

HP Operations Agent

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

Software Version: 11.10

Release Notes

Document Release Date: Aug 2012

Software Release Date: Aug 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:

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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.

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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.

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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: 11.10

Publication date: Aug 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

- **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 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 11.10 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)

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 11.10.
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 11.10 from the system.
- After installing the HP Operations agent 11.10, 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 `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>
Linux	x86	<code>./oacleanall_Linux2.6_X86.sh</code>
	x64	<code>./oacleanall_Linux2.6_X64.sh</code>
	power (64-bit)	<code>./oacleanall_Linux2.6_PPC64.sh</code>
HP-UX	PA-RISC	<code>./oacleanall_HP-UX_PA32.sh</code>
	Itanium	<code>./oacleanall_HP-UX_IA32.sh</code>
Solaris	SPARC	<code>./oacleanall_Solaris_SPARC32.sh</code>
	x86	<code>./oacleanall_Solaris_X86.sh</code>
AIX	power (64-bit)	<code>./oacleanall_AIX_powerpc64.sh</code>

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.

Uninstallation 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.

QCCR1A145411: Remote deployment of the HP Operations agent 11.10 from the HPOM on UNIX/Linux console to Windows nodes fails.

Workaround: None

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

```
ipv4=true
```

4. Save the file.

5. Start the agent:

opcagt -start

Alternatively, add the following entry in the `%SystemRoot%\system32\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

QCCR1A147305: On Windows, the `ovdeploy -inv -includeupdates` command does not list any components other than HP Software Perl.

Workaround: None

QCCR1A147308: The `OPC_INSTALLED_VERSION` variable does not show the version information when you upgrade the HP Operations agent from 11.00 to 11.10.

Workaround: None

QCCR1A123745: All `BYLS_` metrics are displayed as `na` for a particular LPAR system.

Workaround: Clear the shared memory on the LPAR for which the data is shown as `na`, and then restart the agent.

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 11.10, 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 11.10, the following error message appears in the glance console:

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

Ignore this error.

- After installing the HP Operations agent 11.10 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 11.10 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_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 `cpsh`).

- 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

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- Software release date.

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