HP OpenView GlancePlus

Software Release Notes

C.03.82.00

for Sun Solaris Systems 7, 8 and 9

Legal Notices

Warranty.

Hewlett-Packard makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

Restricted Rights Legend.

Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company
United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Copyright Notices.

©Copyright 1999-2004 Hewlett-Packard Development Company, L.P.,

No part of this document may be copied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

Trademark Notices.

Windows® and MS Windows ® are U.S. registered trademarks of Microsoft Corporation.

Microsoft® is a U.S. registered trademark of Microsoft Corporation.

UNIX® ia a registered trademark of The Open Group.

All other product names are the property of their respective trademark or service mark holders and are hereby acknowledged.

Support

Please visit the HP OpenView web site at:

```
http://openview.hp.com/
```

There you will find contact information and details about the products, services, and support that HP OpenView offers.

You can go directly to the HP OpenView support web site at:

```
http://support.openview.hp.com/
```

The support site includes:

- Downloadable documentation
- Troubleshooting information
- Patches and updates
- Problem reporting
- Training information
- Support program information

HP OpenView GlancePlus for Sun Solaris Systems

Announcements

This document provides a description of the changes made to HP GlancePlus for Sun Solaris Sun Solaris C.03.82.00. It contains important information not included in the manuals or in the online help.

This release is available on the Sun Solaris operating system versions 7 and later.

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

What's New in This Release?

This section summarizes the functionality and features added to this release of GlancePlus. This release also includes several defect fixes. Refer to "Patches and Fixes in This Release" for more information.

- Benefits - HP recommends that you upgrade to GlancePlus C.03.82 for Sun Solaris to take advantage of new feature enhancements, new metric additions, and its defect fixes.

- Features:

  — Two new process-level metrics have been added to Glance:

    - PROC_PROC_CMD - gives the full command string for a process.

    - PROC_PROC_ARGV1 - a subset of PROC_PROC_CMD and normally the first argument from the command string.

    - The character-mode glance interface displays these metrics in its Process Resource Screen (PROC_PROC_CMD display is truncated to the screen size).

    - The motif interface gpm lists them in the Process List window. The column width is truncated to 32 characters; but, Tooltip shows the complete command line.

  — New parm file options have been added to take advantage of process arguments and command strings:

    - javaarg flag, when set in the parm file, will override the value of PROC_PROC_ARGV1 specifically for java and jre processes. When javaarg is set to true, the value of PROC_PROC_ARGV1 will be replaced with the java class or jar name extracted from the command string (no matter where it occurs). As an example, if a process command string is:

      ```
      ./java -Xms128M -D_hildago com.myco.myron -threadqueuemax 20
      ```

      then, if javaarg is not set (false), the value of PROC_PROC_ARGV1 would be -Xms129M. However, if javaarg is set to true, then the value of PROC_PROC_ARGV1 would be com.myco.hildago.

    - argv1= parameter allows you to bucket processes into applications based on pattern matching and asterisk wildcards (the pattern string is compared with the PROC_PROC_ARGV1 metric). When used with the javaarg flag, it is useful to define java applications. For the above process example, with javaarg set to true, you could define an application such as:

```
application = myapp
argv1 = com.myco.*
```

- `cmd=` parameter allows you to bucket processes into applications based on a very flexible pattern matching algorithm using the entire command string (pattern string is compared with the `PROC_PROC_CMD` metric). Another way to define the application in the above example would be:

```
application = myapp
cmd = *my[Cc]o.*
```

The `/opt/perf/newconfig/parm` default file has been updated with more examples demonstrating the above features.

These process argument enhancements in both GlancePlus and OVPA Agent enable more precise system performance analysis while maintaining the low monitoring overhead you expect in these tools.

— Several metrics have been added to glance screens & gpm windows:

- Swapin, swapout, swap byte rate, user and system memory metrics have been added to the Memory Report.

- Argv1, Process Command, and Process Start time metrics to the Process Resource report.

- Process creation rate to CPU report.

- OS Kernel type to the second page of the System Tables Report screen in glance and the System Attribute window in gpm.

— The following feature has been added to glance character-mode:

- A new `-aos` command line option has been added as an alternative for `-adviser_only -syntax` option.

— The following features have been added to Motif-mode gpm:

- Global Info Report window (which allows you to display any chosen global metric) has been added.

- Mouse wheel scrolling has been enabled in all the windows.

- Cursor Control keys have been enabled for selection in all the List type windows.

— Default adviser symptoms and alarms have been updated.

Patches and Fixes in This Release

The following defects have been fixed with GlancePlus release C.03.82.00.

Request ID	Description
8606359519	Changes in kernel settings for clock frequency have been taken into account while calculating CPU utilization metrics. CPU metrics are now correct regardless of clock frequency settings.
8606357775	Customers who made very heavy use of Application Response Measurement (ARM) would sometimes experience aborts of the performance tools. The product now functions without aborting under heavy transaction loads.
8606353327	The GBL_RUN_QUEUE metric value has been made consistent with the OVOA/EPC collector and is equivalent to the GBL_LOADAVG metric.
B555028584	In a Sun cluster environment, performance tools could occasionally abort with a bus error. This problem has been addressed and the tools run properly in cluster environments.

Known Problems and Workarounds

The following requests remain open in this release. To see the status of the following requests or other open requests, see "Online Documentation and Support" in the "Version Information and File Placement Plan" section.

Request ID	Description
R555019851	The By-LogicalVolume class of data (`LV_ metrics`) will not show entries for volumes mounted using the Veritas Volume Manager version 3.5. The By-FileSystem class of data (`FS_ metrics`) and By-Disk class of data (`BYDSK_ metrics`) show all VxVM data correctly. Workaround is to use the `FS_*` metrics instead of the `LV_*` metrics.
R555029320	In the Glance online help for this release, the process level (`PROC_*`) metric descriptions mistakenly include mention of thread-level (`THREAD_*`) metrics. Thread-level metrics are only available in HP-UX Glance. Functionality of the product is not affected.

Compatibility and Installation Requirements

- Please review this entire document before you begin this update. Installation requirements as well as instructions for installation are documented in the install.txt document in the /*<directory>*/docs/gp/ directory, where *<directory>* is your CD-ROM directory.

- We recommend that you have at least the *End User System Support level* of OS installation installed on your Sun systems. If you have the *Core System Support level* of OS installation, you will have to install the following operating system packages.

  — If you will be using character-mode GlancePlus (glance), install these packages:

        SUNWlibC

        SUNWlibms

  — If you will be using Motif-based GlancePlus (gpm), install these packages:

        SUNWlibC

        SUNWlibms

        SUNWmfrun

        SUNWxwplt

  You can check which packages are installed by using the pkginfo command. The operating system packages can be found on the Sun Solaris distribution media.

- The following Solaris patch is recommended for our product to function correctly.

  Patch level   Description

  117000-03   On Solaris 8, this patch fixes aborts and incorrect 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.

- GlancePlus Motif and character mode components.

  — gpm, the GlancePlus Motif-based interface, requires a high-resolution color monitor to export the DISPLAY. It requires more memory resources to run, but also provides a more visual and versatile interface. Its ability to run iconified with alarm notification via a flashing color border makes it an excellent choice for continuous monitoring.

— `glance`, the character-based interface, runs on any curses terminal and is the preferred solution for running across a slow data communications link, such as a modem. It requires less memory resources and initiates quickly.

The two choices allow you to use the appropriate tools for the situation and environment.

- Refer to the following documents for additional information about how to use GlancePlus.

  Access the following documents in `/opt/perf/paperdocs/gp/C/`:

  — *GlancePlus Installation Guide* - `gpinst.pdf`

  — *GlancePlus Adviser* - `adviser.pdf`

  — *GlancePlus Concepts* - `concepts.pdf`

  — *GlancePlus Dictionary of Performance Metrics* - `GP-metrics.pdf` and `GP-metrics.txt`

  Access the following documents in `/opt/perf/paperdocs/arm/C/`:

  — *HP OpenView Performance Agent & GlancePlus for UNIX Tracking Your Transactions* - `tyt.pdf`

  — *Application Response Measurement (ARM) API Guide* - `arm2api.pdf`

  Access the following man pages by typing **man <man page>**, such as man `gpm`:

  — GlancePlus: `gpm`, `glance`

  — HP-UX Measurement Interface: `arm`, `midaemon`, `perfstat`, `ttd`, `ttd.conf`

  Access online help in:

  — Motif mode `gpm` (click Help from any Motif mode GlancePlus window)

  — character mode glance (press h in any character mode GlancePlus window)

  How to install and run GlancePlus, located in:

  `/opt/perf/ReleaseNotes/gp.install.doc`

  Release Notes (this document), located in:

  `/opt/perf/ReleaseNotes/Glance`

- Packaging and Installation Changes.

  The packaging method for HP OpenView GlancePlus product uses the standard `pkgadd` family of tools. The product consists of the following four packages:

  `HParm`   ARM 2.0 runtime and development

HPglance   GlancePlus core modules and character-based user interface (glance)

HPgpm   Motif-based graphical user interface (gpm)

HPhh   HyperHelp viewer for on-line help for gpm

The installation of the last two packages is optional and can be omitted if you will not be using gpm. If your requirements change, other packages can be added at a later time.

Please refer to the gp.install.doc (or readme.gp) document for details on product installation.

- If you are installing or upgrading GlancePlus on a system that already has OV Performance Agent installed, you must upgrade OV Performance Agent to the same release version. OV Performance Agent and GlancePlus release versions should always be the same.

- Compatibility information for programs using libarm:
  (Application Response Measurement)

  — The ARM library shipped with this version of the performance tools is thread-safe. However programs compiled with the older versions of the SunWorkshop C++ compiler without the -mt option and linked to the thread-safe ARM library may not be able to use this library. Therefore, both thread-safe as well as non-thread-safe ARM libraries are included in this product.

  — On systems that experience compatibility problems with the thread-safe ARM library, the performance tool installation script will copy the non-thread-safe (compatibility version) ARM library into /opt/perf/lib/. The compatibility issue can occur with applications that are compiled using the SunWorkshop C++ compiler CC version 5.0 without the -mt compiler option and are also linked either directly or indirectly to the pthread library, which makes calls to the RPC API. In this release, the thread-safe version of the ARM library links with the pthread library.

  — On Solaris 7 systems, programs that are linked to and incompatible with the thread-safe ARM library, will hang. In this release of the performance tools, the installation script will copy the non-thread-safe version of the ARM library to the /opt/perf/lib/ directory and issue an informational message, Non-thread-safe library for ARM installed for compatibility, see Release Notes.

  — On Solaris 8 and 9 systems, systems with patches that are incompatible with the thread-safe ARM library, exhibit hangs or aborts (segmentation violation core dumps), depending on the patch levels. (This behavior is due to a Solaris OS defect.) For these systems, in this release, the installation script will copy the non-thread-safe version of the ARM library to the /opt/perf/lib/ directory.

— On all other Solaris 8 and 9 systems, the thread-safe version of the ARM library will be installed in /opt/perf/lib/.

— Patches are available for Solaris 8 and 9 OS releases that will allow the system to be compatible with the thread-safe ARM library. For Solaris 8, apply patch 108993-31 and for Solaris 9, apply patch 113319-17.

— If you are certain that your ARM'ed applications are NOT compiled using C++ Compiler CC version 5.0 without -mt flag, you may elect to use the thread-safe version of the ARM library even on systems that are *NOT* on the newer OS releases and patch levels.

— In order to determine which version of the ARM library has been copied into /opt/perf/lib during installation, you may run the following command: perfstat -v | grep libarm.

If the output of the above command contains the string (not thread-safe), then the compatibility library has been installed in /opt/perf/lib/. If this string is not in the output, then the thread-safe version of the ARM library has been installed.

— If you wish to replace the compatibility version of the ARM library with the thread-safe ARM library, follow these steps:

1. Stop all performance tools.

   — If Glance is running, exit Glance.

   — If OVPA is running, stop it by typing: mwa stop.

2. Stop all applications using libarm.

3. Copy the file /opt/perf/newconfig/libarm.so to /opt/perf/lib/libarm.so

   The performance tools and ARM'ed applications can then be restarted.

If problems occur, you can always return to using the compatibility library. A copy of both libarm versions can always be found in /opt/perf/newconfig. The libraries are named, libarm.compat.so and libarm.so.

See the *OV Performance Agent and GlancePlus Tracking Your Transactions* manual for more general information about how to use ARM.

NOTE	The archive form of the ARM library (libarm.a) is no longer included with Glance.

Software Availability in Native Languages

Localized GlancePlus is not available for Sun Solaris systems.

Version Information and File Placement Plan

Version Information

The following describes how to obtain the what strings for GlancePlus on Sun Solaris for SPARC architecture.

- To obtain the version strings for the GlancePlus executables, enter:

  /opt/perf/bin/perfstat -v

  The output looks like:

  ```
  GlancePlus executables in directory /opt/perf/bin
       glance     C.03.82.00 05/12/04  SunOS 5.7+
       gpm        C.03.82.00 05/12/04  SunOS 5.7+
       libnums.so C.03.82.00 05/12/04  SunOS 5.7+
  ```

NOTE	Since libnums is shared between the performance products, the version on your system may be more recent than the one above due to another performance product updating it. The version above is the one shipped with this release of GlancePlus.

- To obtain the version string for GlancePlus help, enter:

  what /opt/perf/help/gp/C/glance.help

  The output looks like:

  ```
  glance.help  SUN B3694A   C.03.82.00
  ```

File Placement

Release Notes and install documentation:

/opt/perf/ReleaseNotes

Paper documents:

/opt/perf/paperdocs/gp/C

/opt/perf/paperdocs/arm/C

Executables and scripts:

/opt/perf/bin

Online help files:

/opt/perf/help/gp/C

Messages and catalog files:

/opt/perf/lib/nls/msg/C

Configuration files and holding area:

/opt/perf/newconfig

Program libraries:

/opt/perf/lib

Include files for program development:

/opt/perf/include

Man pages:

/opt/perf/man

Product configuration and status files:

/var/opt/perf

Startup and shutdown scripts:

/etc

gpm online help files:

/opt/perf/hyperhelp

Application defaults file for gpm:

/opt/perf/hyperhelp/app-defaults

Temporary copy of application defaults file for gpm:

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

Production copy of application default file for `gpm`:

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

Product binary data and internal-use files:

`/var/opt/perf/datafiles`

Configuration startup files:

`~/userid/`

Online Documentation and Support

Go to the HP OpenView eCare web site to access interactive technical support tools. The same information and tools used by HP OpenView phone support experts are now available at:

`http://support.openview.hp.com`

To view the status of customer requests:

1. Click `technical knowledge base` under the blue `troubleshooting` label.

2. You can search for documents, known problems, or patches in one of two ways:

   a. Search by keyword by selecting the keyword search tab (selected by default), filling in the pertinent product information (`performance agent`, version and `OS`), checking one or more document types, and clicking [`search`].

   OR

   b. Search by document ID number, by selecting the `document id lookup` tab, entering the document ID number and clicking [`view document`].

To view these or archived Release Notes and other documentation:

1. Click `using hp software` in the menu column on the left side of the page and select `product manuals`. This displays the HP OpenView `product manuals search` web site:

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

2. Select `glanceplus` in the product list box and the version, such as c.03.82. You will see the OS associated with the release version in the OS list box.

3. Select the document you want to view and click [`Open`] to view the document online, or click [`Download`] to place the file on your computer.