

# HP Operations Agent

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

Software Version: 11.12

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## Release Notes

Document Release Date: September 2013

Software Release Date: June 2013



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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/>).

This product includes an interface of the 'zlib' general purpose compression library, which is Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.

## 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.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

**<http://h20230.www2.hp.com/selfsolve/manuals>**

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

Or click the **New users - please register** link on the HP Passport log on page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

## Support

Visit the HP Software Support Online web site at:

**<http://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 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 web 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 a support contract. To register for an HP Passport ID, go to:

**<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](http://h20230.www2.hp.com/new_access_levels.jsp)**

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## HP Operations Agent Release Notes

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

**Software version:** 11.12

**Publication date:** September 2013

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](#)
- [Known Problems](#)
- [Documentation Updates](#)

### What's New in This Release

#### 11.12

- **Consolidated media for HP Operations agent and Infrastructure SPI**

The consolidated media provides both the HP Operations agent and Infrastructure SPIs packages for the base media (version 11.11 ) and patch (version 11.12) together.

The base media is the DVD containing the HP Operations agent and Infrastructure SPIs packages for all the platforms. The patch releases contain enhancements and defect fixes of the product. You can download the platform-specific ISO's from the <http://h20230.www2.hp.com/selfsolve/patches>

The HP Operations agent releases are categorized as:

Release Version	Media	Patch
11.10	Yes	-
11.11	Yes	-
11.12	Yes (Consolidated media containing the packages of the product for the version 11.11 and platform specific ISO's for the version 11.12)	Yes

By using the consolidated media version 11.12, you have an option to upgrade from Operations agent 8.53, 8.60, 11.0x, or 11.10 to the following version in a **single** step:

- Base media version (11.11 )

**or**

- Base media version (11.11) and then the patch version (11.12 ) together

In addition, you can do the following by using the consolidated media:

- Register HP Operations agent 11.11 and 11.12 together on the management server.
- Register HP Operations agent 11.11 and install Infrastructure SPIs 11.11 on the management server.
- Install Infrastructure SPIs 11.11 and 11.12 together on the management server.
- Installing HP Operations agent (version 11.11 and 11.12) on the managed node.

The consolidated media also provides an option to remove the Infrastructure SPI patch or remove all the available Infrastructure SPIs patches.

To upgrade HP Operations agent and Infrastructure SPIs from version 11.11 to version 11.12, you can do the following:

- Download the consolidated media which contains platform-specific ISO's for HP Operations agent and Infrastructure SPIs.
- Download the HP Operations agent and Infrastructure SPIs ISO files from the web site: <http://h20230.www2.hp.com/selfsolve/patches>.

For more information, see *HP Operations agent and Infrastructure SPIs Installation Guide*.

### ■ VMware virtual appliance

The HP Operations agent 11.12 (patch) includes a VMware virtual appliance in the form of `HPOA_VM_OVF10.ova` file prepackaged with HP Operations agent 11.12. To monitor the vSphere environment, you can deploy the virtual appliance and collect performance data of the virtual infrastructure from different VMware vCenter Servers.

For more information about deploying the virtual appliance, see the *HP Operations Agent User Guide: VMware Monitoring*

Simple upgrade from the previous version of virtual appliance with HP Operations agent to version 11.12 is available. For more information, see *Upgrading the Virtual Appliance with HP Operations agent to Version 11.12* in the *HP Operations Agent User Guide: VMWare Monitoring*

### ■ New consolidated package for HP-UX

This version of the HP Operations agent contains a consolidated package depot file for HP-UX. You can use the new consolidated HP-UX package by copying the package from the media. The file is available at the following location:

For the Itanium platform:

```
<Media_root>\patches\OAHPUX_00030\HP-UX_IA32\HPOAConsolidated.depot.Z
```

For the PA-RISC platform:

```
<Media_root>\patches\OAHPUX_00030\HP-UX_PA32\HPOAConsolidated.depot.Z
```

You can install HP operations agent package by using the `swinstall` command on HP-UX.

### ■ Integration of HP Operations agent with HP Network Node Manager i

Integration with HP Operations agent helps you to monitor the traps forwarded by HP NNMi and view the enriched SNMP traps on the HPOM console. The HP Operations agent integration with HP NNMi is available with Northbound interface and trap forwarding.

To process and use this information with HP Operations agent, you must configure SNMP interceptor (opctrapi) for the following:

- Enhance message severity
- Create CMAs from NNMi Custom Incident Attributes (CIA) on the HPOM console
- Assign source of SNMP trap

For more information, see *Integrating HP Operations Agent with HP NNMi* in the *HP Operations Agent User Guide*.

### ■ **Capability to stop all the HP Operations agent processes by a single command**

You can stop all the processes of the HP Operations agent components (Operations monitoring and performance collection components) by running a single command (`opcagt -kill`). For more information, see the *HP Operations Agent Installation Guide*.

### ■ **Enhanced perfd process to check the license before starting the data collection**

The **perfd** process starts the data collection only after verifying that the license is enabled. If the license is not enabled, the process is idle.

### ■ **Enhanced perfd process to enable threshold and filter conditions**

You can set the threshold and filter options in the perfd process. For more information, see *Enabling Threshold and Filter Conditions* in the *HP Operations Agent User Guide*.

### ■ **Support for new metrics**

- BYNETIF\_NET\_SPEED
- BYNETIF\_UTIL
- GBL\_NET\_UTIL\_PEAK
- GBL\_CPU\_WAIT\_TIME\_CUM
- GBL\_CPU\_WAIT\_UTIL\_CUM
- GBL\_CPU\_WAIT\_UTIL\_HIGH
- GBL\_CPU\_WAIT\_TIME
- PROC\_SCHEDULER
- THREAD\_SCHEDULER

### ■ **Deprecation of Event Correlation Agent (opceca) component**

HP Software announces deprecation of Event Correlation Agent components (opceca and opcecaas) of HP Operations agent with the version 11.12. HP Software will continue to support the component (in terms of defect fixes) till the obsolescence of product component is announced. No further enhancement to the Event Correlation Agent component will be done.

### ■ **Obsolescence of OPC\_IP\_ADDRESS variable with HP Operations agent 11.12**



The OPC\_IP\_ADDRESS variable is a configuration variable available with the Operations Monitoring Component of HP Operations agent. This variable is used with DCE and the value of this variable specifies the IP address or node name of the managed node. With this release, OPC\_IP\_ADDRESS will be obsolete. OvCoreID is used with HTTPS agents to identify messages for the managed node.

### Code Signing

HP Operations agent contains digitally signed code. This is to protect the integrity of the software. Sometimes, when you run Agent commands on the managed node, the response is very slow. The delay may happen due to Certificate Revocation List (CRL) check.

For more information, see <http://support.opview.hp.com/selfsolve/document/KM00377257>.

## New Features Introduced in 11.1x Releases

### 11.11

#### ■ VMware virtual appliance

The HP Operations Agent 11.11 media includes a VMware virtual appliance in the form of HPOA\_VM\_OVF10.ova file prepackaged with HP Operations agent 11.11.

To monitor the vSphere environment, you can deploy the virtual appliance and collect performance data of the virtual infrastructure from different VMware vCenter Servers.

For more information about deploying the virtual appliance, see the *HP Operations Agent User Guide: VMware Monitoring*.

#### ■ Support for new platforms: Debian 6, Ubuntu 11.10 and 12.04

#### ■ Backup Server

You can set up one or more backup servers, to which the messages must be sent when the primary server is down. For more information, see the *HP Operations Agent User Guide*.

#### ■ AIX Virtualization Monitoring

Monitor Power Frame level metrics - To discover and monitor Logical instances that are active on a frame.

### 11.10

#### ● Support for new virtualization platforms:

- Kernel-based Virtual Machine (KVM) for all supported Linux kernels
- Xen (for supported SUSE Linux versions)
- Branded zones for Solaris

For more information, see *HP Operations Agent in an Extended Virtualized Environment* section in the *HP Operations Agent Concepts Guide*.

- **Licensing:** You can now set a license for the HP Operations agent at the time of installation. For more information, see the *HP Operations Agent Installation Guide* and *License Guide*.

The installation of the HP Operations agent no longer sets evaluation licenses. To be able to use any feature, you must do one of the following:

- Apply a license at the time of installation; see the *Installation Guide* and *License Guide* for more information.
- Apply a license after installation by using the `oalicense` utility; see the *License Guide* for more information.
- **Simplified installation process of the HP Operations agent and Infrastructure SPIs**

The *HP Operations Agent and Infrastructure SPIs* media provides both the HP Operations agent and Infrastructure SPIs packages and enables you to install both the products with the `oainstall` program.
- **Faster installation on Windows:** On Windows, the installation of the HP Operations agent 11.10 requires significantly less time than the installation of the older version (11.00).
- **Enhanced security:**
  - You can now run the HP Operations agent with a non-root/non-privileged user. You can also configure the agent to run only the Operations Monitoring Component with a non-root/non-privileged user and continue to run the Performance Collection Component with root/Local System. For more information, see the *HP Operations Agent User Guide*.
  - The HP Operations agent enables you to configure the key length of the RSA key pair that is used for secure communication with the HPOM. For more information, see the *Configuring the Security Component Variables* section in the *HP Operations Agent User Guide*.
  - With the help of the new configuration variable `ENABLE_DEF_SYM_KEY_ALGO`, you can configure the agent to use a symmetric key algorithm of your choice for secure communication. Supported algorithms are:
    - eBlowfish
    - eDES
    - eDES3
    - eAES128
    - eAES192
    - eAES256

For more information, see the *Configuring the Security Component for Symmetric Key* section in the *HP Operations Agent User Guide*
- **Support for new platforms:** Solaris 11
- **Discontinuance of support:** With this version, support for the HP Operations agent is discontinued on the following platforms:
  - Linux on Itanium
  - Windows on Itanium
  - AIX 5.3 (32-bit)
  - Solaris 9

## 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 11.12. If you are installing version 11.11, download *Installation Guide 11.11*.
3. Click **Search**.

## Installation Notes

- Upgrading the HP Operations agent from a *prerelease evaluation* version is not supported. Before installation, you must completely remove the prerelease evaluation version of the HP Operations agent 11.12 from the system.
- After installing the HP Operations agent 11.12, if you accidentally install the agent 11.00, agent installation is corrupt. To restore to its normal state, go to the scripts directory on the installation media, and then run the `oacleanall` script. The `oacleanall` script enables you to remove the agent completely from the system.

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.

**Note:** Do not use this script on a system where the agent coexists with other HP Software products.

Operating System	Architecture	Command
Windows	x86	<code>cscript oacleanall_Windows_X86.vbs</code>
	x64	<code>cscript oacleanall_Windows_X64.vbs</code>

Operating System	Architecture	Command
Linux	x86	./oacleanall_Linux2.6_X86.sh
	x64	./oacleanall_Linux2.6_X64.sh
	power (64-bit)	./oacleanall_Linux2.6_PPC64.sh
Linux (Debian)	x64	./oacleanall_Linux2.6_X64_DEB.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 (64-bit)	./oacleanall_AIX_powerpc64.sh

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

### Uninstall Notes

If the node hosts another HP Software product, make sure to stop all the processes of the product prior to the agent uninstallation. After the agent is completely uninstalled, you can start the processes of the HP Software product

### Known Problems

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.

---

**QCCR1A163010:** Opcmona process with 'SNMP MIB' as source in the policy definition works for the remote node. However, it fails for the local node.

**Workaround:** Contact HP Support for the hotfix.

---

**QCCR1A160602:** After you uninstall HP Operations agent 11.12, the queue files available with version 11.12 are still present on the node. The HP Operations agent 11.11 will not work with the queue files available with version 11.12.

**Workaround:** Run the command to restart agent processes: **opcagt -cleanstart**

---

**QCCR1A161956:** On AIX LPARs, the values of the `GBL_CPU` and `BY_CPU` metrics do not match the values indicated by system monitoring tools that are built-in with AIX unless you set the CPU sharing mode as `DEDICATED`.

**Workaround:** None

---

**QCCR1A161681:** When the Virtual Appliance (VA) is hosted on vCenter that is also monitored by the HP Operations agent on the VA, the parent details of VA such as Data Center name, Cluster name are unavailable. These details are required to associate the VA node with the vCenter. This issue impacts HP Operations Smart Plug-in for Virtualization Infrastructure (VI SPI) discovery process. The VA node will not be discovered as a VM instance.

**Workaround:** None.

---

**QCCR1A162689:** Install HP Operations agent 11.12 on HP-UX machine using `swinstall` command and then reconfigure HP Operations agent using the command:

`/opt/OV/bin/OpC/install/oainstall.sh -c -a`. Some of the agent component XML files for the version 11.12 will not appear in the inventory list.

**Workaround:**

Run the command to restore the deleted agent component XML files:

```
cp /opt/OV/newconfig/installation/inventory/*-OAHPUX_00030.xml  
/var/opt/OV/installation/inventory/
```

In this instance, **OAHPUX\_00030** is the HP-UX patch ID.

---

**QCCR1A153010:** Opcle multiple monitoring template policy fails to send messages after restarting the opcle process from the Ubuntu operating system.

**Workaround:** Set the locale to **en\_US.utf8**.

---

**QCCR1A150517:** When logfile policies having some pre-processing actions are deployed, and a re-configuration happens simultaneously, **opcle** aborts.

**Workaround:** None

---

**QCCR1A150469:** If you add or delete an ESX/ESXi host to a vCenter monitored by HP Operations agent on the virtual appliance, the change is not detected by the HP Operations agent.

**Workaround:** Restart the data collection process of the HP Operations agent from the HP Operations Agent Virtual Appliance web console.

---

**QCCR1A153550:** *On Windows only.* When you upgrade the HP Operations agent running in the NPU mode (that is, with a non-default user with fewer privileges than root or the Local System account) to the version 11.11, the agent starts running with root or the Local System account.

**Workaround:** After the upgrade, configure the agent to run in the NPU mode. To configure, use the command `cscript oainstall.vbs -c -a -npu_password <npu password>`.

---

**QCCR1A153345:** Command line utility **Extract** does not provide the complete output and exits with `Segmentation fault` message in the following scenarios:

- While retrieving data from **rxlog** file in the guided mode. This affects both the Detail and Summary records.
- While retrieving data by using the command to specify the class name using `-C` option - **extract -xp -C <classname>**. This impacts DSI data export and retrieval functionality.

**Workaround:** Use the **extract** command: **extract -xp <any of -gapkdztncuyiGADZTNUYI > -I logfile**. To retrieve DSI data, use CODA interface to add logfile entry in the `datasources` file.

---

**QCCR1A145411:** Remote deployment of the HP Operations agent 11.12 from the HPOM on UNIX/Linux console to Windows nodes fails.

**Workaround:** Contact HP Support for the hotfix.

---

**QCCR1A129472:** `scopeux`, `perfalarm`, and `rtmd` processes remain Down on a global AIX LPAR after creating a new shared WPAR on it.

**Workaround:** Run the following commands:

- To start `scopeux` and `perfalarm`:  
**ovpa start scope**
  - To start `rtmd`:  
**ovc -start rtmd**
- 

**QCCR1A126866:** On an agent node in a high-availability cluster, when the state of an HPOM policy changes from disabled to enabled, the `clusterpollist` file is not updated.

**Workaround:** None.

---

**QCCR1A146928:** Within the first five minutes after installing the HP Operations agent on a Windows node, the `perfalarm` process stops working.

The following message appears in the `status.perfalarm` file:

```
ALARM GENERATOR BEGIN  
  
Data Source file is empty!
```

**Workaround:** Restart `perfalarm` by running the following command:

**ovpacmd start alarm**

---

**QCCR1A143330:** After upgrading the HP Operations agent on Windows to the version 11.12, the following unnecessary messages appear in the `oainstall.log` file:

- `[HPSharedComp][Lcore][ERROR] ><Product Matrix C:\Documents and Settings\All Users\Application Data\HP\HP BTO Software\conf\ProductMatrix.cfg was not found`

- [HPSharedComp][Lcore][ERROR] ><The file C:\Program Files\HP\HP BTO Software\bin\ovcd.exe is not found
- [HPSharedComp][OvSecCC][ERROR] ><Error in stopping HP OpenView Ctrl Service
- [HPSharedComp][OvSecCC][ERROR] ><Error In OvCslAddInitScript. Error Value Returned: 64 -
- [HPOvPerlA][OvPerlA][ERROR] ><Error Line: Error Source: OvCslRemoveComponentVersions() Error Description: Variable is undefined [User Description: -General Error Check in OvCslRemoveComponentVersions() . ] [<date> PM] [HPOvPerlA][OvPerlA][ERROR] >< Error Line: Error Source: OvCslWriteComponentVersions Error Description: Variable is undefined [User Description: -General Error Check in OvCslWriteComponentVersions() . ]

**Workaround:** Ignore these messages.

---

**QCCR1A160910:** After you uninstall Operations agent 11.1x from HP-UX PA- RISC node, some messages are available with oalicense. Messages are available in file (*/core*).

**Workaround:** Ignore the messages.

---

### Node Name or IP Address Issues

After installing HP Operations agent 11.12, node name resolution may get affected. This may result in the messages not able to reach the correct external nodes, Operations agent Message Stream Interface (MSI) containing the empty node name or IP address, or a policy condition with the mismatch in the node name.

**QCCR1A166209:** If the SNMP trap policy has a condition with node-name (FQDN) specified in the node field, HP Operations agent may not match the condition. When a trap gets generated from one of the nodes specified in the Node field, this condition may not match.

**QCCR1A165720:** When message agent fails to resolve the node name, then the local hostname or IP address is getting added in final message. This issue appears when a message is sent with opcmmsg with the value of the node as UNRESOLVABLE HOSTNAME.

**QCCR1A166199:** While reading opctrapi messages from agent MSI queue using C API, the node name in the message appears as blank. Although the issue exists but messages appear on the HPOM management server with the proper node name.

**Workaround:** Contact HP Support for the hotfix.

## Limitations

- On an HP-UX system, if you open the character-mode interface of glance during the installation of the agent 11.12, the following error message appears in the glance console:

```
Glance fatal error. == Fatal Nums Error ==
```

Ignore this error.

- After installing the HP Operations agent 11.12 on a Windows system, several new programs such as HP Software E/A Agent, HP Software Measurement Interface, HP Software Performance Core, and HP Operations-agent program appear in the Programs and Features (Add/Remove Programs) window. While uninstalling the HP Operations agent by using the Programs and Features window, always select **HP Operations-agent** and ignore all other programs that were added after the installation.
- Although the `scope` collector logs an identical set of BYLS metrics on vMA, KVM hosts, and Xen hosts, the values of the following metrics are always indicated as `na` in the scope log on KVM or Xen hosts:
  - BYLS\_CLUSTER\_NAME
  - BYLS\_CPU\_PHYS\_READY\_UTIL
  - BYLS\_CPU\_PHYS\_WAIT\_UTIL
  - BYLS\_CPU\_PHYSYC
  - BYLS\_CPU\_SYS\_MODE\_UTIL
  - BYLS\_CPU\_USER\_MODE\_UTIL
  - BYLS\_CPU\_UNRESERVED
  - BYLS\_DATACENTER\_NAME
  - BYLS\_DISK\_UTIL
  - BYLS\_DISK\_UTIL\_PEAK
  - BYLS\_LS\_PARENT\_TYPE
  - BYLS\_LS\_PARENT\_UUID
  - BYLS\_MEM\_ACTIVE
  - BYLS\_MEM\_HEALTH
  - BYLS\_MEM\_OVERHEAD
  - BYLS\_MEM\_SWAPPED
  - BYLS\_MEM\_SWAPTARGET
  - BYLS\_MEM\_SWAP\_UTIL
  - BYLS\_MEM\_SYS
  - BYLS\_MEM\_UNRESERVED
  - BYLS\_VC\_IP\_ADDRESS
  - BYLS\_DATACENTER\_NUM\_HOSTS
  - BYLS\_BOOT\_TIME\_EPOCH
  - BYLS\_SUBTYPE
  - BYLS\_DISK\_CAPACITY
  - BYLS\_MULTIACC\_ENABLED



- BYLS\_DISK\_IORM\_ENABLED
- BYLS\_DISK\_IORM\_THRESHOLD
- BYLS\_DISK\_FREE\_SPACE
- BYLS\_DISK\_SHARE\_PRIORITY
- BYLS\_DISK\_READ\_LATENCY
- BYLS\_DISK\_WRITE\_LATENCY
- BYLS\_DISK\_QUEUE\_DEPTH\_PEAK
- BYLS\_DISK\_COMMAND\_ABORT\_RATE
- BYLS\_DISK\_THROUGHPUT\_USAGE
- BYLS\_DISK\_THROUGHPUT\_CONTENTION
- BYLS\_NUM\_CLONES
- BYLS\_NUM\_CREATE
- BYLS\_NUM\_DEPLOY
- BYLS\_NUM\_DESTROY
- BYLS\_NUM\_RECONFIGURE
- BYLS\_TOTAL\_VM\_MOTIONS
- BYLS\_TOTAL\_SV\_MOTIONS
- BYLS\_CPU\_EFFECTIVE\_UTIL
- BYLS\_MEM\_EFFECTIVE\_UTIL
- BYLS\_CPU\_FAILOVER

These metrics are not available with GlancePlus or the Real-Time Metric Access (RTMA) utilities (like `cps`).

- For Domain-0 or any other instance with unlimited memory entitlement, the `BYLS_MEM_PHYS_UTIL` metric shows `na`. (On KVM and Xen hosts, the `BYLS_MEM_PHYS_UTIL` metric shows the percentage of the total memory assigned to the virtual machine that is currently used.)
- On AIX, the `FS_SPACE_RESERVED` metric is typically zero for local file systems since AIX does not reserve any file system space by default for the superuser.
- The `GBL_NUM_VG` metric shows zero if you disable the Logical Volume class of metrics.
- 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
```
- Limitations for using a non-default (no-root or non-privileged) user
  - The non-privileged user mode is not supported on the HP-UX platform.
  - The non-privileged and mixed modes are not supported on the HPOM management server. The HPOM processes must always run under the root/Local System user.
  - The non-privileged and mixed modes are not supported on AIX WPAR.
  - The BYLS metrics data cannot be collected for Xen and KVM hosts.
  - The HP Operations agent cannot collect metrics starting with `PROC_REGION_*` or `PROC_FILE_*` for all instances of processes owned by non-privileged users. Also, processes running with higher privileges like `ovbbccb` and `sshd` are not available in the non-privileged mode.
  - On Windows, the `PROC_USER_NAME` metric is displayed as `Unknown` for processes owned by users other than the agent user.
  - On AIX, you may see the following error message in the command line console (or in the `oainstall.log` file in the `/var/opt/OV/log` directory) after you configure the agent to use the non-default user:

Product activation failure. Refer to the log file for more details.

Ignore this error.

## Documentation Updates

The first page of this document identifies the:

- Version number for the software.
- Software release date.

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