HP Operations Agent

For the Windows ®, Linux, HP-UX, Solaris, and AIX operating systems

Software Version: 11.04

Release Notes

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Acknowledgements

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

This product includes software developed by the Apache Software Foundation (http://www.apache.org/).

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Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.

- Document Release Date, which changes each time the document is updated.

- Software Release Date, which indicates the release date of this version of the software.

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- Manage support contracts

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

To find more information about access levels, go to:

http://h20230.www2.hp.com/new_access_levels.jsp

Contents

HP Operations Agent Release Notes

for the Windows ®, Linux, HP-UX, Solaris, and AIX operating systems.

Software version: 11.04

Publication date: September 2012

This document is an overview of the changes made to HP Operations agent. It contains important information that is not included in books or Help. You can find information about the following in this document:

- What's New in This Release

- Support Matrix

- Installation Requirements

- Defects

- Requested Enhancements

- Fixed Defects

- Documentation Updates

Note: This Release Note includes enhancements, changes, and defect fixes for HP Operations Agent versions 11.01, 11.02, 11.03, and 11.04.

What's New in This Release (11.04)?

There are no new enhancements in this version of HP Operations agent. HP Operations Agent 11.04 comprises of only defects that have been fixed.

Defects

See the patch text file for more information about the fixed defects.

The reference number for each defect is the Quality Center Change Request (QCCR) number. For more information about open defects, visit HP Software Support Online, or contact your HP Support representative directly.

Known Issues with 11.04 Release

- Operations agent installation fails if the installer program is extracted in a non-English directory. For example, if you download the installer program in the Japanese folder, the installation of the Operations agent will not be successful.

- In the co-existence scenario where HP operations agent and Performance Manager are installed on the same node, you must install the Performance Manager 9.0 (component patch HPPM8X9XCPS_00002) before you install Operations agent 11.04 .

- After you install or upgrade the HP Operations agent 11.04 on the HPOM management server (HPOM for UNIX, Linux or Windows), the communication with the Solaris SPARC managed nodes running on Operations agent 8.60.005 will fail. Otherwise, the communication between

agent on the Solaris SPARC node (with the agent 8.60) and the management server (with the agent 11.04) will fail until you upgrade the agent on the management server to the version 11.04.

- **Workaround**: You must apply the hotfix QCCR1A97520 on all the Solaris SPARC managed nodes running with HP Operations agent 8.60.005 before upgrading to Operations agent 11.04.

  or

  Upgrade all the Solaris SPARC managed nodes running on HP Operations agent 8.60.005 to the higher versions such as HP Operations agent 8.60.501 or HP Operations agent 11.0x. Then, upgrade to HP Operations agent 11.04.

- Installation of HP Operations agent takes longer on the passive node of the OML management server in the cluster environment.

  - **Workaround**: Before you install Operations agent on the passive node, switch the node to the active state and then continue with the installation.

- If you install the HP Operations agent 11.04 on the Linux/Unix nodes using the IncludeUpdates command, error messages appear for installation. These messages can be safely ignored.

- Removal process of HP Operations agent 11.04 fails on Windows if the hotfix (HFWIN_00058) is installed on the node.

  - **Workaround**: Remove the hotfix before you install HP Operations agent 11.04.

Supported Platforms

You can find the Support Matrix for this product that lists all software and hardware requirements at this location: HP Support matrices.

Discontinuance of support for the HP Operations agent on Windows Vista and AIX 32 bit

With the release of the HP Operations agent11.04, support for the HP Operations agent 11.0x on Windows Vista and AIX 32 bit is discontinued.

What's New in 11.03 Release?

- The installer program available with this version of the HP Operations agent enables you to install HP Operations agent 11.00 and 11.03 together in the inactive mode by using the `-defer_configure` option. For more information see the *Installing the HP Operations Agent in the Inactive Mode* section in the *HP Operations Agent (*11.03 *) Installation Guide*.

- The logfiles can be archived through the scopeux process before performing a rollover.

  The logfiles are archived:

  On Windows

  logfile_timestamp

  On Unix

  logfile_timestamp.tar

  If the rollover is successful, the archived files are removed.

If the rollover results in corruption:

- remove the corrupted file and start with a fresh logfile

- use the archive file to extract data

- scope process will continue running and log data into a new logfile

What's New in 11.02 Release?

- **Enhancements in the parm file**

  - **New parm file parameter to include or exclude file system types**

    The `fstypes` parameter in the `parm` file enables you to choose file system types that can be excluded or included during the data logging process.

  - **New parm file parameter to include the cache memory for logging the memory utilization data (value of the GBL_MEM_UTIL metric)**

    The `cachemem` parameter in the `parm` file enables you to configure the agent to include the cache memory size while logging the total memory utilization for a node (value of the `GBL_MEM_UTIL` metric).

  - **New parm file parameters for monitoring Solaris global zones**

    The `parm` file parameters—`proclist` and `appproc`—enable you to exclude the processes and applications that belong to non-global zones while logging performance metrics for the global zone.

    For more information about using new parm file parameters, see the *Managing Data Collection* section in the *HP Operations Agent (11.02) User Guide.*

  - **Application grouping based on Solaris projects**

    The `project_app` parameter in the `parm` file enables you to group applications based on Solaris projects.

- **Enhanced data access from the log file-based data store**

  This version of the HP Operations agent introduces two new configuration variables (`DATAMATRIX_VERSION` and `DATAMATRIX_ROWCOUNT`) to help you access data from the log file-based data store (data that is logged by the `scope` collector) more efficiently. These variables enable different reporting tools (HP Service Health Reporter, HP Performance Manager, HP Reporter) to query data from the agent's data store in chunks and help you avoid connection failure when the data store holds a large volume of data. Use these variables for troubleshooting purposes only (that is, only when reporting tools show the error: `Error occurred while retrieving data from the data source`). For more information, see the *Troubleshooting* section in the *HP Operations Agent (11.02) User Guide.*

- **Ability to configure proxy servers from an external configuration file**

  In a secure environment, where you want to configure proxy servers for agent's communication with other managed nodes and management server, you can use an external configuration file to

specify the details of proxy servers instead of using the variable PROXY. This version of the agent introduces the configuration variable PROXY_CFG_FILE, which enables you to specify the location of the proxy configuration file that contains all the details of proxy servers that you want to use for secure communication.

For more information on using this variable, see the *Configuring Proxies* section in the *HP Operations Agent* 11.02 *Deployment Guide*.

- **Metrics enhancements**

  This version of the HP Operations agent provides the following enhancements to performance metrics:

  - This version of the HP Operations agent introduces the BYDSK_BUSY_TIME metric (for both Performance Collection Component and GlancePlus). The BYDSK_BUSY_TIME metric indicates the duration for which the disk device was busy transferring data.

  - The GBL_SWAP_SPACE_USED metric is now available on Windows. This metric indicates the total swap space that is in use. For more information, see the *Dictionary of Operating System Performance Metrics*.

  - The following metrics (which were previously available only with HP GlancePlus) can now be logged by the scope collector:

Metric	Description
GBL_CPU_QUEUE	This metric is an indicator of CPU demands among the active processes or kernel threads.
GBL_MEM_CACHE_UTIL	The percentage of physical memory used by the buffer cache.
GBL_MEM_FILE_PAGE_CACHE	The amount of physical memory used by the file cache.
GBL_MEM_FILE_PAGE_CACHE_ UTIL	The percentage of physical memory used by the file cache.
GBL_MEM_PAGEIN_BYTE	The number of kilobytes of page-ins.
GBL_MEM_PAGEIN_BYTE_RATE	The number of kilobytes of page-ins per second.
GBL_MEM_PAGE_FAULT	The number of page faults.
GBL_MEM_PAGE_FAULT_RATE	The number of page faults per second.
GBL_SWAP_SPACE_RESERVED	The amount of swap space reserved for the swapping and paging of programs that are currently running.
GBL_SWAP_SPACE_USED_UTIL	The percentage of swap space used.
BYDSK_ID	The ID of the current disk device.

Metric	Description
BYDSK_BUSY_TIME	The duration for which the disk device was busy transferring data.

For more information on these metrics, see the *Dictionary of Operating System Performance Metrics*.

- **Support for new platforms**

  HP Operations agent 11.02 supports the following platforms:

Operating System	Architecture
[a]Windows 7 SP1	x86
[a]Windows 7 SP1	x64
[a]Windows Server 2008 R2 SP1 on Hyper-V	x64
[b]Red Hat Enterprise Linux 6, 6.1	x86
[b]Red Hat Enterprise Linux 6, 6.1	x64
[b]Red Hat Enterprise Linux 6, 6.1	power
[a]Red Hat Enterprise Linux 4.9	x86
[a]Red Hat Enterprise Linux 4.9	x64
[a]CentOS 5.6 and 5.5	x86
[a]CentOS 5.6 and 5.5	x64
[b]CentOS 6	x86
[b]CentOS 6	x64
[b]Oracle Linux 6	x86
[b]Oracle Linux 6	x64
[b]AIX 7.1	power

[a]Between the version 11.01 and version 11.02 releases, this platform was certified as a supported platform for the HP Operations agent 11.0x.

[b]With the version 11.02 release, this platform is certified as a supported platform for the HP Operations agent 11.0x. To install the HP Operations agent 11.00 and 11.02 together on this platform by using the command line, you must use the -minprecheck option.

New cluster software support: This version of the HP Operations agent supports HP Serviceguard 11.20. In addition, modular packages are now supported for all versions of HP Serviceguard that are supported by the HP Operations agent 11.02.

- **Discontinuance of support for the HP Operations agent on Windows XP**

With the release of the HP Operations agent11.03, support for the HP Operations agent 11.0x on Windows XP is discontinued.

What's New in 11.01 Release?

- **Support for monitoring vMA 4.1**

  This version of the HP Operations agent enables you to monitor vSphere Management Assistant (vMA) 4.1.

- **Enhanced monitoring of Windows event logs**

  With this version of the HP Operations agent, you can monitor the data in the Details tab of Windows event logs (for Windows 2008). Also, the HP Operations agent can now monitor subscribed events and events with the level LOG_ALWAYS or VERBOSE.

- **New Configuration Variables**

  OPC_LE_SKIP_NO_OF_INVALID_EVENTS (namespace eaagt): When you set this variable to a positive integer, you can receive notifications in the HPOM console if invalid events are encountered by the logfile encapsulator (opcle). When the number of invalid events encountered by opcle reaches the value of this variable, the HP Operations agent sends an alert to the HPOM console. By default, this feature is disabled and the variable is set to -1.

- **New Metrics**

  - **GBL_MEM_ARC_UTIL:** This metric indicates the percentage of physical memory used by ZFS ARC.

  - **GBL_MEM_ARC:** For HP GlancePlus and RTMA only. This metric indicates the amount of Adaptive Replacement Cache(ARC) used by ZFS.

Changes

Changes with the 11.02 Release

Installation of the HP Operations agent 11.02 affects the OPC_MON_SAVE_STATE variable in the following way:

- If you did not set the variable to any values prior to installing the HP Operations agent 11.02, the OPC_MON_SAVE_STATE variable assumes the value FALSE.

- If you used the ovconfchg command to set a value (TRUE or FALSE) for the variable prior to installing the HP Operations agent 11.02 the configured value remains in effect after the installation process is complete.

  For example, if you used the command **ovconfchg -ns eaagt -set OPC_MON_SAVE_STATE TRUE** before installing the version 11.02 the same value (TRUE) is retained after the installation of the HP Operations agent 11.03.

For more information, see the *HP Operations Agent*11.02*) User Guide*.

HP Operations Agent Support Matrix

You can find the Support Matrix for this product that lists all software and hardware requirements at this location: HP Support matrices.

Note: 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 Access levels.

To register for an HP Passport ID, go to HP Passport Registration.

Installation Requirements

You can find requirements and steps to install the HP Operations Agent in the HP Operations Agent Installation Guide at this location:

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

After you log on to the manuals web site, follow these steps:

1. In the Product list, select Operations Agent.

2. In the Version list, select 11.03.

3. Click **Search**.

Installation Notes

- If you want to install the agent 11.00 and 11.04 together on a UNIX/Linux node, the following additional disk space is required for the data directory on the node:

Table: Additional Disk Space Requirement for Installing the HP Operations Agent 11.00 and 11.04 Together

Node Platform	Additional Disk Space Requirement
Linux x86	85 MB
Linux x64	74 MB
Linux POWER PC	61 MB
Linux Itanium	65 MB
HP-UX Itanium	194 MB
HP-UX PA-RISC	168 MB
Solaris SPARC	89 MB
Solaris x86	84 MB
AIX 64-bit	137 MB
AIX 32-bit	106 MB

- If you want to install only the HP Operations agent 11.04 on a UNIX/Linux node, the following additional disk space is required for the data directory on the node:

Table: Additional Disk Space Requirement for Installing only the HP Operations Agent 11.04

Node Platform	Additional Disk Space Requirement
Linux x86	35 MB
Linux x64	40 MB
Linux POWER PC	28 MB
Linux Itanium	30 MB
HP-UX Itanium	66 MB
HP-UX PA-RISC	54 MB
Solaris SPARC	31 MB
Solaris x86	31 MB
AIX 64-bit	53 MB
AIX 32-bit	39 MB

You need the above disk space in addition to what is specified as the required disk space in the *HP Operations Agent* 11.03 *Installation Guide*. If this additional space is not available, the installation fails (the prerequisite check of the installer does not check the availability of this additional space on the system).

After installing the HP Operations agent 11.04, if you accidentally install the agent 11.01, 11.02, or 11.03 the system becomes corrupt. To restore the system to its normal state, go to the scripts directory in the directory where you extracted or mounted the HP *Operations Agent* 11.04 ISO file, and then run the oacleanall script.

The scripts directory includes a set of `oacleanall` scripts—one script for each platform. You must choose the appropriate script to bring the system back to its original state. The following table lists the commands for all supported platforms.

Operating System	Architecture	Command
Windows	Itanium	cscript oacleanall_Windows_IA64.vbs
	x86	cscript oacleanall_Windows_X86.vbs
	x64	cscript oacleanall_Windows_X64.vbs

Operating System	Architecture	Command
Linux	Itanium	./oacleanall_Linux2.6_IA64.sh
	x86	./oacleanall_Linux2.6_X86.sh
	x64	./oacleanall_Linux2.6_X64.sh
	power (64-bit)	./oacleanall_Linux2.6_PPC64.sh
HP-UX	PA-RISC	./oacleanall_HP-UX_PA32.sh
	Itanium	./oacleanall_HP-UX_IA32.sh
Solaris	SPARC	./oacleanall_Solaris_SPARC32.sh
	x86	./oacleanall_Solaris_X86.sh
AIX	power (32-bit)	./oacleanall_AIX_powerpc32.sh
	power (64-bit)	./oacleanall_AIX_powerpc64.sh

Note: This script removes the agent (11.00 and 11.04) from the system completely and irrecoverably. Use this script only to reverse the effect of an incomplete, unsuccessful, or incorrect installation of the agent.

Defects

See the patch text file for more information on known problems and workarounds.

The reference number for each defect is the Quality Center Change Request (QCCR) number. For more information about open defects, visit HP Software Support Online, or contact your HP Support representative directly.

Enhancement Requests

See the patch text file for more information on enhancements.

The reference number for each defect is the Quality Center Change Request (QCCR) number. For more information about pending enhancement requests, visit HP Software Support Online, or contact your HP Support representative directly.

Fixed Defects

Fixes in the 11.03 Release

- QCCR1A134151: Intermittent error: transport endpoint is not connected from opcmona

- QCCR1A131034: High CPU utilization by scopeux.

- QCCR1A133053: HP Operations agent 11.02 deployment package cannot be installed on the HP Operations Manager for UNIX server due to miscalculation in disk space.

- QCCR1A126052: Increase in ovbbcrcp process memory on the AIX 5.3 platform

- QCCR1A130506: HP Operations agent binaries are pointing to 5.6.1 version, instead of 5.8.8 version of perl

- QCCR1A133147: High memory consumption by the opcle process.

Fixes in the 11.02 Release

Reintroduction of Embedded Performance Component (coda) Metrics

A group of metrics, which used to be exclusively collected by the Embedded Performance Component of the agent 8.x and not by the `scope` collector of the HP Performance Agent, was not available with the HP Operations agent 11.00. This version of the HP Operations agent provides an enhanced `scope` collector that is capable of collecting those metrics (see Table: Metrics Reintroduced by the HP Operations Agent 11.02 for the list of metrics).

Metrics Reintroduced by the HP Operations Agent 11.02

Metric Name	Description
BYCPU_INTERRUPT	The number of device interrupts for a CPU.
BYCPU_INTERRUPT_RATE	The average number of device interrupts per second for a CPU.
BYDSK_BUSY_TIME	The duration for which a disk device was busy transferring data.
BYDSK_ID	The ID of a disk device.
FS_DEVNO	On UNIX systems, this metric indicates the major and minor device numbers of a file system that you are monitoring. On Windows, this is the unit number of the disk device on which a logical disk resides.
FS_FRAG_SIZE	Block size of a file system.
GBL_ACTIVE_CPU	The number of active CPUs on the system.
GBL_CPU_CLOCK	The clock frequency of CPUs. This metric indicates NA if different CPUs run with different clock frequencies.

Metric Name	Description
GBL_MACHINE_MODEL	The model of the CPU.
GBL_MEM_PG_SCAN	The total number of pages scanned by the `pageout` daemon.
GBL_MEM_PG_SCAN_RATE	The number of pages scanned per second by the `pageout` daemon.
GBL_NET_COLLISION	The number of collisions that occurred on all network interfaces.
GBL_NET_ERROR	The number of errors that occurred on all network interfaces.
GBL_SWAP_SPACE_USED	The amount of swap space used (in MB).
GBL_SYSCALL	The number of system calls.
GBL_SYSCALL_RATE	The average number of system calls per second.
TBL_FILE_TABLE_USED	The number of entries in the file table that are currently in use by file descriptors.
TBL_PROC_TABLE_USED	The number of entries in the `proc` table that are currently in use by processes.

For more information on these metrics, see the *Dictionary of Operating System Performance Metrics*.

See the patch text file for information on other fixes.

Limitations

- If you want to use one of the following components of the HP Operations agent, you must run the agent with a user with the root/administrative privileges.
  - Performance Collection Component

  - Real-Time Measurement Component

  - Real-Time Metric Access Component

- If you install the agent 11.03 by mounting the ISO file, the following messages appear in the `oapatch.log` file after installation:

```
Installation of the component package HPOvXpl returned exception.
Installer received non-zero code
The requested operation is successful.
Changes will not be effective until the system is rebooted.
Installation of the component package HPOvSecCo returned exception.
Installation of the component package HPOvBbc returned exception.
```

If you run the following commands (from the bin directory) on the node before installing from the mounted ISO file, these messages do not appear:

a. **opcagt –kill**

b. **midaemon –T**

c. **ttd –k**

- On an HP-UX system, if you open the character-mode interface of glance during the installation of the agent 11.03, the following error message appears in the glance console:

```
Glance fatal error. == Fatal Nums Error == 11.00.044 10/13/10 ==
```

Ignore this error.

- You can use only the Operations Monitoring Component with a non-root/non-privileged user. If you use measurement threshold policies that use the performance metrics from the agent's data store, you must run the Operations Monitoring Component too with a root/administrative user.

- If the SNMP_SESSION_MODE variable is set to the value NO_TRAPD, the event interceptor component of the HP Operations agent   connects to Microsoft's SNMP service on a Windows node.

- The scope collector logs the value of the FS_DEVNO metric in the decimal format. The real-time metric access (RTMA) and real-time measurement (RTM) components and HP GlancePlus show the value of FS_DEVNO in the hexadecimal format.

- On Solaris non-global zones and AIX WPARs, the following metric classes are not supported by the Performance Collection Component, GlancePlus, and RTMA:
  - CPU class (BYCPU)

  - Disk class (BYDSK)

  - Swap class (BYSWP)

  - Logical volume (LVM)

  - Logical system (BYLS)

    Note: In addition, the Performance Collection Component does not support metrics of the NFS metric class in AIX WPARs.

- The following metrics are not supported by the Performance Collection Component in Solaris non-global zones:
  - GBL_DISK_TIME_PEAK

  - GBL_DISK_REQUEST_QUEUE

  - GBL_CPU_WAIT_UTIL

  - GBL_DISK_PHYS_IO_RATE

  - GBL_DISK_PHYS_READ_RATE

  - GBL_DISK_PHYS_WRITE_RATE

  - GBL_DISK_PHYS_BYTE_RATE

  - GBL_DISK_PHYS_WRITE_BYTE_RATE

- GBL_DISK_VM_IO_RATE

- GBL_MEM_SYS_AND_CACHE_UTIL

- GBL_SWAP_SPACE_AVAIL

- GBL_SWAP_SPACE_RESERVED

- GBL_SWAP_SPACE_AVAIL_KB

- GBL_SWAP_SPACE_MEM_AVAIL

- GBL_CPU_CYCLE_ENTL_MIN

- GBL_DISK_UTIL_PEAK

- GBL_DISK_PHYS_READ_PCT

- GBL_CPU_WAIT_TIME

- GBL_DISK_PHYS_IO

- GBL_DISK_PHYS_READ

- GBL_DISK_PHYS_WRITE

- GBL_DISK_PHYS_READ_BYTE_RATE

- GBL_DISK_PHYS_BYTE

- GBL_DISK_VM_IO

- GBL_MEM_CACHE_HIT_PCT

- GBL_SWAP_SPACE_USED

- GBL_SWAP_SPACE_UTIL

- GBL_CPU_MT_ENABLED

- GBL_SWAP_SPACE_DEVICE_AVAIL

- GBL_CPU_CYCLE_ENTL_MAX

- TBL_PROC_TABLE_UTIL

- TBL_FILE_LOCK_USED

- GBL_ZONE_APP

- For the following metrics, the Performance Collection Component shows global zone values in non-global zones:
  - GBL_MEM_DNLC_HIT_PCT

  - GBL_FS_SPACE_UTIL_PEAK

  - GBL_NET_PACKET_RATE

  - GBL_NET_IN_PACKET

  - GBL_NET_IN_PACKET_RATE

  - GBL_NET_OUT_PACKET

  - GBL_NET_OUT_PACKET_RATE

- GBL_NET_COLLISION_RATE

- GBL_NET_COLLISION_PCT

- GBL_NET_DEFERRED_PCT

- GBL_NET_ERROR_RATE

- GBL_NET_IN_ERROR_PCT

- GBL_NET_IN_ERROR_RATE

- GBL_NET_OUT_ERROR_PCT

- GBL_NET_OUT_ERROR_RATE

- GBL_NET_COLLISION_1_MIN_RATE

- GBL_NET_ERROR_1_MIN_RATE

- GBL_RUN_QUEUE

- GBL_LOADAVG

- GBL_LOADAVG5

- GBL_BLOCKED_IO_QUEUE

- The Performance Collection Component always reports zero for the following metrics in non-global zones:
  - GBL_NUM_DISK

  - GBL_NUM_LS

  - GBL_NUM_ACTIVE_LS

  - GBL_NUM_DISK

- On Linux, the following metrics are logged only for SUSE Linux Enterprise Server 11 and Red Hat Enterprise Linux 5.4 or higher:
  - APP_DISK_PHYS_IO_RATE

  - APP_DISK_PHYS_READ

  - APP_DISK_PHYS_READ_RATE

  - APP_DISK_PHYS_WRITE

  - APP_DISK_PHYS_WRITE_RATE

  - APP_IO_BYTE

  - APP_IO_BYTE_RATE

- To view the man pages on UNIX/Linux platforms, you must manually set the `MANPATH` variable to the following locations:
  - On AIX: `/usr/lpp/OV/man`, `/usr/lpp/perf/man`

  - On HP-UX, Solaris, and Linux: `/opt/OV/man`, `/opt/perf/man`

- You cannot enable or disable a policy with the ovpolicy command if the policy name includes the **:** character.

- You cannot use the PROCESS object with the SCOPE data source in Measurement Threshold policies where the source is set to Embedded Performance Component. Such Measurement Threshold policies fail to perform monitoring and send the following message to the HPOM console:

  ```
  CODA: GetDataMatrix returned 76='Method
  ScopeDataView::CreateViewEntity failed
  ```

- After installation, the evaluation license for the HP Ops OS Inst to Realtime Inst LTU is not automatically activated on AIX WPARs or in Solaris non-global zones. You can run the following commands to activate the evaluation license for this LTU:

  AIX WPARs

  a. **/usr/lpp/OV/bin/oalicense -set -type EVALUATION "HP Ops OS Inst to Realtime Inst LTU"**

  b. **/usr/lpp/OV/bin/ovcreg -add /usr/lpp/OV/newconfig/DataDir/conf/perf/rtmd.xml**

  c. **/usr/lpp/OV/bin/ovc -start rtmd**

  Solaris non-global zones

  a. **/opt/OV/bin/oalicense -set -type EVALUATION "HP Ops OS Inst to Realtime Inst LTU"**

  b. **/opt/OV/bin/ovcreg -add /opt/OV/newconfig/DataDir/conf/perf/rtmd.xml**

  c. **/opt/OV/bin/ovc -start rtmd**

Documentation Updates

The first page of this document identifies the:

- Version number for the software.

- Software release date.

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