HP Operations Agent

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

Software Version: 11.11

Release Notes

Document Release Date: January 2012

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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.

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

This site requires that you register for an HP Passport and log on. To register for an HP Passport ID, go to:

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:

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- 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

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HP Operations Agent Release Notes

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

Software version: 11.11

Publication date: December 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
- Known Problems
- Documentation Updates

What's New in This Release

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 the *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 SPIsmedia 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 11.11 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 11.11 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
 - o eDES3
 - o eAES128
 - o eAES192
 - o 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)

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 11.11.
- 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 11.11 from the system.
- After installing the HP Operations agent 11.11, if you accidentally install the agent 11.00, the system becomes corrupt. To restore the system to its normal state, go to the scripts directory on the installation media, and then run the <code>oacleanall</code> script. The <code>oacleanall</code> 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	cscript oacleanall_Windows_ X86.vbs
	x64	cscript oacleanall_Windows_ X64.vbs

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 <u>HP Software Support Online</u>, or contact your HP Support representative directly.

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.

QCCR1A153670: On the HP Operations agent virtual appliance, if you configure the agent to use the "fast" collection frequency and monitor a large number of entities, the perfalarm process times out, and occasionally, stops working. As a result, the agent fails to generate any alerts based on the definitions in the alarmdef file.

Workaround: Reduce the data retention period to a smaller value. For more information, see the Configure Automatic Purging of Data section in the HP Operations Agent User Guide: VMware Monitoring.

QCCR1A145411: Remote deployment of the HP Operations agent 11.11 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.

QCCR1A123816: The rtmd process fails to start on the Windows nodes and the following error message appears in the System.txt file:

rtmd (1188/2188): Failed to connect to perfd.

Workaround:

1. Stop the agent:

opcagt -stop

- 2. Open the perfd.ini file with a text editor.
- 3. Add (or comment out) the following line:

ipv4=true

- Save the file.
- 5. Start the agent:

opcagt -start

Alternatively, add the following entry in the $systemRootssystem32\drivers\etc\hosts$ file before starting the agent:

::1 localhost

QCCR1A145606: On AIX LPARs, the values of the BYCPU_ metrics do not match the values indicated by system monitoring tools that are built-in with AIX unless you set the CPU sharing mode DEDICATED.

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 11.11, 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.

Limitations

• On an HP-UX system, if you open the character-mode interface of glance during the installation of the agent 11.11, the following error message appears in the glance console:

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

- After installing the HP Operations agent 11.11 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.
- If the SNMP_SESSION_MODE variable is set to the value NO_TRAPD, the event interceptor component of the HP Operations agent 11.11 connects to Microsoft's SNMP service on a Windows node.
- 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_PHYSC
 - 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_THROUGPUT_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 <code>cpsh</code>).

- 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 realtime 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 nonglobal 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.

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