HP Performance Agent

for the Sun Solaris operating system

Release Notes

Software version: 4.70/September 2007

This document provides an overview of the changes made to HP Performance Agent for the 4.70. It contains important information not included in the manuals or in online help.

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In This Version

HP Performance Agent was formerly called the MeasureWare Agent. In some places, the name MeasureWare Agent (MWA) might still appear.

This release of HP Performance Agent supports the following features:

Other

The following new metrics are included:

All Classes (except Configuration Class):

```
STATDATE
STATTIME
```

Global Class:

```
GBL_CPU_WAIT_UTIL
GBL_DISK_PHYS_READ_PCT
GBL_LOADAVG5
GBL_MEM_DNLC_HIT_PCT
GBL_NET_DEFERRED_PCT
GBL_DISK_REQUEST_QUEUE
GBL_CPU_CLOCK
```

Application Class:

```
APP_LS_ID
APP_MEM_RES
```

Process Class:

PROC_LS_ID

Configuration Class:

GBL_ZONE_APP

This release also includes enhancements and defect fixes. See the "Enhancements and Fixes" section for details.



Before using HP Performance Agent, you must review and accept the license terms and conditions spelled out in the readme file available in /<directory>/Sun/README, where <directory> is your DVD-ROM.

In this version the names HP OpenView Performance Agent is changed to HP Performance Agent and HP OpenView Operations is changed to HP Operations Manager.



The new product name change is applicable to version 4.70 and later. Any references to earlier versions of HP Performance Agent will still have the name as HP OpenView Performance Agent.

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, go to the following web site:

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



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 web site:

http://www.adobe.com/

Installation Notes

For installation requirements and instructions, see the HP Performance Agent Software Installation and Configuration Guide for Sun Solaris Systems provided as part of the product in Adobe Acrobat (.pdf) format, and found as ovpainst.pdf in /opt/perf/paperdocs/ovpa/C/.

Hardware and Software Requirements:

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

Hardware

HP Performance Agent generally runs on hardware platforms supporting the Solaris operating system, including:

- Sun4c
- Sun4d
- Sun4m
- Sun4u
- Sun4us
- Sun4v
- E 10000
- Sunfire
- x86
- x86 64

OS platform and compatibility

This version of HP Performance Agent requires the Sun Solaris 8 operating environments or later. HP Performance Agent running on x86 and x86_64 hardware requires the Sun Solaris 10 operating environments.

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).

• Prerequisites

The following Solaris patches are recommended for HP Performance Agent to function correctly.

Patch level	Description
117000-03	On Solaris 8, this patch level fixes, aborts and corrects metrics in the perftools caused by instrumentation errors on earlier patch levels. Patch 108528-29 is known to have this instrumentation issue. It is fixed by 117000-03.

NCS and DCE Communication Protocols

HP Performance Agent C.04.70.000 for Sun systems supports emulated NCS and DCE communication protocols. For DCE-based operations, a lightweight DCE client (HPlwdce 1.1.4.23.2) is bundled with HP Performance Agent. The lightweight DCE package provides DCE server functionality in the

environments where the commercial DCE software is not available. In order to integrate with the environments that already provide commercial DCE software, this HP Performance Agent release is compatible with the following DCE products:

- DASCOM DCE 1.1.4.15.3 for SUN Solaris 8 and later.
 (DCE and SECDES packages are required)
- IBM DCE 3.1 for SUN Solaris 8
- IBM DCE 3.2 for Sun Solaris 9



If you have a commercial DCE product (IBM DCE 3.1 for Sun Solaris 8) installed and running on your system, you must have the HPlwdce package installed as well.

When you perform installation with HPlwdce package, the installation script detects that a DCE client already exists, and the DCE daemon will not be started. The commercial DCE will be deployed for communication with other HP Software products.

- If you are using the lightweight DCE package bundled with HP Performance Agent on systems where no commercial DCE software is available, and you decide to install one of the above mentioned fully functional, commercial DCE software at a later date, you must:
 - Remove your currently-installed HP Performance Agent.
 - 2 Install the fully functional, commercial DCE software.
 - 3 Reinstall your HP Performance Agent.
- If you were using a fully functional DCE client for HP Performance Agent purposes only, you may safely remove it and use the lightweight DCE package bundled within HP Performance Agent. To do so, you must:
 - Remove your currently installed HP Performance Agent.
 - 2 Remove your fully functional commercial DCE software (see the DCE documentation for information on how to remove it).
 - 3 Reinstall your HP Performance Agent.
- If you were using a fully functional DCE client for applications other than just the HP Performance Agent, you must ensure that the version of the DCE client software is supported by this release of HP Performance Agent. For more information, see the HP Performance Agent for Sun Solaris Systems Installation & Configuration Guide, Chapter 1, "Installing HP Performance Agent Software" and Chapter 2, "Starting Up & Running HP Performance Agent Software"

Disk space

HP Performance Agent 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 100 MB space in the /opt/perf/ and /opt/OV directories for first-time installation of HP Performance Agent
- recommended 125 MB space in the /var/opt/perf/ and /var/opt/OV directories for log and status files



- If you are installing or upgrading HP Performance Agent on a system, on which HP GlancePlus (GlancePlus) is already installed, you must upgrade GlancePlus to the same release version as HP Performance Agent. The GlancePlus and HP Performance Agent release versions must always be the same.
- On a Solaris 10 system with Zones, HP Performance Agent can be installed only in the global zone.
- There is no web fulfillment mechanism to convert the HP Performance Agent images to a non-trial licensed product. To obtain the production (non-trial) version of HP Performance Agent, you must purchase a License-to-Use product for each system on which HP Performance Agent images are installed, and at least one copy of the HP Performance Agent media product for your overall environment. The production software for HP Performance Agent 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 HP Performance Agent 4.7 on a system on which if one or more of the following OV products are installed, it is recommended to restart them after HP Performance Agent 4.7 installation:

- 1 HP Operations Agent
- 2 HP Operations Manager for Unix
- 3 HP Performance Manager
- 4 OV Internet Service

Enhancements and Fixes

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

QXCR1000347704:

PROBLEM:	Support logging of PROC_PROC_CMD in HP Performance Agent logs.	
FIX:	An option is provided in parm file to enable or disable logging of PROC_PROC_CMD in HP Performance Agent logfiles.	
QXCR1000383942:		
PROBLEM:	Provide an option to disable flush option.	
FIX:	The flush interval can be disabled by setting flush at zero (i.e. flush = 0). If the flush is set to zero, the scopeux never logs the application and device data which are not meeting thershold values.	

QXCR1000216935:

PROBLEM: RECORDS PER HOUR are limited to one record per second for logging DSI data.

FIX:

RECORDS PER HOUR limit is increased to allow logging of more unsummarized data records per hour. To support this a new option "-u" is introduced with sdlcomp and need to use this option if more than one unsummarized data record per second need to be logged.

QXCR1000347643:

PROBLEM: Provide an option to Manage log file by days in addition to size.

FIX:

Two new parameters "days" and "maintweekday" are introduced in parm file. The "days" parameter controls how large the scopeux logfiles can grow in terms of number of days of data logged. The "maintweekday" parameter specifies the day of the week log file maintenance is done once the limit for days parameter is met. The log file continues to grow even though the limit for days parameter is met until maintweekday when log file roll back is done removing the exceeded number of days of data from start of log file at mainttime.

QXCR1000403289:

PROBLEM: Provide Process zone-id and Application grouping by zones on Solaris.

FIX:

Process zone-id has been made available through metric PROC_LS_ID. Workload measurement for Solaris zones is done using "Application grouping by Zones" feature. To support this new

feature, a new parm file flag "zone_app" is introduced for HP Performance Agent. When "zone_app" flag is set, all user-defined application sets listed in parm file are ignored and applications are grouped based on configured zones. If 'zone_app' flag is set and glance is running on a zone supported solaris machine then glance 'Process List' screen will show a new column called 'LS Name'.

QXCR1000286135:

PROBLEM: Please add new metrics for Global Runnable processes (RUN QUEUE)

FIX:

GBL_RUN_QUEUE metric was already present but was wrongly showing load average. This has been fixed and RUN QUEUE will be available through the metric GBL_RUN_QUEUE.

QXCR1000026539:

PROBLEM: The metric GBL_MEM_PAGE_REQUEST_RATE is capped at 3276.7.

FIX:	This issue associated with capping of metric GBL_MEM_PAGE_REQUEST_RATE has been resolved.	
QXCR1000436	3154:	
PROBLEM:	Issue while upgrading HP Performance Agent on Solaris System due to perf64.	
FIX:	Issue of perf64 failing to upgrade on a Solaris systems is fixed and now perf64 is upgraded correctly.	
QXCR1000041926:		
PROBLEM:	Customer would like permissions of the status files to be changed.	
FIX:	Now the status files and the SCOPE log files have "644" permission.	
QXCR1000372676:		
PROBLEM:	GBL_STATDATE, GBL_STATTIME, GBL_INTERVAL have to be included in all extracts.	
FIX:	New metrics STATDATE and STATTIME have been added to provide the ending time stamp for each interval in Performance Agent. The above metrics have been added to all the classes except for 'Configuration'.	
QXCR1000419708:		
PROBLEM:	CODA aborts intermittently while serving DSI data sources containing a large number of classes.	
FIX:	Now the problem is fixed.	
QXCR1000420544:		
PROBLEM:	When lvm class is enabled in parm file, CODA fails to run after some time.	
FIX:	The problem has been resolved now and the coda no longer aborts with too many open files error.	

QXCR1000423212:

PROBLEM: OVPA communication daemon is not started automatically

in the following scenarios:

- 1 After a reboot
- 2 If "ovc -kill" is issued before "ovpa start"

FIX:

Now OVPA communication daemon starts fine in all scenarios.

QXCR1000423390:

PROBLEM: Alarming based on process loop syntax in alarmdef file does not work consistently.

FIX: Now the problem is fixed.

QXCR1000438220:

PROBLEM: Under certain conditions rep_server fails to start when Performance Agent is configured in

DCE data comm because of fstat() error.

FIX: The problem has been fixed now and rep_server no longer aborts during start up.

Known Problems, Limitations, and Workarounds

QXCR1000346247:

PROBLEM:

HP Performance Agent 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:

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.

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.

QXCR1000046070:	
PROBLEM:	HP Performance Agent on Solaris does not log LV_ metrics for VxVM 3.5.
WORKAROUND:	While $VxVM\ 3.5$ logical volumes are not in the LV_{-} class of data, the file systems mounted on those volumes show up in the FS_{-} (by-file system) class of data. The FS_{-} metrics must be used to monitor the Veritas volumes.
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. This conflicts withthe default port for BBC communication broker daemon 'ovbbccb'.
WORKAROUND:	Choose a different port for pvalarm.
PROBLEM:	Some of HP Performance Agent or OVO 8.x daemons may fail to start on a Solaris system with both OVO 8.x agent and HP Performance Agent 4.7 installed, with the error message "No space left on device".
WORKAROUND:	Increase the kernel's limit for semaphore.
PROBLEM:	Extract of logical data in combination with other classes of metrics are not supported. Example, extract -xt -ip / -id /-it / -idy (not supported).
WORKAROUND:	Logical class of metrics can be extracted independently. Example, extract -xt -i is supported.
PROBLEM:	Extract with WK1/SPREADSHEET format has cell width limit of 255 characters. This limit truncates PROC_PROC_CMD metric length to 255 when extracted with WK1/SPREADSHEET format.
WORKAROUND:	NONE.

Documentation Errata

None.

Software Version Information and File Placement Plan

Version Information

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

/opt/perf/bin/perfstat -v

File Placement

• Release Notes (English):

```
/opt/perf/ReleaseNotes/
```

• 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:

```
/opt/perf/man/man1/
/opt/perf/man/man3/
/opt/perf/man/man4/
```

Printable documents:

```
/opt/perf/paperdocs/ovpa/C/
/opt/perf/paperdocs/arm/C/
```

Default configuration and template files:

```
/opt/perf/newconfig/
```

• Product configuration and status files:

```
/var/opt/perf/
/var/opt/OV
```

Product binary data and internal-use files (created during and after installation):

```
/var/opt/perf/datafiles/
/var/opt/OV
```

• Development include files:

```
/opt/perf/include/
```

• Library files:

```
/opt/perf/lib/
/opt/perf/lib/sparc_64/
/opt/perf/lib/x86_64/
```

Online help files:

```
/opt/perf/help/ovpa/
```

Startup and shutdown scripts:

```
/etc
/etc/default
```

Local Language Support

Localized HP Performance Agent Software is not available for this release.

Support

You can visit the HP Software support web site at:

www.hp.com/go/hpsoftwaresupport

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

HP Software 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 using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into 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://h20230.www2.hp.com/new_access_levels.jsp

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

http://h20229.www2.hp.com/passport-registration.html

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