to HP OpenView Performance Agent (OVPA) for the 4.60. It contains important information not included in the manuals or in online help.

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In This Version

This release of OVPA has the following features:

Support for HP Virtual Machine 2.0

Ability to monitor HP Virtual Machine (HPVM) version 2.0 from the HPVM host system. A new class of metrics, BYLS, is introduced for the HPVM host, to record the configuration and resource utilization metrics for the Virtual Machines.

The following metrics are added for HPVM virtualization platform:

- Global class:
 - GBL_LS_ROLE
 - GBL_LS_TYPE
 - GBL_NUM_LS
 - GBL_NUM_ACTIVE_LS

- BYLS class:
 - BYLS_LS_ID
 - BYLS_LS_NAME
 - BYLS_LS_STATE
 - BYLS_LS_OSTYPE
 - BYLS_LS_PROC_ID
 - BYLS_LS_UUID
 - BYLS_NUM_CPU
 - BYLS_NUM_DISK
 - BYLS_NUM_NETIF
 - BYLS_CPU_ENTL_MIN
 - BYLS_CPU_ENTL_MAX
 - BYLS_CPU_ENTL_UTIL
 - BYLS_UPTIME_SECONDS
 - BYLS_LS_MODE
 - BYLS_LS_SHARED
 - BYLS_MEM_ENTL
 - BYLS_CPU_TOTAL_UTIL
 - BYLS_CPU_PHYS_TOTAL_UTIL
 - BYLS_CPU_PHYSC



HPVM 1.0 is not supported by OVPA and HP OpenView GlancePlus (GlancePlus).



The OVPM and OVReporter templates for virtualized environment can be downloaded from: **<ftp://ftp.hp.com/pub/ovreporter/VirtualizationTemplates>**

Configurable Logging Intervals

- Ability to configure the process interval between ranges of 5-60 seconds.
- Ability to configure interval for other intervalized classes to 15, 30, 60, or 300 seconds.
- The intervals are configurable in the `parm` file. The global interval value must be a multiple of the process interval value.

Example: To set the process collection interval to 15 seconds, global and all other intervalized data classes to 30 seconds, make the following entry in the `parm` file:

```
collectioninterval process=15, global=30
```

The default values for `process=60` seconds, `global=300` seconds.

- If there is no value specified for the `collectioninterval` line in the `parm` file or if `scopeux` detects illegal values while starting, the defaults will be used. It is recommended that "`scopeux -c`" be run after modifying the `parm` file, so that any warnings which might occur due to incorrect values will be displayed.

Additional logging thresholds

- Logging thresholds for process data. The default `parm` file contains the following:

```
procthreshold cpu = 5.0, memory = 900, disk = 5.0, nonew, nokilled
```
- To request that all process data be logged each interval,

```
procthreshold all
```

The `procthreshold` is equivalent to `threshold`, which was available with earlier releases.

Logging thresholds for additional data classes (such as, application and device data).

- Logging thresholds for application data, `appthreshold`.

Example, the following entry in the `parm` file will log only those application instances for which `cpu` utilization exceeds 10.0% during the interval,

```
appthreshold cpu = 10.0
```

- To request that all application data be logged each interval,

```
appthreshold all
```

- Thresholds for disk data, `diskthreshold`.

Example, the following entry in the `parm` file will log only those disk instances for which disk utilization time exceeds 10.0% during the interval,

```
diskthreshold util = 10.0
```

To request that all disk data be logged each interval,

```
diskthreshold all
```

- Logging threshold for netif data, `bynetifthreshold`.

Example, the following entry in the parm file will log only those netif instances for which the IO rate exceeds 60.0 packets per second during the interval,

```
bynetifthreshold iorate = 60.0
```

To request that all netif data be logged each interval,

```
bynetifthreshold all
```

- Logging threshold for file system data, fsthreshold.

Example, the following entry in the parm file will log only those file system instances for which the space used exceeds 70.0% during the interval,

```
fsthreshold util = 70.0
```

To request that all file system data be logged each interval,

```
fsthreshold all
```

- Logging thresholds for cpu data, bycputhreshold.

Example, the following entry in the parm file will log only those cpu instance for which the percentage utilization of the cpu exceeds 90.0% during the interval,

```
bycputhreshold cpu = 90.0
```

To request that all cpu data be logged each interval,

```
bycputhreshold all
```

- Logging thresholds for logical volumes, lvthreshold.

Example, the following entry in the parm file will log only those logical volumes for which the IO rate exceeds 35 IOs per second during the interval,

```
lvthreshold iorate = 35
```

To request that all logical volumes be logged each interval,

```
lvthreshold all
```

Flush Interval

- Ability to request a data flush interval for application and device data classes.
- Ability to record/log ALL instances of application and device data periodically, including instances which are considered "uninteresting" based on the threshold criteria specified.

Example, the following entry in the parm file will cause all instances of application and device data to be written to the logs once per hour (3600 seconds).

```
flush = 3600
```

The flush seconds must be in the range 300-32700 and be an even multiple of 300.

The following new metrics are included:

- Global class:

- GBL_SWAP_SPACE_USED
- GBL_MEM_PAGEIN
- GBL_MEM_PG_SCAN
- GBL_MEM_FREE

- Process class:
 - PROC_STARTTIME
- CPU class:
 - BYCPU_CPU_CLOCK
- DISK class:
 - BYDSK_DISKNAME
 - BYDSK_AVG_QUEUE_TIME
 - BYDSK_AVG_READ_QUEUE_TIME
 - BYDSK_AVG_WRITE_QUEUE_TIME
 - BYDSK_AVG_WRITE_SERVICE_TIME
 - BYDSK_AVG_READ_SERVICE_TIME

This release also includes enhancements and defect fixes. See the [Enhancements and Fixes](#) section for details.

Documentation Updates

The first page of this release notes document contains the following identifying information:

- Version number, which indicates the software version.
- Publish date, which changes each time the document is updated.

To check for recent updates or to verify that you are using the most recent edition, visit the following URL:

http://ovweb.external.hp.com/lpe/doc_serv/

- 1 In the Product list, click the product name.
- 2 In the Version list, click the version number.
- 3 In the OS list, click the OS type.
- 4 In the document list, click the document title.
- 5 To retrieve the document, click **Open** or **Download**.



To view files in PDF format (*.pdf), Adobe Acrobat Reader must be installed on your system. To download Adobe Acrobat Reader, go to the following URL:

<http://www.adobe.com>

Installation Notes

For installation requirements and instructions, refer to "HP OpenView Performance Agent for HP-UX Installation and Configuration Guide" provided as part of the product in Adobe Acrobat (.pdf) format and found as ovpainst.pdf in /opt/perf/paperdocs/ovpa/C/.

Before installing OVPA, make sure that your system meets the following minimum hardware and software requirements:

Hardware Requirements

- HP 9000, Integrity Servers and HP Workstations supported on the HP-UX 11i Version 1 and Version 2 release and later.

OS Platform and Compatibility

- HP-UX 11i Version 1 (11.11) for the PA-RISC architecture
- HP-UX 11i Version 2 (11.23) and later for both the Itanium (TM) and PA-RISC architectures

Disk Space Requirements

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

- recommended 70 MB space in the `/opt/perf/` and `/opt/OV` directories for first-time installation of OVPA
- recommended 125 MB space in the `/var/opt/perf/` and `/var/opt/OV` directories for log and status files

Compatibility

- On HP-UX 11.11, the following patch must be installed to use the correct version of libnm.1. This patch is a Cumulative ARPA Transport patch.

PHNE_27063 (or superseding patch)

- HPUX 11.11 and beyond running EMC PowerPath v2.1.2 or v3.0.0 must have the latest EMC patches installed to avoid conflicts with the OVPA/GlancePlus products. Without these EMC patches, problems can occur ranging from OVPA/GlancePlus product core dumps to invalid disk queue metrics.

For the EMC PowerPath v2.1.2 release, use the following patch:

EMCpower_patch213 HP.2.1.3_b002 (or superseding patch)

For the EMC PowerPath v3.0.0 release, use the following patch:

EMCpower_patch301 HP.3.0.1_b002 (or superseding patch)

For more details about these EMC patches or to check whether a superseding patch is available, contact EMC Support.

- HP-UX 11.11 requires the following patches for the performance tools to properly run with VERITAS Volume Manager 3.2:

PHKL_26419 for HP-UX B.11.11 (11.11) (or superseding patch)

PHCO_26420 for HP-UX B.11.11 (11.11) (or superseding patch)

- If multiple processor sets are configured on an HP-UX 11.11 system and you are using the `log application=prm` switch in the `parm` file to log APP_ metrics by PRM Group, you must install the following kernel patch for it to function correctly:

PHKL_28052 (or superseding patch)

- This revision of OVPA is verified to work with Process Resource Manager (PRM) version C.03.02.

- ▶ If you are installing or upgrading OVPA on a system, on which GlancePlus is already installed, you must upgrade GlancePlus to the same release version. The GlancePlus and OVPA versions must always be the same.
- ▶ There is no web fulfillment mechanism to convert the OVPA images to a non-trial licensed product. To obtain the production (non-trial) version of OVPA, you must purchase a License-to-Use product for each system on which OVPA images are installed, and at least one copy of the OVPA media product for your overall environment. The production software for OVPA must be installed from the media. It can be installed directly over the trial software (You need not remove the trial software).

Special Installation instructions

- If you are installing OVPA 4.6 and OVO 7.x agent on the same system, you must install OVO 7.x agent first and then OVPA 4.6
- On Itanium-based systems, OVPA 4.6 and OVOU Management Server 8.x (up to 8.10) for HP-UX cannot coexist on the same system.
- If you are installing OVPA 4.6 on a system on which if one or more of the following OV products are installed, it is recommended to restart the them after OVPA 4.6 installation
 - a OVO Agent
 - b OVO Unix Management Server
 - c OV Performance Manager
 - d OV Performance Insight
 - e OV Internet Service
- If you have OV SMART Plug-Ins installed, install the following patches for SMART Plug-Ins, to work successfully with OVPA 4.6. These patches are required to update a tool that is used to integrate OV SMART Plug-Ins and OVPA.

HPUX: OVO/U 7.1X on HPUX-PA PHSS_33921
 OVO/U 8.1X on HPUX-IA PHSS_33922

Solaris: OVO/U on 7.1X Sun ITOSOL_00474
 OVO/U on 8.1X Sun ITOSOL_00475

Windows: OVOW on 7.2X OVOW_00201
 OVOW on 7.5X OVOW_00202

Enhancements and Fixes

The following issues (identified by error tracking number) are fixed in this release:

QXCR1000289162

PROBLEM: Application utilizations do not add up to GLOBAL CPU utilization.

FIX: A new parameter, `gapapp`, is added in `parm` file. Based on the parameters for `gapapp`, a dummy application is added to application list whose metric values indicate the differences between global metrics and sum of application metrics.

QXCR1000370552

PROBLEM: `"mwa restart alarm"` exposes file descriptor leak in `rep_server`.

FIX: The problem is fixed.

QXCR1000368751

PROBLEM: OVPA alarms received by OVO show the alarm start time to be later than the end time.

FIX: Now, the alarm start time will not be greater than the end time.

QXCR1000362775

PROBLEM: `perfalarm`, while restarting, is unable to connect to `coda`, if `bbc` port is being changed dynamically.

FIX: Now, restarting `perfalarm` can connect to `coda` after the `bbc` port is changed dynamically.

QXCR1000366448

PROBLEM: `coda` process crashes while destroying `ScopeAccess` object.

FIX: The problem is fixed.

QXCR1000332045

PROBLEM: `parm` file on different platforms shows different value of mainttime and does not match the text statement written regarding mainttime value.

FIX: The value of mainttime is consistent on all the platforms.

QXCR1000378175

PROBLEM: As OVPA is configurable in seconds' granularity, TIME metric should also give seconds too.

FIX: Now, TIME metric will be displayed in HH: MM: SS format.
To see the data with seconds granularity with OVPM, version of OVPM6 should be 06.01.042 (patch) and version of OVPM5 should be X.05.00.036 (hotfix).

QXCR1000318628

PROBLEM: Scope log files and OVPA status files have global write permissions after upgrade to C.04.X.

FIX: The check for inconsistency in file permissions for 'others' and 'group' users, has been added.

QXCR1000241467

PROBLEM: OVPA and glance do not report both inactive iCoD CPU's as well as active CPUs.

FIX: This problem is fixed. The iCOD CPUs are correctly reported now.

QXCR1000202118

PROBLEM: The red alert used in the alarmdef file for the GBL_NET_ERROR_1_MIN_RATE alert should be consistent with the alarm specification.

FIX: This metric is not referenced in the default alarmdef.

QXCR1000298401

PROBLEM: perfstat has to be enhanced to show the active datasources.

FIX: perfstat should show active datasources if coda is running.

QXCR1000356803

PROBLEM: perfstat output needs to be enhanced to show port configuration and status of EPC.

FIX: To provide the required data, the option "-d" has been added, and "-p" has been enhanced to perfstat.

QXCR1000356310

PROBLEM: Scope Access API's consume very high CPU, causing the coda process to show a very high value for `PROC_CPU_TOTAL_UTIL`.

FIX: The issue of coda consuming high CPU utilization for huge `log` files, without any client request, has been fixed.

QXCR1000336978

PROBLEM: Need a mechanism to verify if installations of OVPA contain permanent licenses.

FIX: OVPA software license status can now be obtained using '`-licheck`' option of `extract` or `utility`.

QXCR1000215773

PROBLEM: OVPA needs to be enhanced to use an alternate temporary directory for `utility` `resize` operation.

FIX: OVPA will now use the alternate temporary directory set by "`TMPDIR`" environment variable, as temporary location to `resize log` file.

QXCR1000026718

PROBLEM: OVPA should be able to recognize a newly created `lv` without needing to be stopped and restarted.

FIX: OVPA now recognizes creation of a new `lv` without having to restart the services.

QXCR1000350192

PROBLEM: OVPA doesn't recognize new CPUs added in a virtually partitioned environment until `scopeux` is restarted.

FIX: On virtually partitioned systems, if CPUs are added/removed dynamically, the same is updated in the subsequent interval.

QXCR1000241877

PROBLEM: `glance` doesn't dynamically reflect when file systems are unmounted (or mounted).

FIX: Now `GlancePlus/gpm` can display changes dynamically for unmounted (or mounted) file systems without restarting `midaemon`.

QXCR1000327694

PROBLEM: coda dumps core while starting when it tries to access a corrupted DSI log files.

FIX: This problem is fixed and now coda ignores a datasource if corresponding DSI log file is corrupted and records an error message in the log file coda.txt.

QXCR1000319426

PROBLEM: PROC_CPU_SYS_MODE_UTIL, PROC_CPU_USER_MODE_UTIL and PROC_CPU_TOTAL_UTIL metrics will overflow for a multithreaded application in a multi CPU environment if the value exceeds 327.67%.

FIX: The upper limit for these metrics has been increased to 3270%.

QXCR1000315985

PROBLEM: On some windows systems "UNAUTHORIZED CONNECTION ATTEMPT" message is logged to status.rep_server file even though the machine name is included in `authip` file.

FIX: This problem is fixed.

QXCR1000323517

PROBLEM: alarmgen terminates abnormally when CONFIGURATION metrics are included in alarmdef file.

FIX: This problem is fixed.

QXCR1000244444

PROBLEM: scopeux stops running after one year limit is reached for any of scope log files.

FIX: Now, scopeux continues to run after performing roll over for the data in the scope log file for which one year limit is reached.

QXCR1000288917

PROBLEM: mwa restart fails if LC_ALL is set to any locale other than "C".

FIX: This problem is fixed.

QXCR1000240635

PROBLEM: scopeux terminates when /var file system is full.

FIX: Now, `scopeux` is modified to log a `WARNING` message in `status.scope` file. It stops logging, if less than 1 MB space is found in `/var` file systems. `perfalarm/alarmgen` will generate an alarm to indicate the situation. `scopeux` will resume logging once free space `/var` file system is greater than 1MB.

QXCR1000343417

PROBLEM: Alarms are not generated when alarms are defined using alias for any multi-instance class.

FIX: This problem is fixed.

QXCR1000217399

PROBLEM: Service name is missing in alarm message on message browser.

FIX: This problem is fixed.

QXCR1000335471

PROBLEM: `ovpa` script starts all common components as root when installed on a system with OVOA 8.x is installed and configured to run as non-root.

FIX: Now OVPA script starts common components as non-root, if OVOA is configured to run as non-root.

QXCR1000316706

PROBLEM: coda performance degrade and memory growth is observed if a datasource is configured for a large `scope log` file.

FIX: The performance of Coda is improved.

QXCR1000308434

PROBLEM: `perflbd`, `rep_server`, `extract` and `sdlutil` are dumping core due to mis-handling of errors returned in case of `DSI log` file corruption.

FIX: Now, `perflbd`, `rep_server`, `extract` and `sdlutil` are modified to handle the errors properly for the corrupted `DSI log` file.

QXCR1000309395

PROBLEM: The keys to access the shared memory of two `DSI` datasources being same results in data corruption. The corrupted data causes the `rep_server` to dump core.

FIX: Now, the implementation uses memory mapped files and works as expected.

QXCR1000310128

PROBLEM: perfalarm fails to treat "SCOPE" as default datasource.

FIX: By default, perfalarm identifies the "SCOPE" datasource without the "use SCOPE" statement in alarmdef file.

QXCR1000313261

PROBLEM: BYNETIF_*_BYTE_RATE metrics overflow when the network traffic is high.

FIX: The overflow has been handled and now the maximum value for the BYNETIF_*_BYTE_RATE metrics is increased to 3276700.0.

QXCR1000313783

PROBLEM: A mis-calculation of address causes dsilog to dump.

FIX: dsilog has been fixed to correctly calculate the memory address.

QXCR1000237216

PROBLEM: Coda memory leak is observed because of not freeing the allocated memory.

FIX: The memory leak in coda is fixed.

QXCR1000288391

PROBLEM: OVPA is not logging the header information for the newly added filesystem into log files. This causes the summarization not to show FS metrics.

FIX: Now OVPA logs header information, if there is a change in number of instances of FILE SYSTEMS.

QXCR1000312752

PROBLEM: The display size of FS_DIRNAME was limited to 40 characters.

FIX: The display size of the field FS_DIRNAME is increased from 40 to 60 characters.

QXCR1000286746

PROBLEM: The date and time shown in "Last Date" field of OVPM's "System Info" screen are incorrect when HTTPS data communication is used to access the data from an OVPA C.04.60.00 system. This may also affect "date range" of OVPM graphs as graphs will cover the "date range" only till "Last Date" time stamp.

FIX: Now, the "Last Date" is displayed correctly on "System Info" screen of OVPM product.

QXCR1000299328

PROBLEM: `'ovpa start server'/'ovpa stop server'` commands are not starting/stopping perfalarm and coda daemons.

FIX: OVPA script can now start/stop perfalarm and coda daemons.

QXCR1000334202

PROBLEM: Change in GMT offset values is not logged for `GBL_GMTOFFSET` due to day light saving (from ST to DST or vice versa).

FIX: Now scope logs a new configuration record whenever there is change in value of `GBL_GMTOFFSET`.

QXCR1000325726

PROBLEM: On some systems, midaemon fails to start with a pthread error message.

FIX: This problem is fixed.

QXCR1000218306

PROBLEM: `TBL_SHMEM_REQUESTED` metric overflows after the total size of requested shared memory reached 4GB.

FIX: This problem is fixed and now `TBL_SHMEM_REQUESTED` can handle up to 1024 GB.

QXCR1000287689

PROBLEM: OVPA/Glance reports the details of all the lan cards available on the system irrespective of whether they have been configured or not.

FIX: Now, OVPA/Glance is modified to report only the configured LAN cards.

QXCR1000349063

PROBLEM: Performance of ARMed applications may degrade if large number of calls are made to

`arm_init()`, `arm_getid()` and `arm_end()` from ARMed application.

FIX: This problem is fixed.

QXCR1000316706

PROBLEM: Coda takes considerable amount of time to process the scope data.

FIX: The performance of coda is improved by an average of 50% on all platforms. The CPU consumption and memory growth are reduced by 50%.

QXCR1000304293

PROBLEM: `ovcodautil` from a client with no certificates, times out when trying to connect to a CODA server configured to use single port SSL communication.

FIX: `ovcodautil` from a client with no certificates does not time out, when trying to connect to a coda server configured to use single port SSL communication. Instead, it displays the following error message: "Request denied, https protocol required".

QXCR1000326374

PROBLEM: CODA aborts frequently with a core dump on a system with OVPA 4.5 installed.

FIX: This problem is fixed.

QXCR1000328083

PROBLEM: CODA aborts with a core dump when a corrupted DSI files is present in the list of data sources.

FIX: This problem is fixed.

QXCR1000329220

PROBLEM: Coda reporting "Internal Error - Unhandled Exception in `coda_DataAccess::HandleRequest()`" in `coda.txt`.

FIX: This problem is fixed.

QXCR1000346928

PROBLEM: If OVPA 4.X is uninstalled coda 7.x will not get registered back with OVO agent.

FIX: This problem is fixed.

QXCR1000331473

PROBLEM: Coda data collection is disabled, when OVPA 4.x installed on system where ovo7.x agent is present.

FIX: Coda data collection is enabled, when OVPA 4.5 is installed on top of OVO 7.x agent.

QXCR1000282671

PROBLEM: "opcagt -stop" stops coda on ovpa4.5/OVO8.x node.

FIX: OVO 8.16 agent resolves the issue.

QXCR1000228172

PROBLEM: Add APP_MEM_UTIL metric to OVPA for HP-UX/IA

FIX: APP_MEM_UTIL is logged in OVPA.

QXCR1000239516

PROBLEM: gpm/scopeux dumps core when 51 PRM groups are active on 11.23.

FIX: Issue is resolved.

QXCR1000314580

PROBLEM: Deployment of OPVA 4.50 to HP-UX node fails.

FIX: Fix is provided with OVPA 4.60 deployable packages.

Known Problems, Limitations, and Workarounds

QXCR1000346247

PROBLEM: OVPA alarming module (alarmgen/perfalarm) processes the logged records every 15 seconds. Even if the logging interval is configured to less than 15 seconds (in case of PROCESS class), alarmgen/perfalarm processes all the logged records at the next 15 seconds boundary. Alarms generated on these records will have the timestamp of the last record processed.

For example:

- a If an alarm condition is met at 00:02:10, the alarmgen/perfalarm will process that record at 00:02:15, and reports alarm start time as 00:02:00.
- b If an alarm condition is ended at 00:02:10, the alarmgen/perfalarm will process

that record at 00:02:15, and reports alarm end time as 00:02:15.

WORKAROUND: None.

PROBLEM: Extract of logical data (extract -xt with -i/-I option), is not supported in this release.

WORKAROUND: NONE.

PROBLEM: On virtually partitioned systems, if the CPUs on a partition are removed/deleted, the CPU State is shown as "Disabled" in both OVPA and GlancePlus. Also, if the released CPUs are added to other partitions, still the CPU State is shown as "Disabled", on the partition where that CPU was removed.

WORKAROUND: NONE.

QXCR1000377061

PROBLEM: On systems that has OVPA 4.6 installed, by default, the DCE based alarm generator, alarmgen, is not running.

WORKAROUND: To enable the DCE based alarm generator, alarmgen, stop OVPA, rename the perfalarm executable to perfalarm.old, and restart OVPA using the mwa script.

QXCR1000240349

PROBLEM: BBC5 daemon fails to start on a system with PV (PerfView) installed. The default port for pvalarm, the "PV alarm management" daemon is 383, which conflicts with the default port for BBC communication broker daemon ovbbccb.

WORKAROUND: Choose a different port for pvalarm.

PROBLEM: On Itanium-based systems, OVPA 4.6 and OVOU Management Server 8.x (up to 8.10) for HP-UX can not coexist.

WORKAROUND: NONE

PROBLEM: If you are installing on an HP-UX 11.23 system, you may see the following warning message for GlancePak and OVPA bundles.

The software specification "B3699AA" refers to a bundle (or to a product, subproduct or fileset within a bundle). Only some of the software specified could be selected. The messages below show the items, which could not be selected and those items which were

selected but generated a warning:

WORKAROUND: This message can be safely ignored.



In Hp-UX 11.31, If the same data is being accessed by read/write system calls and mmap, the IO type will be determined by the first access. If the data is accessed by read/write first, then it will be categorized FS_IO whereas if mmap() was done first, it will be VM_IO.

Documentation Errata

None.

Software Version Information and File Placement Plan

Version Information

For a summary of version strings of the major executable components of OV Performance Agent for HP-UX, use the following command:

```
/opt/perf/bin/perfstat -v
```

File Placement

The following is a list of directory locations for product files.

- For a list of all files in the product, enter the command:
`/usr/sbin/swlist -l file MeasureWare MeasurementInt`
- Release Notes (English):
`/opt/perf/ReleaseNotes/`
- Release Notes (Japanese):
`/opt/perf/ReleaseNotes/ja_JP.SJIS/`
- Executables including UI programs, daemons, and scripts:
`/opt/perf/bin/`
- Shared component binaries:
`/opt/OV/bin/`
`/opt/OV/lbin/`
- Shared component libraries:
`/opt/OV/lib/`

- **Examples** (refer to the README file in the directory for more information):
/opt/perf/examples/
- **Man pages (English):**
/opt/perf/man/man1/
/opt/perf/man/man3/
/opt/perf/man/man4/
- **Man pages (Japanese):**
/opt/perf/man/ja_JP.SJIS/man1/
- **Printable documents:**
/opt/perf/paperdocs/ovpa/C/
/opt/perf/paperdocs/arm/C/
- **Printable documents:**
/opt/perf/paperdocs/ovpa/C/
/opt/perf/paperdocs/arm/C/
- **Default configuration and template files:**
/opt/perf/newconfig/
/opt/perf/newconfig/etc/rc.config.d/
- **Product configuration and status files:**
/var/opt/perf/
/var/opt/OV/conf/perf/
- **Product data and internal-use files** (created during and after installation):
/var/opt/perf/datafiles/
- **Development include files:**
/opt/perf/include/
- **Library files:**
/opt/perf/lib/
/opt/perf/lib/hpux32
/opt/perf/lib/hpux64
/opt/perf/lib/pa20_64
- **OVPA bootup scripts:**
/sbin/init.d/ovpa
/sbin/rc1.d/K190ovpa [linked to /sbin/init.d/ovpa]
/sbin/rc2.d/S810ovpa [linked to /sbin/init.d/ovpa]
- **Online help files:**
/opt/perf/help/ovpa/C/
- **Message catalogs:**
/opt/perf/lib/nls/msg/C/

Local Language Support

Localization into Japanese (ja_JP.SJIS) is provided.

This version of OVPA product and supporting user documentation are available in Japanese (ja_JP.SJIS).

The Japanese editions of the following OVPA manuals are available in PDF format at:

<http://www.jpn.hp.com/go/manual>

These manuals are:

- HP OpenView Performance Agent for HP-UX Installation and Configuration Guide
- HP OpenView Performance Agent for UNIX User's Manual
- HP OpenView Performance Agent for UNIX Data Source Integration Guide
- HP OpenView Performance Agent and GlancePlus for UNIX Tracking Your Transactions
- Application Response Measurement (ARM) API Guide

Support

Please visit the HP OpenView support web site at:

<http://www.hp.com/managementsoftware/support>

This web site provides contact information and details about the products, services, and support that HP OpenView offers.

HP OpenView online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by being able to:

- Search for knowledge documents of interest
- Submit and track progress on support cases
- Submit enhancement requests online
- Download software patches
- Manage a support contract
- Look up HP support contacts
- Review information about available services
- Enter discussions with other software customers
- Research and register for software training



Most of the support areas require that you register as an HP Passport user and sign in. Many also require an active support contract.

To find more information about support access levels, go to the following URL:

http://www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to the following URL:

<http://www.managementsoftware.hp.com/passport-registration.html>

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