Hewlett Packard
Enterprise

HPE Operations Agent

Software Version: 12.02
For the Windows®, HP-UX, Linux, Solaris, and AIX operating systems

Release Notes

Document Release Date: February 2017

Software Release Date: December 2016

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Contents

HPE Operations Agent Release Notes

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

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This document provides an overview of the changes made to the HPE Operations Agent. You can find information about the following:

- What's New in this Release
- Known Issues

> **Note:** HPE Operations Agent 12.02 is localized in the following languages: English, French, German, Japanese, Russian, Korean, Simplified Chinese, and Spanish.

For the list of supported hardware, operating systems, and integration with other products, see the Support Matrix.

What's New in this Release

12.02

Performance Updates

Custom data logging is enhanced with the following capabilities:

- Added a Perl API to log strings.
- Raw data logging support in DSI.
- Capability to customize DB size for custom data classes added.
- Metric label capacity increased to 48 characters.
- Performance of Perl APIs used for custom data logging is optimized and improved.

For more information, see the section *Logging Custom Data* in the *HPE Operations Agent User Guide.*

Install Notification Enhancement

While installing or upgrading HPE Operations Agent if the HPE OMi server is not active, HPE Operations Agent is enhanced to send a install notification to the HPE OMi server when the server is restored.

For more information, see the chapter *Troubleshooting* in the *HPE Operations Agent and Infrastructure SPIs Installation Guide*.

Security Enhancements

The following security enhancements are available with HPE Operations Agent 12.02:

- OpenSSL version upgrade. The upgraded version for OpenSSL is 1.0.2j with FIPS 2.0.12.
- 7-Zip version upgrade. The upgraded version for 7-Zip is 16.02 with Perl 5.16.016.

12.01

Extended Collection Builder and Manager (ECBM) Support

Performance Collection Component provides access to Windows performance counters that are used to measure system, application or device performance on your system.

You can use the Extended Collection Builder and Manager (ECBM) to select specific performance counters to build data collections.

For more information, see the chapter *Building Collections of Performance Counters on Windows* in the *HPE Operations Agent User Guide.*

Note: ECBM feature is available in HP Operations Agent 11.14 and HPE Operations Agent 12.01. Direct upgrade from HP Operations Agent 11.14 to HPE Operations Agent 12.01 is applicable. This feature is not available in HP Operations Agent 12.00.

Metric Streaming

HPE Operations Agent enables you to log custom metrics into the Metrics Datastore along with the default system performance metric classes.

With HPE Operations Agent 12.01, custom and system performance metrics are available for streaming by using the Metric Streaming functionality. You can configure the metric streaming data collection by using the **Metric Streaming Configuration** policy.

Metrics Streaming enables you to stream metrics data to a target subscriber (For example: Performance Engine) and use the data for graphing and analysis.

For more information, see the chapter *Using Metric Streaming* in the *HPE Operations Agent User Guide.*

HPE Operations Agent Health View Authentication

With HPE Operations Agent 12.01 support for authenticated access to HPE Operations Agent Health View is available. User authentication is provided using Microsoft Active Directory or OpenLDAP. You can configure LDAP from the Dashboard View of the HPE Operations Agent Health View.

For more information, see the chapter *Installing HPE Operations Agent Health View* in the *HPE Operations Agent User Guide: Health View*.

SNMP Trap Interceptor (opctrapi) Enhanced to use NETSNMP Logging

The **opctrapi** process logs the trace messages for SNMPv3 traps. These messages do not provide sufficient information required to troubleshoot problems related to security parameters associated with the incoming SNMPv3 traps.

To resolve this issue, the **opctrapi** process is enhanced to use NETSNMP logging. The `netsnmp.log` file contains comprehensive information about errors and incoming traps that can be used to troubleshoot problems.

For more information, see *Enabling opctrapi to Use NETSNMP Logging* in the *HPE Operations Agent User Guide.*

Installer Enhancements

The following installer enhancement are available with HPE Operations Agent 12.01:

- RPM format support for installing hotfixes on Linux.
- Single depot package for HP-UX installation.

For more information, see the *HPE Operations Agent and Infrastructure SPIs Installation Guide*.

New Metrics Introduced

BYHBA Metrics on Linux and Windows

BYHBA metrics are now available on Linux, Windows, and HP-UX systems.

BYCORE Metrics on HP-UX

BYCORE metrics are now available on Linux, Windows, HP-UX, and Solaris systems.

PRM Metrics on HP-UX

PRM (Process Resource Manager) metrics on are now available on HP-UX systems.

Security Enhancements

The following security enhancement are available with HPE Operations Agent 12.01:

- FIPS 140-2 compliance for Java components.
- OpenSSL version upgrade. The upgraded version for OpenSSL is 1.0.1s with FIPS 2.0.12.

12.00

- Installer Enhancements
- Performance Updates
- Other Enhancements
- HP Operations Agent Health View
- x86 Virtualization Technology Evolution from HP Operations Agent to HP vPV

Installer Enhancements

You can use one of the following methods to simplify the deployment and installation of the HP Operations Agent in large environments:

- **Installation of HP Operations Agent using the Agent Installation Repository**

  In a typical environment, there are multiple versions of the HP Operations Agent deployed on a combination of operating systems. You can install **Agent Installation Repository** on Linux operating system and deploy different versions of HP Operations Agent available in the repository on Windows and Linux operating systems.

  Agent Installation Repository can be hosted in your environment by using any one of the following:

  - Standalone Agent Installation Repository

    Agent installation repository can be installed on a Linux machine as a standalone installer to set repository on any Linux host. The same repository can act as a **Yum repository** for the HP Operations Agent and LCore packages.

  - Agent Installation Repository as a Virtual Appliance

    Agent Installation repository is available as a Virtual Appliance and can be deployed in VMware environment.

  For more information, see the chapter *Installing HP Operations Agent using Agent Installation Repository* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide.*

- **Installation of HP Operations Agent using the Puppet Environment**

  You can install the HP Operations Agent using **Puppet** in an environment where **Puppet Master** and **Puppet Clients** are configured.

  HP Operations Agent packages are stored in the Agent Installation Repository. The Puppet module available on the puppet master fetches the HP Operations Agent

packages or zip file from the Agent Installation Repository and deploys the HP Operations Agent packages on the puppet clients (Linux nodes).

For more information, see the chapter *Installing HP Operations Agent using the Puppet Environment* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide.*

- **Installation of HP Operations Agent using HP Server Automation**

  You can deploy the HP Operations Agent using the HP Server Automation. The target where you are installing the HP Operations Agent must always have the Server Automation agent installed on it. For more information, see the chapter *Installing HP Operations Agent Using HP Server Automation* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide.*

- **Installation of HP Operations Agent using single step installer**

  The HP Operations Agent 12.00 installer enables you to install the base version of the HP Operations Agent 12.00 along with patch and hotfix in a single step. The installer first installs the base version of the HP Operations Agent 12.00 on the system, followed by patch and any available hotfix. For more information on single step installation, see the chapter *Installing HP Operations Agent (Full and Differential Packages) using Single Step Installer* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide.*

- **Installation of HP Operations Agent using Profile file**

  With the HP Operations Agent 12.00, all the install time configurable values must be added in the profile file under the new namespace `nonXPL.config`. The configurable values added under the namespace `nonXPL.config` will not be updated in the `xpl.config` settings.

  For more information, see the chapter *Installing HP Operations Agent using Profile File* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide.*

- **Installation of HP Operations Agent using ZIP media**

  You can create a ZIP media and then install the HP Operations Agent manually on the node. For more information, see the chapter *Reducing the Installation Time* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide.*

Performance Updates

Data collection, data logging, and monitoring capabilities of the HP Operations Agent is updated with the following features:

Metric Datastore

With the HP Operations Agent 12.00, multiple proprietary datastores such as CODA, SCOPE and DSI have been consolidated into a single Relational Database Management System (RDBMS) based datastore using SQLite. The SQLite datastore enables easy maintenance of data and data recovery with minimal loss in case of corruption.

The CODA and Scope processes (`scopeux` and `scopent`) are consolidated into a single process called the **oacore** process. The **oacore** process provides both read and write interface for system performance and custom data.

You can use the configuration variables to configure the default behavior of the **oacore** process. For more information about configuration variables, see *Configuration Variables for the oacore Process* section in the chapter *Configuration Variables of the HP Operations Agent* of the *HP Operations Agent Reference Guide.*

For more information about Metric Datastore, see the *HP Operations Agent User Guide.*

> **Note:** All applications on the HP Operations Agent 12.00 will function only if the **oacore** process is running.

Controlling Disk Space Used by Database Files

The Performance Collection Component provides automatic management of the database files. For every class of data that is logged into the datastore, class specific database files are created.

Database files that store the default performance metric classes are rolled over when the maximum size specified in the **parm** file is reached. If the roll over size is not specified in the **parm** file, database files are rolled over when the maximum size of 1 GB is reached.

The maximum size of the database files that store the custom data is set to 1 GB by default. This size cannot be configured. These database files are rolled over when the maximum size of 1 GB is reached.

During a roll over, 20 percent of oldest data is removed from the database files.

For more information about controlling disk space used by database files, see the chapter *Managing Data Collection* in the *HP Operations Agent User Guide.*

Proxy Datasource

You can host only one datasource in read-only mode. In the proxy mode, data logging to the Metrics Datastore is completely disabled. For more information about hosting database files from a different system as datasource, see the chapter *Comparing HP Operations Agent 12.00 with Earlier Versions* in the *HP Operations Agent User Guide.*

Extended Collection Builder and Manager

This feature is not supported with the HP Operations Agent 12.00.

Updated parm File

The **parm** file contains instructions for the data collector to log specific performance measurements. The **parm** file enhancements are as follows:

Parameter	Description
javaarg	This parameter is valid on both Windows and UNIX platforms.
cachemem	On AIX machines, you should set the cachemem parameter to **free (f)** to match with topas commands.
	On Solaris machines, cachemem parameter is applicable only for Adaptive Replacement Cache (ARC) for ZFS.
	Cachemem parameter is set to **user (u)** by default. You can set this parameter to **free (f)** in the **parm** file and then restart the data collector. GBL_MEM_UTIL excludes ZFS ARC cache when cachemem parameter in the **parm** file is set to **free**.
Scope transactions	With the HP Operations Agent 12.00, Scope transactions are not logged and the Scope_Get_Process_Metrics and Scope_Get_Global_Metrics are also not logged.
Size	The size of the database files that store the *default performance metrics class*, depends on the maximum size specified in the **parm** file. If the size specification in the **parm** file is changed, **oacore** detects it *only* during startup.
	The database files for a class are rolled over, when the maximum size specified in the **parm** file is reached. During rollover, 20 percent of oldest data is removed. If *size* is not specified in the **parm** file, database files are rolled over when the maximum size of 1 GB is reached.
	The maximum size of the database files that store the *custom data* is set to 1 GB by default. This size cannot be configured.
	For more information about controlling disk space used by database files, see the chapter *Managing Data Collection* in the *HP Operations Agent User Guide.*

Mainttime	This parameter is not supported.
Days	This parameter is not supported.
Maintweekday	This parameter is not supported.
proccmd	This parameter is valid on all platforms.The `proccmd` parameter enables logging of process commands to the datastore.
	By default, the value of this process is set to 0 and the logging of process commands is disabled. To enable logging of process commands, set the value of this parameter to 1.
	Logging of the `proccmd` parameter is turned on when the value of this parameter is greater or equal to 1. The length of the process command that is logged is always 4096 irrespective of the value specified in this parameter.

For more information about parm file, see *Using the parm File* section in the chapter *Managing Data Collection* in the *HP Operations Agent User Guide.*

New Processes

The following processes are added to the HP Operations Agent 12.00:

- **oacore**

  The CODA and **scope** processes (scopeux and scopent) are consolidated into a single process called **oacore**. The **oacore** process provides both read and write interface for system performance and custom data.

  The **oacore** process is invoked by the `ovpa` script. Based on the instructions provided in the **parm** file, the **oacore** data collector continuously collects performance and health data across your system and stores the collected data in the Metrics Datastore.

- **hpsensor**

  The `rtmd` process is replaced with the `hpsensor` process. The XPL configurations for `rtmd` are not backward compatible and will not work after you upgrade HP Operations Agent from 11.xx to 12.00. The `hpsensor` process provides similar XPL configurations to enforce security (SSL).

  The `hpsensor` process helps in accessing real-time performance metrics, through a secure communication channel, locally or remotely.

Updates in the Command Line Tools

HP Operations Agent 12.00 supports only command line mode to run the *Utility* and *Extract* program. Interactive mode to run *Utility* and *Extract* commands is not supported

with the HP Operations Agent 12.00.

Updates to the Extract Tool

The *Extract* program is used to retrieve and analyze the historical data logged in the datastore of the HPE Operations Agent. The Extract program performs the export function. It reads data from datastore and exports the results to output files in the ASCII format.

During an upgrade from the HP Operations Agent version 11.xx to 12.00, data stored in the CODA database files, SCOPE log files, and the DSI log files are retained in read-only mode. Extract program can read data from both log file based datastore and Metrics Datastore.

The *Extract* program enhancements are as follows:

- A new metric class *Host Bus Adapter (HBA)* is added to export the HBA data.

  Extract Command Options

-h	Specifies the HBA detail data to be exported.
-H	Specifies the HBA summary data to be exported.

- The metric class *core* is added to export the bycore data.

  Extract Command Options

-x	Specifies the core detail data to be exported.
-X	Specifies the core summary data to be exported.

For more information about Extract Program, see the chapter *Using the Extract Program* in the *HP Operations Agent User Guide.*

Updates to the Utility Tool

The *Utility* program is a tool for managing and reporting information on the collection parameters (`parm`) file and the alarm definitions (`alarmdef`) file.

Changes to the *Utility* program are as follows:

- Resize command is not supported.
- Following Utility commands are not supported:
  `start, stop, exit, guide, logfile, menu, sh,` and `show.`

  For more information about Utility Program, see the chapter *Using the Utility Program* in the *HP Operations Agent User Guide.*

Enhanced Custom Data Logging

The process of custom data logging is enhanced with DSI and Submittal API.

> **Note:** It is recommended that you use API to log custom data into the Metrics Datastore.

Enhanced Data Source Integration

Data collected by the DSI process is logged into Metrics Datastore.

> **Note:** For DSI to collect custom data, the **oacore** process must be running.

To preserve backward compatibility, the command line continues to support the logfile argument. The logfile name is extracted from the following path and it is considered as the datasource name:

```
sdlcomp <class specication file> <logfile name>
```

When you upgrade the HP Operations Agent from version 11.xx to 12.00, metadata or the format for storing data is copied from the old logfiles to the Metrics Datastore.

For more information about the DSI program, see the chapter *Overview of Data Source Integration* in the *HP Operations Agent User Guide.*

Application Programming Interface

The process of custom data logging has been simplified with the use of APIs. You can use APIs to seamlessly log custom data into the Metrics Datastore. You can use APIs to log 64-bit data types and multi-instance data into the datastore.

> **Note:** You can use APIs to log data into the Metrics Datastore only if the **oacore** process is running.

For more information, see the chapter *Using Application Programming Interface* in the *HP Operations Agent User Guide*.

Baselining

Baselining is a process to compute and provide reference values based on the historical data stored in the Metrics Datastore. To compute baseline data for a specific time period, metric data collected at corresponding time periods from previous weeks is used. Baseline data is computed at the end of every hour and is stored in the Metrics Datastore.

Baseline data is used to:

- Provide reference values to monitor daily performance
- Provide reference values to analyze performance trends
- Dynamically set optimal threshold values to analyze the pattern of resource utilization

Baseline data computed by the HP Operations Agent is used by the SI-AdaptiveThresholdingMonitor policy to monitor performance and resource utilization.

Baseline data is used along with the deviations (N) set in the SI-ConfigureBaselining Policy or SI-AdaptiveThresholdingMonitor Policy to enable adaptive monitoring or adaptive thresholding. Adaptive thresholding helps you to dynamically calculate the optimal threshold values.

For more information about baselining, see in the chapter *Overview of Baselining* in the *HP Operations Agent User Guide.*

Other Enhancements

Some of the other enhancements in the HP Operations Agent 12.00 are as follows:

Enhanced SNMP Trap Interceptor

The SNMP trap interceptor can collect SNMP traps originating from remote management stations or SNMP-enabled devices, and then can generate appropriate events based on the configuration. The SNMP trap interceptor enhancements are as follows:

- The **opctrapi** process is configured to intercept SNMPv1, SNMPv2, SNMPv3 traps and inform messages.
- The **opctrapi** process can intercept the SNMP traps based on the object ID of the varbind (OID) or position of the varbind.
- The monitoring agent component (**opcmona**) can be modified to perform SNMPv3Get by adding specific parameters to the Measurement Threshold policy.

> **Note:** The SNMP_SESSION_MODE configuration variable is not supported with the current version.

For more information, see the chapter *Working with the HP Operations Agent* in the *HP Operations Agent User Guide.*

Perfalarm

On a fresh installation of the HP Operations Agent version 12.00, the alarm generator server (`perfalarm`) is disabled by default.

To enable `perfalarm` before installing the HP Operations Agent, set the variable **ENABLE_PERFALARM** to **TRUE** or **true** in the profile file and then install the HP Operations Agent with the profile file.

If you are installing HP Operations Agent without the profile file, copy the **alarmdef** file from `/opt/perf/newconfig` to `var/opt/perf/` to enable **perfalarm.**

To enable `perfalarm` after installing the HP Operations Agent, use the command line options.

If you upgrade from the HP Operations Agent version 11.xx to 12.00, `perfalarm` continues to function as set previously.

For more information about enabling `perfalarm`, see the chapter *Installing HP Operations Agent using Profile File* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide*.

HP Operations Agent Health View

HP Operations Agent Health View is a health monitoring tool that provides a quick overview of the health of the HP Operations Agent.

HP Operations Agent Health View plays an important role especially in a complex environment that has many HP Operations Agents deployed on multiple nodes. For example, on a specific managed node if any of the health or policy parameters fail or if any of the processes have issues, then you will not receive alerts or messages from that managed node.

HP Operations Agent Health View enables you to quickly identify issues in a complex environment with several managed nodes.

Note: You can set the HPOM Management Server as the Health View Server or you can install HP Operations Agent Health View on a server other than the HPOM Management Server.

HP Operations Agent Health View offers the following features:

- Provides a consolidated dashboard that shows the health of all the HP Operations Agents configured with Health View.
- Allows you to drill-down into each managed node and view the list of HP Operations Agent processes and resources that are being used.
- Allows you to drill-down into each HP Operations Agent process and identify issues related to health and policy parameters.

x86 Virtualization Technology Evolution from HP Operations Agent to HP vPV

HP Operations Smart Plug-in for Virtualization (VI SPI) and HP OMi Management Pack for Infrastructure (OMi MP for Infrastructure) users can start to use a monitoring only edition of Virtualization Performance Viewer (HP vPV) for x86 Virtualization technologies such as VMware vSphere, Microsoft Hyper-V, KVM, and Xen.

HP announces the following updates with HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure version 12.00:

- Operations Agent Virtual Appliance is discontinued
- VI SPI does not support x86 Virtualization

For x86 virtualization technologies, you can continue to use the VI SPI and the virtualization component of the OMi Management Pack for Infrastructure till the obsolescence of HP Operations Agent 11.1x. For non-x86 virtualization technologies (HPVM, AIX, Solaris), you can continue to use the VI SPI and VI Management Pack.

Some of the key benefits that you get with the technology evolution to HP vPV (HP vPV is rebranded as HPE Cloud Optimizer from version 3.00) are:

- Improved scalability and interoperability
- Improved coverage of metrics

While the technology evolution entitles you to an equivalent capability replacement in HP vPV (HP vPV is rebranded as HPE Cloud Optimizer from version 3.00), you can get enhanced performance troubleshooting and capacity optimization of physical, virtual, and cloud technologies with the premium edition of HP vPV (HP vPV is rebranded as HPE Cloud Optimizer from version 3.00).

For more details visit hp.com/go/vpv.

Enhanced HP Operations Agent

The current version of HP Operations Agent is enhanced with the following features:

No	Enhancements Requests	Description
1	QCCR1A70322	The SNMP trap interceptor **opctrapi** is enhanced to support processing of SNMP traps based on the varbind object id.
2	QCCR1A95853	GBL_MAC_ADDR_LIST and BYNETIF_MAC_ADDR metrics are added on all platforms to implement MAC address details.
3	QCCR1A104981	CLUSTER_LOCAL_NODENAME is set automatically in the conf.cluster namespace while installing HP Operations Agent on a cluster node.
4	QCCR1A119191	HBA metrics is logged on HP-UX platforms.
5	QCCR1A129081	With the current release, **opctrapi** can intercept both SNMPv3 traps and inform messages.

6	QCCR1A132039	The maximum limit of the `proccmd` parameter in **parm** file is increased to 4 million.
7	QCCR1A138558	`OvCtrl` daemon (`ovcd`) logs the process details such as process name and PID into the system.txt file whenever a process is started or stopped.
8	QCCR1A149755	Best Practises for Installation and Deployment of HP Operations Agent is documented in the Installation Guide.
9	QCCR1A145541	Length of PROC_PROC_NAME is increased from 16 to 255 characters.
10	QCCR1A147550	Enhanced list of file system metrics are logged into the Metrics datastore.
11	QCCR1A147667	Regardless of the language of the Operating System, the HP Operations Agent is set to English if you set IGNORE_ LOCALE=True in the profile file.
12	QCCR1A148589	HP Operations Agent is enhanced to support 10 GB Network card.
13	QCCR1A152747	**opctrapi** is enhanced to do the following: • Intercept both SNMPv3 trap and inform messages • Intercept SNMP traps based on the object ID of the varbinds (OID) along with the position • Convert OID to its textual representation
14	QCCR1A155140	Logical Volume metrics are supported on Linux Platform.
15	QCCR1A157392	Enhanced the documentation for the `cachemem` parameter.
16	QCCR1A159506	HP Operations Agent is enhanced to support 64-bit mode on HP-UX systems.
17	QCCR1A168188	HP Operations Agent 12.00 supports TLS version 1.2 for HTTPS communication.
18	QCCR1A169444	stacktrace tool does not overwrite `/opt/OV/OMU/adminUI/conf/servicemix/wrapper.conf` file.
19	QCCR1A169894	You can run the following commands to exclude `perfstat.tar.z` output file from the `oa_data_`

		collector.sh output:
		On Windows :
		`oa_data_collector_win.bat ADC EXCLUDE PCC`
		On HP-UX/Linux/Solaris:
		`oa_data_collector.sh -asp -e pcc`
20	QCCR1A169895	`oa_data_collector.sh` script includes the following files while creating `oa_data_collector.zip`: • " /etc/resolv.conf" • "/etc/nsswitch.conf " • "/etc/hosts " • "/etc/networks"
21	QCCR1A169897	HP Operations Agent installation message on the console contains the version (base, patch or hotfix)information in the banner.
22	QCCR1A172620	SNMP trap interceptor is enhanced to intercepts the SNMP traps based on the object ID of the varbind.
23	QCCR1A173297	On HPOM for Windows management server, the OvPmad database consistency check during registration is integrated with oainstall.vbs scripts and is triggered by default with the -i -m command option. If there is a corruption during registeration, an error is reported and registeration is skipped for that platform.
24	QCCR1A174024	The pre-check functionality of the HP Operations Agent installation is enhanced.
25	QCIM1A174134	SNMP trap interceptor (**opctrapi**) is enhanced to do the following: • Intercept both SNMPv3 traps and inform messages • Intercept SNMP traps based on the object ID or position of varbinds • Convert OID to its textual representation
26	QCCR1A174615	Along with the operations components, HP Operations Agent is enhanced to monitor performance components such as **perfd, ttd, midaemon, glance** and **oacore**. Health

		parameters are available for **perfd, perfalarm** and **oacore**.
27	QCCR1A174978	autofs filesystems are reported as autofs (not as Network File System) and all the filesytem metrics are collected on these systems.
28	QCCR1A175002	Infrastructure SPI policy SI-ZombieProcessCountMonitor policy (Measurement Threshold) is added to monitor the number of zombie processes.
29	QCCR1A175032	Service and Process monitoring polices and Schedules task polices will support short term and long term peak behavior.
30	QCCR1A175188	The installation time is reduced significantly on all platforms and the single step installer enables you to install the base version along with patches and hotfixes.
31	QCCR1A175736	HP Operations Agent is enhanced to collect metrics information from HPVM 6.30.
32	QCCR1A175958	You can reduce the installation time by removing the signatures from the packages and MSI scripts.
33	QCCR1A176406	You can use the variable COMM_PROTOCOL to set the protocol to be used for secure communication. The values supported for COMM_PROTOCOL are TLSv1.2, TLSv1.1 and TLSv1
34	QCCR1A176489	Device mapper statistics is being logged as a part of the disk metrics class.
35	QCCR1A178043	SHA2 hash algorithm is used to sign certificates.
36	QCCR1A178813	The Metrics BYLS_LS_MODE_MEM is added to indicate if the memory of the Solaris zones is capped or uncapped.
37	QCCR1A178816	The Metrics BYLS_LS_MODE_MEM is added to indicate if the memory of the Solaris zones is capped or uncapped.
38	QCCR1A175715	A new variable OPC_MSG_USE_OUTGOING is introduced to define the sequence in which the messages are intercepted.

Note: For information about the configuration metrics, metrics introduced and the metrics obsoleted in the HP Operations Agent 12.00 see the *HP Operations Agent Handbook of Metrics*.

Obsolescence Announcements

12.02

HPE Operations Agent 12.02 announces the end of support for HP-UX 11.11 and 11.23.

For the list of supported hardware, operating systems, and integration with other products, see the Support Matrix.

12.01

HPE Operations Agent 12.01 announces the obsolescence of Performance Collection Component's graphical user interface on Windows.

Known Issues

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.

Performance Collection Component

The data access requests are timed out

The **oacore** process completes the data access requests much before the requests are timed out. Data access requests are completed in the order in which they arrive.

If you request large data (for example: 2 million process records), **oacore** might take longer than usual to complete the request. While **oacore** is processing a large data access request, other requests (such as dsilog, extract) may be timed out.

Workaround: If you get a time-out error, you must request again.

On a HPUX IA system you cannot access the older database files after upgrading to HPE Operations Agent 12.xx

On a HPUX IA system, when you upgrade the HPE Operations Agent from version 11.1x to 12.xx, the older database files are saved at:

`/var/opt/OV/tmp/BackUp`

You *cannot* access this data using tools such as `ovcodautil`, extract, utility or through reporting tools such as the HP Performance Manager and the HP Reporter.

Workaround: None

QCCR1A183242, **QCCR1A183163**, and **QCCR1A183050**: Unsupported metrics BYLS and TTD appear in Glance, OVPA , and/or Xglance help page.

Workaround: Ignore these unsupported metrics.

QCCR1A183608: **extract** program hangs when the HPE Operations Agent is upgraded to 12.xx with 2-4 weeks of data and the **extract** output file has alignment issues.

Workaround: Run the utility command to determine the time stamp for the first logged data and then use the **Start** time and the **End** time as part of the **extract** program.

QCCR1A137193: On Windows 2008, **oacore** is not able to collect data for CPUs added dynamically.

Workaround: None

QCCR1A185739: PRM_BYVG_GROUP_ENTITLEMENT has issue on HPUX PA in **perfd** layer.

Workaround: None

QCCR1A188800: Parm file parameter **ignore_mt** set to **True** is ignored for Linux platform.

Workaround: None

QCCR1A188872: Data Retention: DSI logging is missing the last records which was logged in 11.14 after upgrade.

Workaround: None

QCCR1A189516: On AIX and Solaris, file system types (`fstypes`) filtering configuration in **parm** file is not working as expected under commented or default scenario.

Workaround: Manually set the file system types (`fstypes`) to be monitored on AIX and Solaris. For more information on how to monitor specific file systems, see the chapter *Managing Data Collection* in the *HPE Operations Agent User Guide*.

QCCR1A189030: `datasources` file is not updating properly during ECBM policy registration after custom DSI class configuration, causing ECBM logging failure after HPE Operations Agent upgrade.

Workaround: New line is required during custom DSI datasource configuration. After a manual entry in the `datasources` file in the HP Operations Agent 11.x, new line or blank line below the entry is required.

Installation and Upgrade

QCCR1A185387: HPE Operations Agent 12.xx HPUX IA64 package is shipping older 11.xx 32-bit LCore libraries/binaries instead of 12.00 32 bit libraries.

Workaround: None

Registration of the HP Operations Agent fails on the HPOM for Windows Server

Registration of the HP Operations Agent fails on the HPOM for Windows server with the following error:

```
            Description: (PMD97)  Exception has been caught in method

            COvPmdPolicyManager::AddDeploymentPackage2

 ERROR:      (NPREG1024) Cannot add deployment package (PD:  'E:\Agent

            Installer\OMWAgent_11_11\packages\WIN\Windows_X64\OVO-
 Agent.xml')

            to policy management server (PMAD)

 Error during registration.
```

The error occurs if a directory or a file in the `%OvDataDir%\shared\Packages\HTTPS` directory has a long file name or path.

Workaround: To resolve this issue, delete the files or directories with long file names and then retry the registration.

Installation of deployable packages fail on the HPOM for Windows server

Installation of deployable packages fail on the HPOM for Windows server with the Error 103 - PMAD corruption error.

Workaround: To resolve this issue, you have to clean the PMAD database. Use the **ovpmad_dbcleanup** script to remove the corrupted entries from the PMAD database. The **ovpmad_dbcleanup** script is designed only for the HPOM for Windows server.

For more information, see the chapter *Troubleshooting* in the *HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure Installation Guide*.

QCCR1A180762: The HP Operations Agent monitoring component is removed if you install HP Performance Manager 9.x on a Windows x86 system where the HP Operations Agent 12.00 is installed.

Workaround: Reinstall the HP Operations Agent 12.00 on the system to restore all the removed files and components.

> **Note:** Make sure that you install the HP Operations Agent 12.00 only after installing the HP Performance Manager 9.x.

QCCR1A182916: On HP-UX PA-RISC platform, when you install the HP Operations Agent from OMx, you may see the following error message in the System.txt file.

```
(ctrl-94) Component hpsensor exited after short runtime
```

Cause: Reconfig signal is sent to the hpsensor process before it is fully started, hence hpsensor exits.

Workaround: Ignore this error message, hpsensor process will run after installation is successful.

QCCR1A184993: In mixed mode configuration, **oacore** and **hpsensor** processes are running in non-root mode on HP-UX platform.

Workaround: None

QCCR1A187365: Upgrade from HP Operations Agent 12.00.052 to any higher version of agent is not supported.

Workaround: None

QCCR1A189447: Upgrade from HP Operations Agent 12.00 to 12.01, 12.02 and upgrade from HPE Operations Agent 12.01 to 12.02 is not supported on Debian and Ubuntu.

Workaround: None

QCCR1A189487: When the management server is not active during the HPE Operations Agent upgrade to 12.02, auto actions do not get executed at the agent node until the management server is restored.

Workaround: None

QCCR1A189376: Error logged in oainstall.log while deleting the register key - HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Control Panel\CPLs\PACPL.

Workaround: None

Perl

QCCR1A158330: Custom compiled CPAN modules and the behavior of the CPAN Perl modules are not supported.

Workaround: None

Brand inconsistency in naming of Perl component as compared to other components. Perl component is represented as HP and other components are represented as HPE in **ovdeploy** output.

HP Operations Smart Plug-ins (HPOM SPIs)

QCCR1A184627: JBoss SPI discovery fails due to Perl incompatibility issues with the HP Operations Agent 12.00.

Workaround: Hotfix is available for this issue, contact HP Support to obtain the hotfix.

QCCR1A185118: Data source creation and Data logging issues are reported while using the HP Operations Agent 12.00 with HP Operations Smart Plus-ins (HPOM SPIs).

Workaround: Hotfix is available for this issue, contact HP Support to obtain the hotfix.

> **Note:** For the list of supported hardware, operating systems, and integration with other products, see the Support Matrix.

Integration with Other Products

QCCR1A183470: HP Reporter 4.00 is not compatible with the HP Operations Agent 12.00.

Workaround: Hotfix is available for this issue, contact HP Support to obtain the hotfix.

QCCR1P7013: Uninstallation of the OpsA Collector 2.31 fails with dependency error for LCore components as the HPE Operations Agent depends on them.

Workaround: Ensure you uninstall the HPE Operations Agent before uninstalling the OpsA Collector 2.31.

> **Note:** For the list of supported hardware, operating systems, and integration with other products, see the Support Matrix.

Health View

QCCR1A186749: Instance count of custom data sources is not correct in process view of **oacore** in Health View.

Workaround: None

hpsensor

QCCR1A186595: Collection interval mentioned in the **Metric Streaming Configuration** policy for **hpsensor** is not getting updated for system performance metrics.

Workaround: None. By default, the collection interval is 10 seconds.

QCCR1A186861: Custom metrics tool should consolidate the metrics when the same metric comes with different instances from different policies.

Workaround: None

QCCR1A186919: **ddflog** fails to send data to **hpsensor** if **oacore** is not running even though metric streaming is enabled.

Workaround: **oacore** must be running for **ddflog** to send data to **hpsensor**.

QCCR1A187055: Metric Streaming - **hpsensor** is not publishing metrics with UTF8-characters in metric, class, datasource, or instance name.

Workaround: None

QCCR1A186620: As compared to Linux and Windows, the performance of **hpsensor** on Solaris is slower and CPU and memory utilization is more.

Workaround: None

Other

QCCR1A186971: **opcmona** and **opctrapi** abort and dump core while enabling FIPS on HPUX IA 11.31.

Workaround: None

QCCR1A189518: With a non resolvable value of **OPC_NAMESRV_LOCAL_NAME** auto or operator initiated action is not getting executed on the node.

Workaround: None

QCCR1A189624: **opcmona** aborts on Windows, when any system environment variable value is more than 980 bytes.

Workaround: To resolve the issue, follow the steps:

1. Reduce the PATH size (or any system environment variable, whose value is crossing 1024) to less than 980 characters.
2. `ovc –kill`
3. `ovc –start`

QCCR1A168077: Infrastructure SPI alert assignment does not work on HPOM server console for Windows if the length of SYSTEM_ID metric is greater than 64 characters.

Workaround: None.

QCCR1A167902: On Linux, when you install the HPE Operations Agent, the user `opc_op` in `/etc/passwd file` and the group `ovgrp` in `/etc/group` are not created.

Workaround: Use the command **groupadd opcgrp** to create the `opcgrp` group manually before installing the HPE Operations Agent. In case HPE Operations Agent is already installed, run the following command to create the user:

`useradd -g opcgrp -d /home/opc-op opc_op`

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**.

Limitations

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

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

  Ignore this error.

- If you have created and registered ECBM policy in HP Operations Agent 11.14, upgraded to HP Operations Agent 12.00 with ECBM policy running, and again upgraded to HPE Operations Agent 12.01, then the data collected in HP Operations Agent 12.00 will not be in proper format as ECBM is not supported in HP Operations Agent 12.00. You may have to discard the data collected in HP Operations Agent 12.00.

- After installing the HP Operations Agent 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.

- 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.

- HPOM server with IPv4 stack configured with dual stack Reverse Channel Proxy cannot communicate with an IPv6 stack HP Operations agent node and vice versa.

- The GBL_NUM_VG metric shows zero if you disable the Logical Volume class of metrics.

- 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.`

- 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 AIX WPAR.

  - By default, the agent user with non-privileged and mixed user modes will not have permission to read the monitored log file.

  - By default, the agent user with non-privileged and mixed user modes will not have permission to start a program using an automatic command, operator-initiated command, tool, or scheduled task.

  - HP Operations Smart Plug-ins may require additional configuration or user rights if the agent user with non-privileged and mixed modes does not have administrative rights.

- The HPE 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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Feedback on Release Notes (Operations Agent 12.02)

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