HP OpenView GlancePlus

for the Linux operating system

Release Notes

Software version: 4.60 / February 2007

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

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This release of OpenView GlancePlus is supported on RedHat, SuSE, Debian, Asianux and Turbo distributions of Linux. See the <u>Installation Notes</u> section for more details.

VMWare support

GlancePlus 4.60 can be installed on Virtual Machines (VM) hosted on VMWare ESX Server of versions 2.5.x or 3.x and it is not supported on ESX Server Console. When installed on a VM (running Linux) hosted on a VMWare ESX server 3.x and later, GlancePlus 4.60 displays metrics that can be used to identify a VM and understand a VM's contribution to the utilization of physical resources available in the system. The value of the new metrics vary depending on whether GlancePlus is on a standalone Linux or Linux VM hosted on ESX server 2.5.X or 3.x.

The following metrics are added:

Global class:

- GBL_LS_TYPE
- GBL_LS_ROLE
- GBL_LS_ID
- GBL_LS_MODE
- GBL_LS_SHARED
- GBL_CPU_ENTL_MIN
- GBL_CPU_CYCLE_ENTL_MIN
- GBL_CPU_ENTL_MAX
- GBL_CPU_CYCLE_ENTL_MAX
- GBL_CPU_SHARES_PRIO
- GBL_CPU_ENTL_UTIL
- GBL_CPU_PHYS_TOTAL_UTIL
- GBL_CPU_PHYSC
- GBL_MEM_ENTL_MIN
- GBL_MEM_ENTL_MAX
- GBL_MEM_SHARES_PRIO
- GBL_MEM_PHYS_SWAPPED
- GBL_MACHINE_MEM_USED
- GBL_MEM_OVERHEAD

For more details on the above mentioned metrics, refer to gp-metrics.txt file.

Thread Metrics

This release includes a new set of thread metrics on Linux platform.

These new metrics are made available and supported with glance/xglance when installed on Linux System with kernel version 2.6.5 and above.

The following new thread metrics are added:

- THREAD_THREAD_ID
- THREAD_PROC_ID
- THREAD_PARENT_PROC_ID
- THREAD_PROC_NAME
- THREAD_PROC_CMD
- THREAD_UID
- THREAD_USER_NAME
- THREAD_STATE
- THREAD_PRI
- THREAD_NICE_PRI
- THREAD_TTY
- THREAD_TTY_DEV
- THREAD_THREAD_COUNT
- THREAD_GROUP_NAME
- THREAD_GROUP_ID
- THREAD_EUID
- THREAD_ACTIVE_THREAD
- THREAD_APP_ID
- THREAD_APP_NAME
- THREAD_CPU_LAST_USED
- THREAD_TOP_CPU_INDEX
- THREAD_MAJOR_FAULT
- THREAD_MAJOR_FAULT_CUM
- THREAD_MINOR_FAULT
- THREAD_MINOR_FAULT_CUM
- THREAD_MEM_RES
- THREAD_MEM_RES_HIGH
- THREAD_MEM_SHARED_RES
- THREAD_MEM_VIRT
- THREAD_STOP_REASON
- THREAD_STOP_REASON_FLAG
- THREAD_TIME
- THREAD_STARTTIME
- THREAD_RUN_TIME
- THREAD_INTERVAL
- THREAD_INTERVAL_ALIVE
- THREAD_INTERVAL_CUM
- THREAD_CPU_SYS_MODE_TIME

- THREAD_CPU_SYS_MODE_TIME_CUM
- THREAD_CPU_SYS_MODE_UTIL
- THREAD_CPU_SYS_MODE_UTIL_CUM
- THREAD_CPU_TOTAL_TIME
- THREAD_CPU_TOTAL_TIME_CUM
- THREAD_CPU_TOTAL_UTIL
- THREAD_CPU_TOTAL_UTIL_CUM
- THREAD_CPU_USER_MODE_TIME
- THREAD_CPU_USER_MODE_TIME_CUM
- THREAD_CPU_USER_MODE_UTIL
- THREAD_CPU_USER_MODE_UTIL_CUM
- THREAD_MEM_DATA_VIRT
- THREAD_MEM_STACK_VIRT
- THREAD_MEM_TEXT_VIRT
- THREAD_PAGEFAULT
- THREAD_PAGEFAULT_RATE
- THREAD_PAGEFAULT_RATE_CUM
- THREAD_PROC_ARGV1
- THREAD_STATE_FLAG

Other

This release includes the following new metric:

Global class:

GBL_MEM_PAGE_FAULT_RATE

For Linux systems with kernel version 2.4.x, the above metric displays N/A.

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



Before using OV GlancePlus, you must review and accept the license terms and conditions spelled out in the readme file available in /<directory>/README, where <directory> is your CD-ROM.

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 GlancePlus for Linux Installation and Configuration Guide*, provided as part of the product in Adobe Acrobat (.pdf) format as gpinst.pdf in

/opt/perf/paperdocs/gp/C/

Before installing OV GlancePlus, make sure your system meets the following minimum hardware and software requirements. These requirements apply to both xglance (the Motif interface) and glance (the character mode interface), unless otherwise noted:

Hardware Requirements

- System with Intel Pentium equivalent architecture (x86)
- System with AMD64 and EM64T architecture (x86_64)

Software Requirements

Linux Distribution Compatibility:

- On 32-bit Intel Pentium (x86):
 - RedHat Enterprise Linux (ES/AS/WS) 2.1, 3 and 4
 - SuSE Enterprise Server 8.x, 9.x and 10.x
 - Debian 3.0 r2/r3/r4, 3.1

- TurboLinux Server 8 and 10
- On 64-bit systems (x86_64):
 - RedHat Enterprise Linux (ES/AS/WS) 3 and 4
 - SuSE Enterprise Server 9.x and 10.x
 - Asianux 2.0

Note for Debian Linux Installation

Instructions to load RedHat Package Manager (RPM) packages, if RPM is not installed on Debian Linux system:

If the directory /usr/bin/rpm does not exist on your system, you need to obtain a copy of RPM that works on your Debian Linux system. After installing RPM, use the following commands to install GlancePlus:

```
1 mkdir /var/lib/rpm
2 rpm --initdb --dbpath /var/lib/rpm
3 cd <Your-CD-ROM-Directory>
4 ./glance.install -f
```

The GlancePlus installation is dependent on libXm.so.3 library provided by the libmotif3 package. On Debian systems, libmotif3 is available in version 3.1 and later. If you are installing GlancePlus on Debian 3.0, you must download and install the backport of libmotif3 for Debain 3.0.

A "forced" install using the **-f** option is recommended as outlined in the RPM package installation instructions. Frequent checking of the Debian site for an updated status of this package is also recommended. The libmotif3 package is used by the xglance binary only.

On 64-bit systems (x86_64), you should have 32-bit versions of the Motif and other dependent libraries, to have GlancePlus installed and working. By default 64-bit systems get the 64-bit versions of the Motif and other dependent libraries.

- Terminals
 - glance: Any terminal supported by the curses library
 - xglance: X-terminal or X-workstation display or emulator. Not all mouse functions are supported by every X server emulator.
- Requirements Linux Packages

To install GlancePlus successfully, the following non-OpenView runtime libraries are required:

- C++ runtime needed by multiple OV GlancePlus binaries.
- For systems with kernel version 2.4:

```
/usr/lib/libstdc++-libc6.1-1.so.2
```

— For systems with kernel version 2.6:

```
/usr/lib/libstdc++.so.5
```

X/Motif runtime library needed by xglance.

```
/usr/X11R6/lib/libXm.so.3
```

— Curses runtime library needed by glance:

```
/usr/lib/libncurses.so.5
```

To verify if these libraries are installed on your system, run the following commands.

- a rpm --query --whatprovides <library-name>
- **b dpkg -S** < library-name > (for Debian systems)

These libraries can exist in one or more RPM packages available with the operating system media or can be downloaded from the Internet.

Disk Space

GlancePlus is installed in the /opt/perf/ directory and some of its components create status files in the /var/opt/perf/ directory. GlancePlus also creates one or more control files in the home directory of the user.

- OV GlancePlus approximately uses 20 MB space in the /opt/ directory for first-time installation and uses a minimal space (status files) in the /var/opt/perf/ directory.
- Runtime memory

xglance: approximately 20 MB of virtual memory glance: approximately 10 MB of virtual memory

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

Enhancements and Fixes

The following items (identified by error tracking number) are fixed in the current software release.

QXCR1000289162

PROBLEM: Application utilizations don't add up to GLOBAL CPU utilization.

FIX: A new parameter, gapapp, has been 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 app metrics.

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.

QXCR1000348886

PROBLEM: xglance's Network By Interface window shows incorrect GBL Packet In/Out Rate, when

the values exceed three digits.

FIX: In xglance, the field width of GBL_NET_IN_PACKET_RATE and GBL_NET_OUT_PACKET_RATE

in the "Network By Interface" window is increased to display values greater than the

current limit (999.9).

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 now correctly reported.

QXCR1000240985

PROBLEM: GBL_MEM_USER_UTIL shows incorrect values.

FIX: Now, this problem is fixed.

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.

Known Problems, Limitations, and Workarounds

QXCR1000367668

PROBLEM: Issue with THREAD_PAGEFAULT metric in xglance tool.

WORKAROUND: In the thread metric selection window, do not select THREAD_PAGEFAULT and

THREAD_PAGEFAULT_RATE as interesting metrics.

QXCR1000353884

PROBLEM: After one of the VMs restarts, the GLOBAL metrics GBL_MEM_SWAPIN_BYTE and

 ${\tt GBL_MEM_SWAPOUT_BYTE} \ are \ zero \ and \ these \ metric \ values \ are \ huge \ for \ first \ interval \ after \ restarting \ VM. \ This \ is \ a \ problem \ with \ the \ VMW are \ command \ that \ provides \ the \ wrong$

values. We are working with VMWare to correct the issue.

WORKAROUND: NONE.

QXCR1000349933

PROBLEM: On SLES9 upto kernel version 2.6.9 it is observed that for processes started after

OVPA/GlancePlus is started, process starttime is ahead of current system time during

first interval. This will affect calculation of metrics PROC_CPU_TOTAL_UTIL,

PROC_CPU_USER_MODE_UTIL and PROC_CPU_SYS_MODE_UTIL.

WORKAROUND: Install kernel version 2.6.10 or above on SLES9.

QXCR1000046025 (Legacy ID R555019786)

PROBLEM:

Some Linux kernels (2.4 versions), disk util, and queue metrics have a zero value or a larger value. Some Linux kernels do not support the instrumentation needed to create proper values for the following metrics:

- GBL_DISK_UTIL_PEAK
- GBL_DISK_REQUEST_QUEUE
- BYDSK_UTIL
- BYDSK_REQUEST_QUEUE
- BYDSK_CURR_QUEUE_LENGTH
- BYDSK_AVG_REQUEST_QUEUE
- BYDSK_QUEUE_*_UTIL
- BYDSK_AVG_SERVICE_TIME

These metrics have a value of zero or incorrect values.

WORKAROUND: NONE.

Documentation Errata

None.

Software Version Information and File Placement Plan

Version Information

For a summary of version strings for the major executable components of GlancePlus for Linux systems, run the following command:

/opt/perf/bin/perfstat -v

File Placement

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

• Release Notes:

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

Executables including UI programs, daemons, and scripts:

```
/opt/perf/bin/
```

• Examples (refer to the README file in the directory for more information):

```
/opt/perf/examples/arm
```

Man pages:

```
/opt/perf/man/
```

• Printable documents:

```
/opt/perf/paperdocs/gp/C/
/opt/perf/paperdocs/arm/C/
```

Default configuration and template files:

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

Development include files:

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

Library files:

```
/opt/perf/lib/
```

• xglance online help files:

```
/opt/perf/hyperhelp
```

Application defaults file for xglance:

```
/opt/perf/hyperhelp/app-defaults
```

• Temporary copy of application defaults file for xglance:

```
/opt/perf/newconfig/app-defaults/C
```

Production copy of application default file for xglance:

/var/opt/perf/app-defaults/C

Configuration startup files:

~userid/

Local Language Support

Localized OpenView GlancePlus is currently not available for this release.

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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