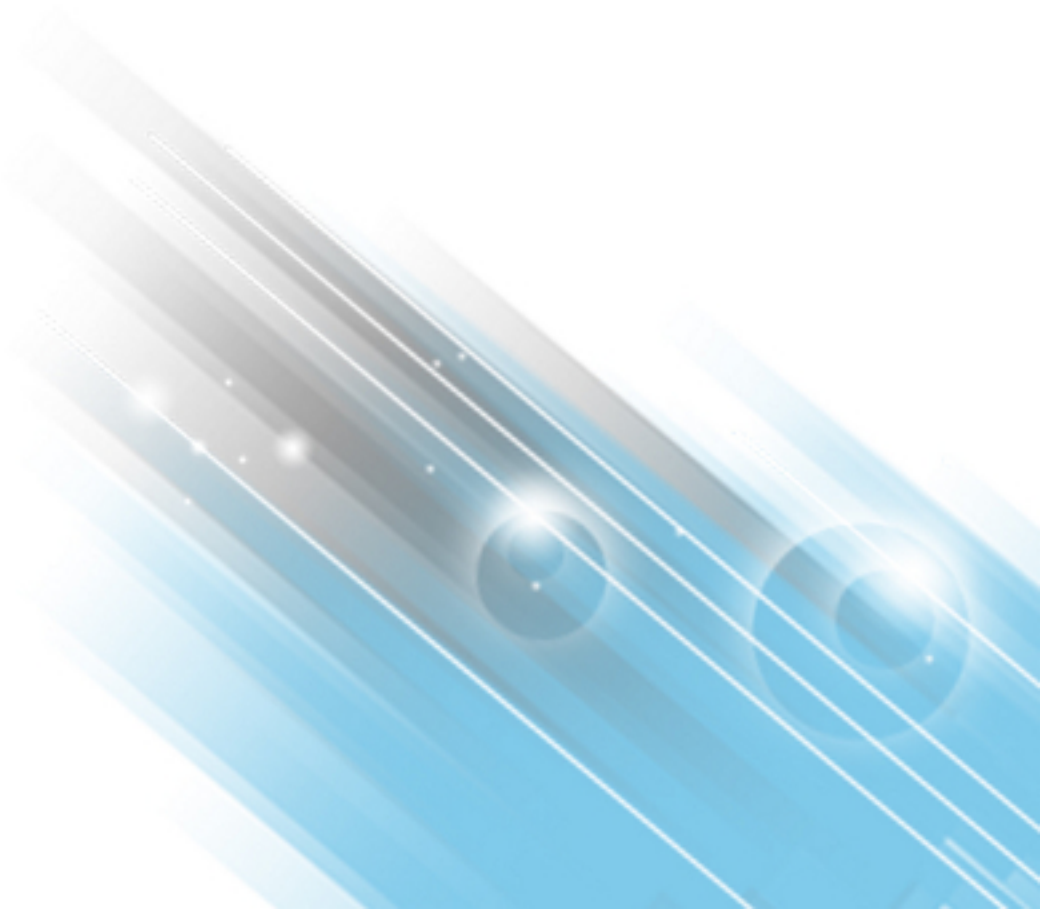
HP Operations Manager

Software Version: 9.21.130
Red Hat Enterprise Linux, Oracle Linux, and CentOS Linux operating systems

Release Notes



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Contents

What's New in HPOM 9.21.130

This section describes changes that are available with the latest HPOM patches. HPOM 09.21.130 consists of the following patches:

Note: The Java GUI patch is part of the HP Operations management server patch. Therefore, changes related to the Java GUI are available in the sections that contain server-specific information.

HP Operations Management Server Patch

The following HP Operations management server patch is available for all supported operating system platforms:

Table 1 Management Server Patch 09.21.130

Patch Name	Management Server Platform		
	HP-UX on HP Integrity	Linux	Solaris
HPOM consolidated server 09.21.130	OMHPUX_00021	OML_00099	ITOSOL_00819

The following changes are available with this patch:

- A new optional parameter `MsgKeyPrefix` is now available for the Event Storm Filter (ESF) flood gate configuration file (`/etc/opt/OV/share/conf/OpC/mgmt_sv/esf/flood_gates.conf`). This option assigns message keys for each ESF flood gate entry.
- A new optional parameter `CMA` is now available for the ESF flood gate configuration file (`/etc/opt/OV/share/conf/OpC/mgmt_sv/esf/flood_gates.conf`). This option assigns custom message attributes to ESF messages.
- New options `-list_nodes_info`, `-chg_info`, and `node_info` are now available for the `opcnode` command. These options enable you to update the `INFO` field in `opc_nodes` table from the command line, without having to use the Java GUI.

- The following server configuration variables are introduced:
  - OPC_SKIP_UNFILTERED_INTERNAL_MSGS
  - OPC_LOG_ONLY_UNFILTERED_INTERNAL_MSGS
  - OPC_ANNO_SIZE_LIMIT
  - OPC_ESF_LOG_EVENT_COND
  - OPC_JGUI_ALLOW_DISOWN_MSGS

  For detailed information about server configuration variables, see the *HPOM Server Configuration Variables* document at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

Administration UI Patch

The following Administration UI patch is available:

Table 2 HPOM Administration UI Patch 09.21.130

Patch Name	
HPOM Administration UI 09.21.130	OMUADMINUI_00015

HP Operations Manager for UNIX and Linux Core and Accessories Server Patch

The following Core and Accessories server patch is available:

Table 3 HP Operations Manager for UNIX and Linux Core and Accessories Server 09.21.110

	Management Server Platform		
Patch Name	HP-UX on HP Integrity	Linux	Solaris
HP Operations Manager for UNIX and Linux Core and Accessories Server 09.21.110	OMHPUX_00019	OML_00096	ITOSOL_00817

This patch contains the following Core and Accessories packages:

- HPOvSecCS (HP Software Certificate Management Server)
- HPOvJxpl (HP Software Cross Platform Component Java)

- `HPOvJsec` (HP Software Security Core Java)
- `HPOvJbbc` (HP Software HTTP Communication Java)
- `HPOvJREB` (HP Software JRE)
- `HPOvTomcatB` (HP OpenView TomcatB Servlet Container)
- `HPOprWsInc` (HP Operations Manager Incident Web Service)

This patch only places the packages onto your HP Operations management server system. Therefore, make sure that you carefully follow the instructions for installing the packages, which are available in the Special Installation Instructions section of the patch description.

Note: It is recommended that you back up your certificates before installing the packages. In a cluster environment, back up the certificates only on the active node.

For example (HP Operations Manager Installation):

```
/opt/OV/bin/OpC/opcsvcertbackup -backup -passwd <password> -file /backup/cert_backup
```

New Support Announcements

With the HPOM 9.21.130 management server patch, the following are supported:

- Oracle Linux 7.x
- RHEL 7.x
- HPOM Virtual Appliance is now available on CentOS 6.7 as a patch (`OML_00100`)
- VCS 6.0 on RHEL 5.11

Note: For the most up-to-date list of what is supported with HPOM, see the support matrix at the following location:

http://support.openview.hp.com/selfsolve/document/KM323488

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

Installation

This section contains the information on installing HPOM 09.21.130, the list of HPOM 9.21 patches, as well as the installation notes that apply to all the HPOM 9.20.xxx releases.

Installing HPOM 09.21.130

HPOM 09.21.130 consists of three patches that are installed on top of the HPOM 9.20 release (with or without 9.2x patches).

Installing HPOM 9.21

HPOM 9.21 consists of three patches that are installed on top of the HPOM 9.20 release (with or without 9.20.xxx patches).

The following table lists the patches required for the HPOM 9.21 installation:

Patch Name	Management Server Platform		
	HP-UX on HP Integrity	Linux	Solaris
HPOM consolidated server and Java GUI patch 9.21.100	OMHPUX_00013	OML_00089	ITOSOL_00811
HPOM Administration UI 9.21.100	OMUADMINUI_00012		
HPOM Core and Accessories Server 09.21.100[1]	OMHPUX_00017	OML_00093	ITOSOL_00815

Note: For the installation and deinstallation instructions, see the *HPOM Installation Guide for the Management Server* at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

[1]This patch contains the following Core and Accessories packages:

- HPOvSecCS (HP Software Certificate Management Server)
- HPOvJxpl (HP Software Cross Platform Component Java)
- HPOvJsec (HP Software Security Core Java)
- HPOvJbbc (HP Software HTTP Communication Java)
- HPOvTomcatB (HP OpenView TomcatB Servlet Container)

Deploying HPOM 9.21 Virtual Appliance

HPOM 9.21 virtual appliance is available on CentOS Linux 6.7 as a patch (`OML_00100`). For more information on how to deploy a virtual appliance, see the *HPOM Virtual Appliance White Paper* at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

HPOM 9.20.xxx Installation Notes

Installation requirements and instructions for installing HPOM 9.20 are documented in the *HPOM Installation Guide for the Management Server*. The most recent edition of this document is available at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

After you install HPOM, the document can be found at:

`/opt/OV/www/htdocs/ito_doc/C/manuals/InstallationGuide.pdf`

The `README.txt` readme file located on HPOM media DVD describes the HPOM media DVD contents and layout and helps you to locate products and documentation.

Hardware Requirements

Make sure that your system meets the following hardware requirements in addition to the requirements listed in the *HPOM Installation Guide for the Management Server*:

- The required disk space for the HP Operations Agent varies depending on the platform. For detailed information about the disk space required by the HP Operations Agent, see the HP Operations Agent documentation.

Software Requirements

This section lists additional software requirements that are not documented in the HP support matrices.

Note: For the most up-to-date list of what is supported by HPOM, see the support matrix at the following location:

http://support.openview.hp.com/selfsolve/document/KM323488

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

Management Server

Make sure that you have the following packages (or later versions) installed:

- kernel-headers
- lm_sensors-2.10.0-3.1
- net-snmp-5.3.1-19.el5
- net-snmp-utils-5.3.1-19.el5
- unixODBC-2.2.11-7.1
- unixODBC-devel-2.2.11-7.1

Oracle Database

Several prerequisite OS patches must be installed for the Oracle database. You can find them at the following location:

- **For Oracle 12.1:**

  http://docs.oracle.com/database/121/LTDQI/toc.htm#CEGHFFGG

- **For Oracle 11.2:**

  http://docs.oracle.com/cd/E11882_01/install.112/e24326/toc.htm

- **For Oracle 11.1:**

  http://docs.oracle.com/cd/B28359_01/install.111/b32285/toc.htm

For detailed information about installing and setting up the Oracle database, see the *HPOM Installation Guide for the Management Server.*

Java GUI

Before installing the HPOM Java GUI, make sure that your system meets the hardware and software requirements, as documented in the *HPOM Installation Guide for the Management Server*, which is available at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

HPOM bundles the JRE for all supported platforms. For the list of supported JRE versions, see the support matrix at the following location:

http://support.openview.hp.com/selfsolve/document/KM323488

Set the JAVA_HOME environment variable to the location of the installed JRE directory, for example:

```
export JAVA_HOME=/opt/OV/nonOV/jre/b
```

HP Operations Agent

Starting with HPOM 9.20, the HP Operations Agent software is no longer shipped together with HPOM. To obtain the supported agent version, request the agent media 11.1x from HP.

Caution: As a prerequisite for the HP Operations Agent installation, your system must meet operating system specific software and hardware requirements. For more information on supported platforms, see the support matrix at the following location:

http://support.openview.hp.com/selfsolve/document/KM323488

For more information on requirements, see the HP Operations Agent documentation, which is available at:

https://softwaresupport.hpe.com/group/softwaresupport/manuals.

During the HPOM installation you are prompted for the agent software location, so make sure that the agent software is accessible. After the installation, deploy the agent to the managed nodes.

Note: The minimum required HP Operations Agent version for IPv6-based server-agent communication is 11.13. For more information on how to configure your HPOM environment for using IPv6, see the *HPOM Administrator's Reference.*

To properly perform the HP Operations Agent installation, consider that the installation of the HP Operations Agent version 11.03 or later with the Force option reads the profile file. You must set the configurable values such as the `MINPRECHECK` option in following file:

```
/etc/opt/OV/share/conf/OpC/mgmt_sv/bbc_inst_defaults
```

These values are then stored in the profile file and read when the HP Operations Agent installation with the Force option is performed. For more information, see the *HP Operations Agent Installation Guide* available at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

Cluster Environment

The HP Operations management server can be installed in a cluster environment in which the HP Operations Agent is already installed on the cluster nodes. For more information about installing HPOM in cluster environments, see the *HPOM Installation Guide for the Management Server*, available at https://softwaresupport.hpe.com/group/softwaresupport/manuals.

Upgrading from HPOM 8.xx to HPOM 9.20

To upgrade HPOM from version 8.xx to version 9.20, see the *HPOM Installation Guide for the Management Server*.

Administration UI

Depending on whether your system has direct Internet access, make sure to choose the correct method for upgrading the Administration UI:

- *For systems with direct Internet access:* Follow the procedure described in the *HPOM Installation Guide for the Management Server*.
- *For systems without direct Internet access:* Use the `OMUADMINUI_9.20.190_UPGRADE.zip` file available for download at ftp://ovweb.external.hp.com/pub/cpe/ito/AdminUI_upgrade/ and follow the instructions in the `README.txt` file.

When installing, updating, or reconnecting the Administration UI, some problems may occur because of the changes in the JavaScript code of the product. To avoid these problems, make sure to clear your browser cache or use “Shift-Reload” after reconnecting to the web application server.

For detailed information about prerequisites that must be met before installing and configuring Administration UI, as well as instructions for installing, see the *HPOM Installation Guide for the Management Server*.

Features, Enhancements, and Changes Introduced with HPOM 9.21.120

This section lists the changes that were introduced with the HPOM 9.21.120 patch:

New Variables

- OPC_CFGUPLD_UPDATE_STARTUP_MSG
- OPC_CSA_ADD_OS_OA_DATA_IN_AUTOMATION
- OPC_CSA_ASSD_NUM_RETRY
- OPC_CSA_ASSD_SLEEP_INTERVAL
- OPC_USE_ASSD_IN_TOPO

  If the value of this variable is set to TRUE, HPOM synchronizes the actual operating system version string with the data sent by Agent Side System Discovery (ASSD).

  Caution: If the target of the topology synchronization is an HPOM for Windows management server, setting the OPC_USE_ASSD_IN_TOPO variable results in an error.

For detailed information about server configuration variables, see the *HPOM Server Configuration Variables* document.

Enhancements

- The -list_resolved_respons_user option is available for the opccfguser utility. This option enables you to get directly assigned responsibilities and assigned user profiles of a user. Duplicate effective assignments are removed. For example, a direct assignment for a node group and a message group can also be assigned to a user's profile, which is then assigned to a user.
- The level attribute is available for the -list_pol_assigns option of the opcpolicy utility. This attribute defines whether the policy type name is printed. If there is no level attribute or the specified value is 1, the policy type name is not printed. If the value is set to 2, the policy type name is printed (in addition to the policy name and version).
- The -timeout option is available for the /opt/OV/bin/OpC/startInitialSync.sh script.

- Distribution performance is improved so that the distribution to a slow node no longer delays other distributions.
- `om_server_switch` is adapted for the PostgreSQL database.
- New tooltip messages for displaying latest messages are available. They are displayed when the `show latest messages` option is selected.
- The `-clean_plat_ident` optional parameter is available for the `opcagtdbcfg` command. This parameter is used for updating the `Platform mapping section` and `Platform abstract name` entries in the database, which are mainly used for distributing the category-based instrumentation. The `-clean_plat_ident` parameter is used only together with the `-plat_ident` option. It first cleans all mappings for the selected platform and then adds the new platform mappings.

  Example of usage of this parameter:

  ```
  opcagtdbcfg -platform ibm/rs6k64/aix5 -plat_ident -clean_plat_ident
  ```
- The Java GUI is bundled with JRE 8.

New Support Announcements

HPOM 9.21.120 now supports the following:

- SNMPv3 syntax in `opcmona` policies
- SGLX 12.xx
- TLS version 1.2 in all HTTPS communication methods
- Administration UI is supported with JRE8
- Administration UI supports PKI-based user authentication
- RHEL 7

  To install HPOM 09.21.120 on RHEL 7, you must use the latest `ovoinstall`script that is available at the following location:

  ftp://ovweb.external.hp.com/pub/cpe/ito/latest_ovoinstall

  > **Caution:** Make sure the HP Operations Agent is installed before running `ovoinstall`.
- HP Operations Agent version 12

Caution: You must run the `ecsoa12copy.sh` script when upgrading to an HP Operations Agent version 12 for ECS to be supported. For more information, see "Support for the HP Operations Agent Version 12" below.

Support for the HP Operations Agent Version 12

HPOM 09.21.120 supports HP Operations agent version 12.

Caution: HP Operations Agent version 12 on Solaris and Linux comes with a new Perl version. Consequently, the existing `opcecm`, `opcecmas`, and `ecsmgr` binaries, which are linked with the old Perl version, are not compatible with HP Operations Agent version 12.

Because of this, the HPOM 09.21.120 management server patch provides the new versions of the `opcecm`, `opcecmas`, and `ecsmgr` binaries. These binaries are placed in the `/opt/OV/contrib/OpC/ECSOA12` directory, together with the `ecsoa12copy.sh` script, which is used for copying the ECS binaries to a proper location. For ECS to be supported, this script is executed during the patch installation and, if the HP Operations Agent version 12 is installed, the new versions of the `opcecm`, `opcecmas`, and `ecsmgr` binaries will be copied to a proper location.

If HP Operations Agent 12 is installed after the 09.21.120 management server patch, follow these steps:

- *Cluster environment:*

  If you are running HPOM in a cluster environment, you must install new ECS binaries on all cluster nodes, as follows:

  a. Set the HP Operations management server represented as an HA resource group to the maintenance mode. To do this, disable HA resource group monitoring by running the following command:

  ```
  /opt/OV/lbin/ovharg -monitor <HPOM_HA_resource_group_name> disable
  ```

  b. Stop the HP Operations management server processes on the cluster node where the HPOM HA resource group (by default, `ov-server`) is active:

  ```
  ovc -stop SERVER
  ```

  c. Run the `ecsoa12copy.sh` script to back up the original ECS binaries and replace them with the new ones:

  ```
  /opt/OV/contrib/OpC/ECSOA12/ecsoa12copy.sh -replace
  ```

  d. Start the HP Operations management server processes on the first cluster node (where you stopped them in Step b):

```
ovc -start SERVER
```

e. Set the HP Operations management server back to the operation mode by enabling the HA resource group monitoring. To do so, run the following command:

```
/opt/OV/lbin/ovharg -monitor <HPOM_HA_resource_group_name> enable
```

- *Non cluster environment:*

a. On the HP Operations management server, stop all processes:

```
ovc -stop SERVER
```

If some of the server processes are still running, stop them manually:

```
kill -9 <pid-of-orphaned-process>
```

b. Run the `ecsoa12copy.sh` script to back up the original ECS binaries and replace them with the new ones:

```
/opt/OV/contrib/OpC/ECSOA12/ecsoa12copy.sh -replace
```

c. Start the HP Operations management server processes:

```
ovc -start SERVER
```

If you are deinstalling the HP Operations agent version 12, follow these steps:

- *Cluster environment:*

If you are running HPOM in a cluster environment, you must restore old ECS binaries on all cluster nodes, as follows:

a. Set the HP Operations management server represented as an HA resource group to the maintenance mode.

To do this, disable the HA resource group monitoring by running the following command:

```
/opt/OV/lbin/ovharg -monitor <HPOM_HA_resource_group_name> disable
```

b. Stop the HP Operations management server processes on the cluster node where the HPOM HA resource group (by default, `ov-server`) is active:

```
ovc -stop SERVER
```

c. Run the `ecsoa12copy.sh` script to restore the original ECS binaries and replace them with the new ones:

```
/opt/OV/contrib/OpC/ECSOA12/ecsoa12copy.sh -restore
```

d. Start the HP Operations management server processes on the first cluster node (where you stopped them in Step b):

```
ovc -start SERVER
```

e. Set the HP Operations management server back to the operation mode by enabling the HA resource group monitoring. To do so, run the following command:

```
/opt/OV/lbin/ovharg -monitor <HPOM_HA_resource_group_name> enable
```

- *Non-cluster environment:*

a. On the HP Operations management server, stop all processes:

```
ovc -stop SERVER
```

If some of the server processes are still running, stop them manually:

```
kill -9 <pid-of-orphaned-process>
```

b. Run the `ecsoa12copy.sh` script with the `-restore` option to restore the original ECS binaries:

```
/opt/OV/contrib/OpC/ECSOA12/ecsoa12copy.sh -restore
```

c. Start the HP Operations management server processes:

```
ovc -start SERVER
```

Automatic Denial of Certificate Requests from an HP Operations Agent

You can use CSA automation to deny certificate requests from an HP Operations Agent based on its version or platform. This means that after you add an HP Operations Agent version and/or platform to a list of unwanted items, every certificate request coming from such a managed node is denied automatically.

Agent Health Check Integration with the HP Operations Agent Self-Monitoring Feature

A new agent self-monitoring feature is available with HP Operations Agent 12.x (in addition to the agent self-monitoring feature introduced with HP Operations Agent 11.x). The main advantages of this new integration are as follows:

- The agent regularly checks the health of the subagents and sends any change in the health status to the management server.

- The health status can also be viewed through a web browser by using the dashboard view on the management server.
- The agent sends an alive message at regular interval.

Features, Enhancements, and Changes Introduced with HPOM 9.21

This section contains support announcements, features, and enhancements that are introduced with the HPOM 9.21 release.

New Features

HPOM 9.21 introduces the following features:

PostgreSQL Support in a Cluster Environment

Installing the HP Operations management server in a cluster environment is supported with a PostgreSQL database. For detailed information about installing and configuring the HP Operations management server in a cluster environment, see the *HPOM Installation Guide for the Management Server*.

IPv6 Support in MoM Environments

The IPv6 protocol is supported in HPOM flexible management environments. For more information on how to configure HPOM to use the IPv6 protocol, see the *HPOM Administrator's Reference*. For more information about the HPOM flexible management environment, see the *HPOM Concepts Guide.*

HPOM Virtual Appliance

HPOM 9.21 for CentOS Linux 6.5 offers a virtual appliance solution that enables you to eliminate the need for installing, configuring, and maintaining complex software systems. HPOM virtual appliance contains a preinstalled and preconfigured HPOM system and is available as an Open Virtual Appliance (OVA) file.

For more information on how to deploy HPOM virtual appliance to VMware in your environment, see the *HPOM Virtual Appliance White Paper*.

New Variable

For more information on the server configuration variables, see the *HPOM Server Configuration Variables* document.

Administration UI

Silent Administration UI Patch Installation

Installing the Administration UI 9.21.100 patch enables you to perform a silent installation of the successive Administration UI patches by running the following command:

```
/opt/OV/OMU/adminUI/adminui patch <AdminUI_patch_name>.zip silent
```

Duplicate Message Suppression

The Measurement Threshold and Schedule Task policies support duplicate message suppression.

Copying Service Process Monitoring Policies

When editing a Service Process Monitoring policy, you can copy and organize conditions.

Enhancements

- Web accessibility is completely implemented for the Administration UI. For details on what is available, see "Administration UI Web Accessibility" below.
- Jetty server is upgraded to version 9. You can define a list of enabled SSL protocols as well as include or exclude SSL security ciphers in the `/opt/OV/OMU/adminUI/conf/jetty.xml` file.
- The performance of message bulk inserts on PostgreSQL database is improved.

Administration UI Web Accessibility

The following table describes accessibility improvements made in the Administration UI:

Accessibility Improvement	Description
Page titles	All Administration UI pages have titles that enable you to find content and easily orient yourself when you have multiple pages or tabs open.
Alternative texts	All Administration UI images, which you use for work with the Administration UI, have corresponding alternative texts (“alt texts”).
Headings	Headings are visually distinguished and you can easily navigate to them by using either a mouse or a keyboard.

Accessibility Improvement	Description
Keyboard access	You can access the Administration UI content and functionality by using a keyboard (for example, move through the content by using the Tab functionality, use arrow keys to select options from the drop-down lists, activate links, access form fields and controls, and so on). Moreover, all visible changes that you can make by hovering the mouse, such as highlighting, you can also perform by using the keyboard.
Visual focus	The currently used UI elements are visually distinguished so that you can easily obtain focus on them.
Forms	Form field s and controls have clearly visible and marked labels. The indicators, such as asterisk (*), legends, instructions, and other required formats are also included.
Data tables	Data tables are properly marked for the All policies and All nodes views.
Links	For the policy and node related views, links contain the text from which you can anticipate the content of their targets.
Speech assistance	You can operate the Administration UI also by using JAWS (Job Access With Speech). To take advantage of speech assistance during your work with the Administration UI, you must have, in addition to JAWS, the JAB (Java Access Bridge) software installed and enabled. For more details about JAWS, see the Oracle web site.

New Support Announcements

With HPOM 9.21, the following is supported:

- RHEL 7

  To install HPOM 9.21 on RHEL 7 you must use the latest `ovoinstall` script that is available at the following location:

  ftp://ovweb.external.hp.com/pub/cpe/ito/latest_ovoinstall

  > **Caution:** Make sure the HP Operations Agent is installed before running `ovoinstall`.

- JRE 8u31

  To use JRE 8, download and install it from either Oracle's Java web site (http://www.oracle.com/technetwork/java/index.html) or your platform repositories.

Caution: Starting with JRE 8, on OS X systems Java GUI must be called with (at least) the following arguments: `user`, `passwd`, and `server`. For example:

```
<path_to_ito_op>/ito_op user=<user_name> passwd=<password_name>
server=<server_name>
```

- PostgreSQL database version 9.4
- HPOM Java GUI client on Windows versions 8 and 8.1

Note: For the most up-to-date list of what is supported by HPOM, see the support matrix at the following location:

http://support.openview.hp.com/selfsolve/document/KM323488

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

Features, Enhancements, and Changes Introduced with HPOM 9.20.320

This section lists the changes that were introduced with the HPOM 9.20.320 patch:

New Variables

A new server configuration variable `OPC_FORW_DISCARD_ALL_EVENTS` is available. If set to `TRUE`, all events, messages, and message operations are no longer forwarded and are just discarded from the `forwmgrq` queue file.

Enhancements

- In an HA Manager environment, you can use both formats (long and short) of an IPv6 address in the `resource_virtual_ipv6.conf` file.
- Health Check is integrated into HA Manager. For more information on using HC component in an HA Manager Environment, see "Using Health Check in an HA Manager Environment" on the next page.
- You can now use Set User ID (SUID) instead of capabilities, which enables you to run the `opcnonrootsetup.sh` script if the file systems are mounted by using the NFS service. Perform the following:

  a. Apply the HPOM consolidated server patch 09.20.320 after installing the HPOM binaries, but before configuring HPOM.

  b. Set the following server configuration variable:

  ```
  ovconfchg -ovrg server -ns opc -set OPC_NON_ROOT_USE_SUID TRUE
  ```

  c. Continue with the `ovoinstall` configuration phase, or, if you already exited `ovoinstall`, run `ovoconfigure` to start the configuration again.

For detailed information about server configuration variables, see the *HPOM Server Configuration Variables* document.

Support Announcement

HPOM 9.20.320 now supports VCS 6.x on RHEL 6.x.

Using Health Check in an HA Manager Environment

To use the Health Check (HC) functionality in an HA Manager environment, you must enable an HC component on all HA Manager nodes. In addition, include the following steps in the procedure described in the "Configuring the HP Operations Management Server HARG in a Server Pooling Environment" section of the *HPOM Administrator's Reference* guide:

- Before creating links in Step 1c, run the following command on all HA Manager nodes:

  ```
  /opt/OV/bin/OpC/utils/hc/opchc.sh -enable [SM]
  ```

- In Step 1c, create also the following links:

  ```
  ln -s /opt/OV/bin/OpC/utils/ha/ha_HC S800_HC
  ```

  ```
  ln -s /opt/OV/bin/OpC/utils/ha/ha_HC K050_HC
  ```

When the HC component is enabled on an inactive node, no HC errors are reported from this node after the HARG is stopped on it for the first time. To avoid HC error messages before stopping the HARG on such a node for the first time, run the following commands:

```
/opt/OV/bin/ovc -stop opchcd
```

```
/opt/OV/bin/ovcreg -del opchcd
```

Features, Enhancements, and Changes Introduced with HPOM 9.20.310

This section lists the changes that were introduced with the HPOM 9.20.310 patch:

New Variables

OPCUIWWW_DISCONNECT_TIMEOUT
OPCUIWWW_NO_LDAP
OPC_USE_ACTION_TIME_FORW_ANNO
AGENT_REQ_NUM_WARNING
AGENT_REQ_NUM_CRITICAL
OPC_API_NO_NODE_DEL_ACK
OPC_ONLY_ACTIVE_MSGCHG_FOR_IWS
OPC_USE_NEW_BOOTSTRAP_METHOD
DISABLE_ADVANCED_TEXT_CHECKS

For detailed information about server configuration variables, see the *HPOM Server Configuration Variables* document.

New CLI

- The HP Operations management server now includes a new contrib tool, `opcsvqchk`, for dumping messages in the server queue files.

  The `opcqchk` contrib tool, which is available with the HP Operations Agent, was used for server message queue files up to the HP Operations Agent version 11.00, when the message format and the tag for messages changed. This resulted in losing the possibility to use `opcqchk` for HP Operations management server message queue files (content was displayed as hex dump).

- Now you can use the `IPv6` and `allnodes.ipv6` files for IPv6 nodes. You can use the `opc_ip_addr` tool to retrieve file names for IPv6 nodes, similarly as it is done for the IPv4 nodes. The files are checked in the following order:

  a. `hex_ip_addr_of_agent` (`IP` file)

  b. `nodename` file

  c. `allnodes.ipv6` for IPv6 nodes

  d. `allnodes.bbc` for HTTPS nodes

  e. `allnodes`

Enhancements

- The `opchamgr` utility now performs retries for the `ping` check. To configure this, override the defaults from the `/etc/opt/OV/hamanager/hamanager.conf` file with the following settings:
  - `PING_RETRIES`

    Number of `ping` retries if `ping` fails (default is 3).
  - `PING_RETRY_DELAY`

    Delay in seconds before retrying `ping` (default is 5).

New Support Announcement

HPOM 9.20.310 now supports the following:

- Oracle database version 12c. For the installation procedure, see “Installing HPOM 9.20.310 with Oracle Database 12c” on page 6.
- RHEL 6.6

Features, Enhancements, and Changes Introduced with HPOM 9.20

This section contains support announcements, features, and enhancements that are introduced with the HPOM 9.20 release.

New Features

HPOM 9.20 introduces the following features:

PostgreSQL Database Support

PostgreSQL is an object-relational database management system (ORDBMS) that is released under the PostgreSQL License, a liberal Open Source license, and is therefore free and open source software.

Note: HPOM 9.20 with the PostgreSQL database is not supported in the cluster environments.

For detailed information about installing a PostgreSQL database, see the *HPOM Installation Guide for the Management Server*.

HPOM Health Monitoring

The health of the HP Operations management server is monitored by registered monitors, which are special tools for monitoring the status of a particular resource. The health status is then forwarded to all registered clients. Registered clients send health data to a file, a database, or a remote application (depending on the type of registered client).

Health monitoring is performed by the `opchealth` daemon, which runs as part of the HP Operations management server processes.

For more information, see the *HPOM Administrator's Reference*.

Agent Running and Reachable

The Agent Running and Reachable (ARR) component is a health monitor that can be controlled by the health monitoring daemon. All ARR events (for example, `NODE DOWN`, `AGENT DOWN`, and so on) are forwarded to the clients through the health monitoring daemon. For more information, see the *HPOM Administrator's Reference*.

Agent Health Check

The Health Check (HC) component is responsible for controlling a continuous message flow from managed nodes to management servers and for monitoring the HP Operations Agent health status that is received from managed nodes. For more information, see the *HPOM Administrator's Reference*.

Event Storm Filter

The Event Storm Filter (ESF) program provides a mechanism to filter HPOM events when an event storm (that is, a large number of events in a short time) is detected. For more information, see the *HPOM Administrator's Reference*.

Smart Card Authentication

The certificate authentication feature introduced with HPOM 9.11 has been expanded to support not only CAC but any kind of smart card or certificate. By configuring smart card authentication on HPOM, access to the HPOM user interfaces is restricted to operators who provide a valid certificate. Therefore, security is increased and access procedures are simplified. For more details, see the *HPOM Administrator's Reference*.

Online Configuration Synchronization

In environments with multiple management servers, you can synchronize HP Operations management server data between the primary server and the other servers by using the `opccfgsync` command line tool. For more information, see the *HPOM Administrator's Reference*.

Non-root Operation

You can run the HP Operations management server processes under a non-root user account. A non-root user is a user with limited authority in comparison to the root user.

When running HPOM as a non-root user, you can perform most of the tasks that were before 9.20 performed only by the root user. For non-root operation limitations, see the *HPOM Concepts Guide*.

Multiple Agent Installation Instances

You can install more than one agent in parallel (that is, run several `inst.sh` scripts simultaneously). To enable this feature, set the `OPC_AGT_MULTI_INST` server configuration variable to `TRUE`.

Caution: For the known problem QCCR1A175339 (see "Known Problems, Limitations, and

Workarounds" on page 42 for the problem description) the Hotfix is available through HP Support. The required HP Operations Agent version is 11.14.

For more information on this feature, see the *HPOM Administrator's Reference*. For more information on the server configuration variables, see the *HPOM Server Configuration Variables* document.

Agent Bootstrapping Installation

A method for the remote agent installation by using the `inst.sh` script is introduced.

The agent bootstrapping installation uses secure file transfer and execution methods based on the SSH communication protocol. For this purpose, HPOM uses PuTTY, a third-party utility that serves as an SSH client.

For more information, see the *HPOM Administrator's Reference*.

Creating a Dynamic Filter for Messages in the Java GUI

It is possible to create a dynamic filter for messages based on a node layout group. This means that when a node layout group is updated (that is, one or more nodes are added or removed), the message filter is updated to show the messages for the nodes that belong to the selected layout group. In addition, it is also possible to select more than one node layout group in the filter. When you add a node layout group by dragging and dropping it into the filter browser, the node layout group appears in the filter list.

Managing Multiple Simultaneous Session Logons in the Administration UI

By default, Administration UI allows Simultaneous Session Logons (that is, one user can have simultaneously more than one session on one system (by using different browsers) or on different systems.)

You can turn off this function by appropriately editing the `/opt/OV/OMU/adminUI/conf/auth.properties` configuration file. You can also log off a user from the Web application, monitor concurrent user sessions, and use the Quality of Service filter. For more information, see the "Managing Multiple Simultaneous Session Logons to the Administration UI" on page 36

New Variables

The following server configuration variables are introduced:

OPC_AGT_MULTI_INST	OPC_JGUI_ALLOWED_HOSTNAME
OMU_AUDIT_LOG_MAXSIZE[a]	OPC_JGUI_DENIED_HOSTNAME
OMU_NO_AUDIT_PROCS[a]	OPC_JGUI_RECONNECT_FROM_GLOB_SETT
OPC_CASE_SENSITIVE_SEARCH	OPCSVCAM_IGNORE_SVCINSTANCE_CREATE_FAIL_
OPC_JGUI_ALLOWED_OPERATOR	LOGGING
OPC_JGUI_DENIED_OPERATOR	OPCUIWWW_LOG_SIZE

For more information on the server configuration variables, see the *HPOM Server Configuration Variables* document.

The following message-related variables are introduced:

$OPC_MSG.TIME_CREATED.HOURS	$OPC_MSG.TIME_CREATED.YEAR
$OPC_MSG.TIME_CREATED.MINUTES	$OPC_MSG.TIME_CREATED.MONTH
$OPC_MSG.TIME_CREATED.SECONDS	$OPC_MSG.TIME_CREATED.DAY

For more information on the audit-related and message-related variables, see the *HPOM Administrator's Reference*.

Enhancements

The following enhancements are introduced:

Accessibility

Web accessibility is improved for Administration UI and Java GUI users. Web accessibility refers to the practice of producing web sites understandable for someone with disabilities. The following is introduced:

- **Java GUI**
  - All Java GUI images, which you use for work with the Java GUI, have corresponding alternative texts ("alt texts").
  - Several key accelerators are introduced in the Java GUI. For the detailed list, see the *HPOM Java GUI Operator's Guide*.
  - Visual focus and tab sequences are improved.
- **Administration UI**
  - All Administration UI pages have titles.
  - All Administration UI images, which you use for work with the Administration UI, have corresponding alternative texts ("alt texts").

[a]This server configuration variable is introduced for auditing support.

Accessibility for the Administration UI is partially implemented, the complete solution will be available with the next HPOM release.

For the information on how to use the Administration UI, see the *HPOM Administration UI Help* document.

Java GUI

- The `def_mvf_operator` parameter is introduced in the `itooprc` resource file. This parameter is used for customizing the default message view filter operator. The default value is `contains`. For more information, see the *HPOM Java GUI Operator's Guide*.
- The Java GUI supports tooltips for minimized service map windows. Therefore, when you hover the pointer over a minimized service map window, a tooltip with the service name appears.

Miscellaneous

- You can assign services to user profiles by running the following command:

  `/opt/OV/bin/OpC/opcservice -assign <profile> <service>`

  To deassign services from user profiles, use the `opcservice -deassign` command.

  For details, see the *opcservice* manual page.
- Instrumentation categories can be assigned to node groups, in addition to policies, policy groups, and nodes.
- Message modifying functionality is improved. You can modify additional message attributes (object, application, service name, message group, severity, and message text). You can also remove a custom message attribute.
- Fully searchable online help systems are introduced for both the Java GUI and the Administration UI.

Other Changes

- The maximum number of duplicate message annotations specified by using the server configuration variable `OPC_MAX_DUPL_ANNO` is 99999 because of a database limitation. If a greater value is set, it is ignored and the value 99999 is used instead. If the value is set to 0 (default), the value 99999 is used.
- Administration UI: The password for the keystore in the `jetty.xml` file is encrypted. If you want to change it, run the following command:

```
/opt/OV/OMU/adminUI/adminui password -u keystore -p <password> -a
```

If you only want to obtain the encrypted keystore password, run this command without the `-a` option.

In addition, you can obtain the encrypted version of your password through the GUI by running the following command:

```
/opt/OV/OMU/adminUI/adminui password -u keystore -i
```

Note: Keep in mind that this GUI only provides you with the encrypted version of the password you entered and does not alter the Administration UI configuration.

New Support Announcements

With HPOM 9.20, the following is supported:

- **Supported Database Versions**
  - **PostgreSQL Database 9.1, 9.2, and 9.3**
  - **Oracle Database 11.2.0.4**

    Oracle Database 11g Release 2 Enterprise Edition, Standard Edition, or Standard Edition One 11.2.0.4 is supported.
- **CentOS Linux 6.x**

  HP Operations management server can run on the CentOS Linux 6.x operating system.

  Caution: Because of the Oracle restrictions, HPOM does not support an Oracle database running on CentOS Linux.
- **Oracle Linux 6.x**

  Both Red Hat Compatible Kernel and Unbreakable Enterprise Kernel are supported.
- **Supported Web Browsers**
  - Administration UI

    Microsoft Internet Explorer 11 (not supported on CITRIX), Google Chrome 32 or higher, Safari 7

- Java GUI

  Microsoft Internet Explorer 11, Google Chrome 32 or higher, Safari 7

- **Supported JRE Versions**
  - Windows: JRE 1.7.0_51
  - Linux and Solaris: JRE 1.7.0_25
  - HP-UX: JRE 1.7.0_21

Note: For the most up-to-date information about what is supported by HPOM 9.20, see the support matrix at the following location:

http://support.openview.hp.com/selfsolve/document/KM323488

Managing Multiple Simultaneous Session Logons to the Administration UI

By default, Administration UI allows Simultaneous Session Logons (that is, one user can have simultaneously more than one session on one system (by using different browsers) or on different systems.)

You can turn off this function by appropriately editing the following properties in the `/opt/OV/OMU/adminUI/conf/auth.properties` configuration file:

- `userauth-filter.concurrentSessionsEnabled`

  Enables you to restrict users from logging on more than once (`true|false`). The default value is `false`, which means that multiple simultaneous session logons are disabled.

- `userauth-filter.concurrentSessions`

  Shows how many concurrent sessions per user is allowed, its value should be a number greater than 0. This property is used only if multiple simultaneous sessions are enabled. Setting the default value (that is, `0`), automatically resets the `concurrentSessionsEnabled` value to default (that is, `false`) and therefore disables multiple simultaneous session logons to the Administration UI.

- `userauth-filter.inactivityTimeout`

  Configures inactivity period. This property is used only if multiple simultaneous sessions are disabled (the `concurrentSessionsEnabled` value is set to `false`). Its value represent minutes, the default is `0`. If the default value is set, this functionality is disabled. If enabled, this functionality logs out an inactive user from the Web application after specified period of time and records this in the appropriate log file.

- `userauth-filter.automaticLogout`

  Performs automatic logout if the number of allowed concurrent sessions is exceeded (`true|false`). This property is used only if multiple simultaneous sessions are disabled (the `concurrentSessionsEnabled` value is set to `false`). The default value is `false`. If the value is set to `true`, a user with credentials identical to the ones used by the already logged-on user is automatically prevented from logging on to the Administration UI.

Note: For any changes in the `/opt/OV/OMU/adminUI/conf/auth.properties` configuration file to take effect, it is required to restart the application as follows:

`/opt/OV/OMU/adminUI/adminui restart`

Any user can be logged out from the Web application by using the following command:

`/opt/OV/OMU/adminUI/adminui logout_user <USERNAME> <SESSIONID>`

User can still perform tasks that do not require authorization, however when the user attempts to perform a task for which the authorization is necessary, the user is logged out from the application. When authorized, this user will be logged on to the application without any prompt.

Monitoring Simultaneous User Sessions

Users that are currently logged on to the Administration UI (sessions from WebApp) can be monitored by using the following tool:

`/opt/OV/OMU/adminUI/bin/listconn`

By using this tool you can obtain the following data: user name, session ID and log-on time.

Quality of Service Filter

Jetty supports Continuations, which enable you to manage HTTP requests in a nonblocking manner, so that threads can be allocated to provide application specific Quality of Service (QoS). Quality of Service (QoS) means overall performance of the computer network, particularly the performance perceived by the users in the network.

The QoSFilter is a utility servlet filter that implements some QoS features. It uses Continuations to avoid thread starvation, prioritize requests and provide a high quality of service.

When you apply the filter to specific URLs within a Web application, it limits the number of active requests being handled for these URLs. Any requests in excess of the limit are suspended.

When a request completes handling the limited URL, one of the waiting requests resumes and can be handled. For more information, visit the following URL:

http://wiki.eclipse.org/Jetty/Reference/QoSFilter

The configuration is located in the following file:

`/opt/OV/OMU/adminUI/webapps/midas/work/webapp/WEB-INF/web.xml`

Search for the following section:

```
[...]
<filter>
  <filter-name>QoSFilter</filter-name>
  <filter-class>org.mortbay.servlet.QoSFilter</filter-class>
  <init-param>
    <param-name>maxRequests</param-name>
    <param-value>100</param-value>
  </init-param>
</filter>
<filter-mapping>
    <filter-name>QoSFilter</filter-name>
    <url-pattern>/*</url-pattern>
  </filter-mapping>
[...]
```

By default, number of processed requests is 100 at a time. To change default behavior, modify the `maxRequests` parameter.

Note: For any changes in the `/opt/OV/OMU/adminUI/webapps/midas/work/webapp/WEB-INF/web.xml` configuration file to take effect, it is required to restart the application as follows:

`/opt/OV/OMU/adminUI/adminui restart`

HPOM 9.2x and Other HP Software Solutions

Integration

HPOM 9.2x provides integrations with other HP Software solutions, such as Network Node Manager i (NNMi) and Business Service Management (BSM). For a complete list and more information, visit the Support web site: http://support.openview.hp.com/sc/integration_catalog.jsp

Coexistence

HPOM 9.2x can coexist on the same system with the following HP Software products:

- HP Operations Agent 12
- HP Performance Manager 9.xx
- SiteScope 11.12 or later

HPOM 9.2x cannot be installed on the same system with some HP Software products. The following HP Software products can be used with HPOM but must be installed on a remote system:

- Network Node Manager i (NNMi) 8.xx and 9.xx
- Business Service Management (BSM) 9.xx

Obsolescence Announcements

This section lists features that are obsolete with the HPOM 9.2x release.

Obsolete Documentation

The following documents are no longer available with HPOM:

- *HPOM Administration UI Release Notes*

  Note that the information contained in this document can be found in the present *HPOM Software Release Notes*.

- *HPOM HTTPS Agent Concepts and Configuration Guide*

  Note that the information contained in this guide was distributed among other HPOM manuals and HP Operations Agent documentation.

- *HPOM Administration UI Administration and Configuration Guide*

  Note that the information contained in this guide is documented in the *HPOM Administrator's Reference* guide.

- *HPOM Administration UI Installation Guide*

  Note that the information contained in this guide is documented in the *HPOM Installation Guide for the Management Server*.

- *HPOM Administration UI User Guide*

  For user-related information you can use the HPOM Administration UI Help document, which is a PDF version of the HPOM Administration UI Online Help.

- *HPOM Custom Process Management White Paper*

  Note that the information contained in this white paper is documented in the *HPOM Administrator's Reference* guide.

- *HPOM High Availability Manager White Paper*

  Note that the information contained in this white paper is documented in the *HPOM Administrator's Reference* guide.

- *HPOM Authenticating Administration UI Users Using PAM or LDAP White Paper*

Note that the information contained in this white paper is documented in the *HPOM Administrator's Reference* guide.

Miscellaneous

- With HPOM 9.20, the `opcpkgdwn` tool is no longer used.
- Starting with the HPOvOprEl version 2.11, which is introduced with the 09.0X.300 Core patch, the licensing-related settings `SwitchOffWarning` and `Severity` are not used any more in the `opr.el` namespace.
- The following tools are removed from the HP Operations management server: `SelfMon`, `dhcp_postproc.sh`, Hotfix Deployment Tool, `ServiceMOMExample.tar`, `HC_configuration.tar` and `ESF_configuration.tar`.
- Microsoft Internet Explorer 8 and Mozilla Firefox 17 are no longer supported.
- ECS Designer is no longer supported. Therefore, you cannot modify ECS circuits on HPOM, but you can still import them. For more information, see the *HPOM Concepts Guide*.

Known Problems, Limitations, and Workarounds

HPOM 9.21

Management Server and Java GUI

Symptom QCCR1A149149
Support for Veritas cluster 6.0 on all platforms

When installing and configuring HPOM in a VCS 6.0 cluster environment, you may get one or both the following errors (depending on whether you have chosen the decoupled configuration) when HA resource groups are being started.

```
Starting Database HARG "ov-db" . . . . . FAILED

Starting Server HARG "ov-server" . . . . . FAILED

[repeat,skip,back,exit,?] :
```

Solution

To resolve this issue, follow these steps:

1. Open a separate window and run the following command to clear the state of failed resource groups:

   ```
   hagrp -clean
   ```

   Example:

   ```
   $ hagrp -clear ov-server
   $ hagrp -clear ov-db
   ```

2. Continue configuring HPOM by typing `repeat` in the original window.

Note: The names of resource groups can be customized.

Symptom QCCR1A185500 and QCCR1A185521
HPOM system package upgrade using Yum upgrade and Yum update utilities fails on RHEL 7.x.

On the RHEL 7.x operating system, HPOM system package upgrade aborts, when using the Yum upgrade and Yum update utilities for upgrade.

Solution

There is no workaround available at the moment.

Symptom QCCR1A179165
Java GUI WebStart problems when using Mozilla Firefox and JRE 8

If Java GUI is started by using WebStart (`http://<server>:8081/OvCgi/ito_op_applet_cgi.ovpl?webstart=true`) on Mozilla Firefox and JRE 8, the following problems arise:

- Java GUI does not open properly. Namely, Message Dashboard is not properly displayed, and the Corrective Actions and All Active Message tabs are missing.
- Java GUI does not close properly. There is no result when selecting **Exit** from the Command File menu. When clicking the **X** button, it is required to repeat this action twice for the Java GUI to exit.
- When the Message Browser is put in the Workspace Pane and the console settings are saved, the following error appears at the next startup by using WebStart:

  ```
  Unable to launch the application.
  ```

Solution

Launch WebStart Java GUI with Internet Explorer or Chrome. You can also use Mozilla Firefox with either Java 7u60 (or earlier) or Java 8u5 (or earlier) version.

Symptom QCCR1A181055
RHCS unmount problem if users are in shared directory

In a cluster environment, a switchover or a failover fails when a user is using one of the shared mount points. The unmount process cannot finish successfully because the shared mount point appears busy.

Solution

After the switchover or failover fails, check the active mount points on the node where the failure took place. If there is a user that uses a shared point, all mount points should be successfully unmounted except the one that is in use (for example, `/etc/opt/OV/share`).

To solve this problem, perform the following:

1. Resolve problem with used shared disks:

   a. Identify the user that is using the active share point:

   ```
   fuser -m -u /etc/opt/OV/share
   ```

i. Make sure that this user stops using the shared location.

ii. If you cannot stop this user from using this location, use the `kill` operation:

`kill -9 <user_id>`

For example, you get the following output when identifying the user: `/etc/opt/OV/share: 17843c(root)`. In this case, type the following: **`kill -9 17843`**.

2. Manually unmount the active shared mount point:

`umount /etc/opt/OV/share`

3. Start the failed resource group manually:

`ovharg_config <HPOM_HA_resource_group_name> -start <node_name>`

Symptom QCCR1A178459
Upload of the template group with too lengthy name

On HP Operations management servers with PSQL database an error appears which contain only the following: "Database:". This problem exists on RHEL 6.6 with Oracle 12 as well.

Solution

This error should state as follows: `Database: ORA-12899: value too large for column "OPC_OP"."OPC_TEMPL_GROUPS"."TEMPL_GROUP_NAME" (actual: 509, maximum: 508)`. To avoid getting this error, enter the shorter template group name.

Administration UI

Symptom QCCR1A184968
Administration UI displays error when submitting forms with large data

When submitting forms with large data (for example, adding large number of nodes to the shopping cart), the following error is displayed on the Administration UI: `HTTP ERROR 500`

Solution

Follow these steps to resolve this issue:

1. Stop all Administration UI processes by running the following command:

`/opt/OV/OMU/adminUI/adminui stop`

2. Edit the `/opt/OV/OMU/adminUI/conf/servicemix/wrapper.conf` file and make the following change:

`wrapper.java.additional.10=-`
`Dorg.eclipse.jetty.server``.Request.maxFormContentSize=10000000`

3. Start the Administration UI processes by running the following command:

   ```
   /opt/OV/OMU/adminUI/adminui start
   ```

Symptom QCCR1A173708
Related categories not included when downloading policies from the Administration UI

When downloading a policy from the Administration UI, the related categories (instrumentation) are not included in the download archive.

Solution

You cannot download policies together with the related instrumentation by using the Administration UI.

On the HP Operations management server, add `WITH_POLICIES` to the `.dsf` file before running the tool for downloading the configuration. For the example of how you can do this, see the *HPOM Administrator's Reference*.

Symptom QCCR1A179761
Editing objects with forbidden characters results in a security warning in the Administration UI

Editing objects that have forbidden characters in default Descriptions, Names, or other fields cannot be performed. When attempting to edit these objects, the following warning is displayed: `This action violates security of this application, therefore it is not allowed.`

Solution

Remove the forbidden characters from an object before you start with editing.

For example:

1. Edit the Certificate Tools tool group.
2. Change the content of the description field from Application Group 'Certificate Tools' to Application Group "Certificate Tools".
3. Save the tool group.

Symptom QCCR1A181440
When copying a Flexible management template, the combo-box arrow button does not work

When copying a Flexible management template, clicking on combo-box arrow button does not produce results.

Solution

Expand the Alias of the destination directory drop-down list by clicking directly inside the list, instead of using the arrow button.

Limitations

The following are known limitations with HPOM 9.21:

- Switching HPOM to non-root operation is not supported in cluster environments.
- Actions from the Browse and Action menu items cannot be opened properly in a new tab.

HPOM 9.20

Management Server

Symptom QCCR1A157983
The opcpolicy check=yes command does not warn in case there are conditions with duplicate descriptions

In case there are conditions with same descriptions in the same policy, the following error message appears in the Administration UI:

```
The following errors have been detected (marked with !):
Condition descriptions must be unique. Duplicate condition description on
conditions number: 1, 2
Please, correct them and try saving again.
```

The `opcpolicy` and `opccfgupld` commands should detect this as a syntax error.

Solution

Manually change the condition descriptions.

Symptom QCCR1A155877
ovocomposer should support JRE 7

When running the `ovocomposer -ui` command, the following error message is displayed:

```
ERROR: The current version of java (1.7) is not supported. INFO : The supported
java versions are: 1.5 and 1.6.
```

The same problem exists also with JRE 8.

Solution

A hotfix is available through HP Support.

Symptom QCCR1A172348

The `mondbfile` policy is assigned in the PostgreSQL and non-root environments, although it is irrelevant.

Solution

Because `mondbfile` call does not affect the PostgreSQL and non-root environments, you can remove the assignment of the `mondbfile` policy manually. When switching to Oracle and to the `root` operation, make sure you assign this policy again so that you can use it in these environments.

Symptom QCCR1A174531
HPOvOUOracleB package relinks OpC/db binaries to Oracle when upgraded even if the database is PostgreSQL

The `HPOvOUOraB` package installation or upgrade relinks HPOM binaries to the Oracle version even if HPOM is currently using a PostgreSQL database.

When the `HPOvOUOraB` package is installed or upgraded, the following links are created in `/opt/OV/bin/OpC`:

```
opcsvcupl -> db/opcsvcupl

opc_dbinit -> db/opc_dbinit

opcdbinst -> db/opcdbinst

opcagtdbcfg -> db/opcagtdbcfg

opcactupl -> db/opchistupl

opcadddbf -> db/opcadddbf

opcdbmsgmv -> db/opcdbmsgmv

opcactdwn -> db/opcactdwn

opcsvcdwn -> db/opcsvcdwn

opcunack -> db/opcunack

opchistdwn -> db/opchistdwn

opcuistartupmsg -> db/opcuistartupmsg

opcack -> db/opcack

opchistupl -> db/opchistupl

opccfgdwn -> db/opccfgdwn

opcswpatch -> db/opcswpatch

opccfgupld -> db/opccfgupld

opcdbidx -> db/opcdbidx

opcdbpwd -> db/opcdbpwd
```

This results in the server failure if HPOM uses a PostgreSQL database.

Solution

You can create the appropriate links by running the `opcdblink psql` command.

Symptom QCCR1A174127
HA Manager daemon is still running after the HP Operations management server is removed

If the HA Manager is configured and running, it continues to run after the HP Operations management server is removed by using the `ovoremove` tool.

Solution

When the HP Operations management server is removed, obtain a PID of `opchamgr` and then stop the process by using the `kill` command.

Symptom QCCR1A172313
Administration UI and SiteScope configuration upload should be performed after the database is reinitialized

The database reinitialization does not upload all the policies from the default installation. When the database is reinitialized by using `opcdbinit -c`, the configuration components such as SiS or SPIs are not uploaded. Only the HP Operations management server default configuration is uploaded.

Solution

Before the database initialization, perform the full configuration download by using the `opccfgdwn` tool. After the database is initialized, upload the downloaded configuration manually by using the `opccfgupld` tool.

Symptom QCCR1A130743
After the I/O application is finished, the window does not close

After an Input/Output application that is started from the Java GUI is finished successfully the following output appears:

rlogin:connection closed.

However, the window stays open.

Solution

You can close the window by clicking the X button in the top-right corner.

Symptom QCCR1A144819
Missing message correlation between pure Self Monitoring and Agent Health Check messages, which results in message duplication

When using the Agent Health Check component and Self Monitoring feature, the alarm messages for the agent health status may get duplicated. This means that an alarm message from Self Monitoring and another message from Health Check both may report the same agent-related problem. There is no mechanism, such as message correlation, to prevent this from happening.

Solution

Acknowledge duplicated (Self Monitoring) alarming messages manually in the message browser.

Symptom
Agent bootstrapping installation method displays an error when installing an agent from the UNIX or Linux management server to the Windows node

Agent Bootstrapping displays the following error:

```
ERROR: Agent Bootstrap access method is not supported for Windows nodes.
```

Despite the error, the installation does not stop.

Solution

This message may be safely ignored, because the installation will continue in the supported mode.

Symptom
Agent bootstrapping installation method fails when installing 11.13.007 HP Operations Agent.

When run in the Agent Bootstrapping mode, the `inst.sh` script exits with the following error:

```
ERROR:   (depl-81) Unable to deploy 'OVO-Agent.xml' to node
         '<agenthostname'>.
          (depl-301) Command '/bin/sh -c "/opt/OV/bin/OpC/agtinstall/
         runplink.sh ************************* root example.example.com "/bin/
         rm -rf  "/var/opt/OV/installation/inventory/
         Operations-agent_OALIN_00031.xml""' terminated with an error:

         /bin/rm: missing operand
         Try `/bin/rm --help' for more information.
```

Solutions

Choose one of the following solutions:

- Instead of the Agent Bootstrapping method, use the Management Server based (option = 1) installation method.
- Ignore the error message and start the remote agent manually by using `ovc -start`. After that, verify the basic agent-server communication by using `opcragt -status <agent_hostname>`.

Symptom QCCR1A142521
Agent Windows installation server method fails when installing HP Operations Agent 11.xx

After the successful installation and configuration of the Installation server on the dedicated Windows system that hosts HP Operations Agent 11.xx, the `inst.sh` script fails when trying to install HP Operations Agent 11.xx on the target node. The following output is displayed:

```
Trying to contact HPOM at <target_win_node> (still 40 cycles) ...
The following error appears in System.txt:
 (depl-81) Unable to deploy 'OVO-Agent.xml' to node '<target_win_node>'.
Exeinst failed (depl-385) Command 'oasetup.exe -install  -no_start -no_boot  '
failed with the return code '10001' on the node '<target_win_node>'^M
0: ERR: Wed May 23 14:31:58 2012: ovdeploy (14535/1): (depl-84) Unable to download
'oainstall.log' from node '<target_win_node>'.^M
```

Solution

Use the standard Management Server based (option = 1) installation method.

Symptom QCCR1A174234
Event Storm Filter may mistakenly suppress the last message before the actual event storm occurs

The Event Storm Filter component may mistakenly suppress the last message before the actual event storm takes place. This can happen when the `PERIOD` parameter is set to the shortest time interval (one minute) in the `flood_gates.conf` file.

Solution

Do not set the shortest time interval (one minute) for the PERIOD parameter in the flood_gates.conf file. Instead, set two minutes or more, and then recalculate the RATE parameter accordingly. For example, modify the following values:

```
RATE=3
PERIOD=1
```

to these ones:

```
RATE=6
PERIOD=2
```

Symptom
A number of parallel agent installation instances is not limited

If you have enabled installing more than one agent in parallel (that is, OPC_AGT_MULTI_INST is set to TRUE), the number of agent installation instances that you can run simultaneously is not limited. The only limitations are the ones pertaining to the operating system (for example, the maximum number of processes or open files per user kernel parameters).

Solution

When installing more than one agent in parallel, be cautious regarding the number of installation instances that you run. It is recommended to start with the small number of installations (for example, 10 instances), and then to reasonably raise the number (for example, to 20 or 30) in case there are no problems with the installations.

Symptom
ovlusterinfo -a command returns cluster exception

The ovclusterinfo -a command displays the local state on the active node as Offline.

Solution

The value of the CLUSTER_LOCAL_NODENAME variable must be a node name instead of a hostname. Set the value as follows:

```
ovconfchg -ns conf.cluster -set CLUSTER_LOCAL_NODENAME <local_node_name>
```

Symptom QCCR1A173263
Second cluster node is not assigned to the virtual node

The second cluster node is not assigned to the virtual node by default. Because of this, all policies and other configuration data that are assigned to this virtual node are not assigned to the second cluster node.

Solution

Assign the second cluster node to the virtual node by using the Administration UI.

Symptom
Configuration data cannot be distributed to the second cluster node

Policies and other configuration data cannot be distributed to the second cluster node, unless the MANAGER and MANAGER_ID variables are manually set on the second cluster node.

Solution

On the second cluster node, set the MANAGER and MANAGER_ID variables as follows:

```
ovconfchg -ns sec.core.auth -set MANAGER <virtual node name>
ovconfchg -ns sec.core.auth -set MANAGER_ID <virtual node ID>
```

SiteScope Integration

Symptom

The SiteScope application does not work from the Java GUI, because of the new Tomcat package 07.00.053.

Solution

1. In the /opt/OV/nonOV/tomcat/b/www/webapps/topaz/WEB-INF/web.xml file, comment out the lines around 203 by using <!-- and -->, as follows:

```
<!--
        <taglib>
            <taglib-uri>/tags/jstl-core</taglib-uri>
            <taglib-location>/WEB-INF/act/tlds/c.tld</taglib-location>
        </taglib>
-->
```

2. Put the following line at the end of the /opt/OV/nonOV/tomcat/b/conf/catalina.properties file:

```
org.apache.jasper.compiler.Parser.STRICT_WHITESPACE=false
```

3. Restart the ovtomcatB process as follows:

```
/opt/OV/bin/ovc -restart ovtomcatB
```

Symptom

When Discovery SiteScope Policy is configured, the AutoDiscovery service is not visible in the Java GUI.

Solution

Manually assign the AutoDiscovery service to the operator, as follows:

```
/opt/OV/bin/OpC/opcservice -assign opc_adm AutoDiscovery
```

Java GUI

Symptom QCCR1A166339
Detached Java GUI windows are not moved to the front

Detached Java GUI windows are not moved to the front when they are run from the window manager.

The menu available from the main window does not contain items for all detached windows. These items should position detached windows to the front.

Solution

Use the Java console on the Windows client, to avoid window manager limitations.

Symptom QCCR1A170203
Using the keyboard is not possible in the web browser after the application loses the focus

After the application loses the focus, using the keyboard in the web browser is not possible until the application retrieves the focus again.

Solutions

1. Use the desktop Java GUI.
2. If you prefer to use the Java GUI as an applet (with the keyboard only), click inside the Java GUI application after it loses the focus. This way you can get the focus back to the applet.

Administration UI

Symptom QCCR1A158228
D_policy type label is not resolved in messages after operation

After completed operation, the `D_policytype` label is displayed in the messages box instead of the used policy type. For example, choose a policy type and then run the “Add to Shopping Cart” action from the action menu.

Solution

There is no workaround available at the moment.

Symptom QCCR1A172235
Using the keyboard focus from the action or browse menus is lost if the menu has disabled options

When you open the action menu on an object that has disabled options, for example, HPOM-> Browse -> All Nodes, and then go through the menu (by using the arrow for moving downwards) until the “Enable Node...” option appears, the focus is lost.

Solution

Skip the disabled option by using the arrow for moving upwards.

Symptom QCCR1A175109
Unable to find the jetty.xml file when running the Administration UI password tool

When changing the Administration UI encrypted passwords in the `jetty.xml` file with the Administration password tool the following error is displayed:

```
Unable to find file to update: /opt/OV/OMU/adminUI/conf/jetty.xml
```

This is because the Administration UI password tool is using relative paths.

Solution

When running the Administration UI password tool command, you must be positioned in the `/opt/OV/OMU/adminUI` directory.

Symptom QCCR1A175073
Download of an element by using the Shopping Cart mechanism stops responding

When downloading an element by using the Administration UI Shopping Cart mechanism, the process stops responding.

Solution

Click on the Stop loading this page browser button and perform the download again.

Symptom QCCR1A175206
Administration UI Smart Card and Internet Explorer issues

When the Smart Card certficate for the Administration UI is read for the first time by using the Internet Explorer, you are prompted to enter a Smart Card password. After you enter the password the Administration UI log-on page does not open. The log-on page opens only after you reload the Administration UI and select twice the valid certificate from the list of certificates. The newly started Administration UI uses the appropriate Smart Card certificate.

Solution

Use Firefox or Google Chrome. Firefox must be configured to use CAC reader as a security device.

Symptom QCCR1A171106/QCCR1A171107
Administration UI aborts when the password expires for Active Directory logon if PAM integration is used

If you use PAM integration for Active Directory logon, the Administration UI aborts upon the user password expiration.

Solution

Use LDAP instead of PAM for Active Directory integration in the Administration UI.

Localization

Symptom QCCR1A174059
Date format in the output of `opcragt` or `opcsv -version` is not translated

In the output of `opcragt` or `opcsv -version`, date format is not translated. It is displayed in English.

Symptom QCCR1A174055
Incorrect date format in the About Java GUI form

In the About Java GUI form, the message related to the build date has US date format.

Symptom QCCR1A174063
opchealth2txt.sh usage is incorrectly translated

The output of `opchealth2txt.sh -h` is incorrectly translated. Moreover, the option descriptions for health and status are identical.

Solution

The following are properly formulated option descriptions in English:

- health <health record> : convert health record to localized text
- status <status record> : convert status record to localized text
- issue <issue record> : convert issue record to localized text

HPOM 9.xx Releases

For known problems, limitations, and workarounds in releases earlier than HPOM 9.20, see the *HPOM Software Release Notes* version 9.11.1xx.

Local Language Support

HPOM can be used in multilingual environments.

Certified Encoding and Character Sets on HP Operations Management Servers

Certified encoding and character sets need to be set for the HP Operations management server and Oracle database host systems.

- Encoding HPOM Node Character Set: `UTF-8`
- Oracle Database Code Set: `AL32UTF8`
- Linux Language Variable `LANG`:
  - English: `en_US.UTF-8, en_GB.UTF-8`
  - Spanish: `es_ES.UTF-8`
  - Japanese: `ja_JP.UTF-8`
  - Korean: `ko_KR.UTF-8`
  - Simplified Chinese: `zh_CN.UTF-8`

Other locales are also supported, for example, German and French. For information about supported character sets, refer to the *HPOM Administrator's Reference*.

Caution: UTF-8 is the only encoding supported by the HPOM database.

Localization Support

HPOM 9.21

HPOM 9.21, 9.21.120, and 9.21.130 offer no localization support.

Note: HPOM 9.21 includes the Japanese versions of 9.20 HPOM Administration UI Online Help and 9.20 HPOM Java GUI Online Help.

HPOM 9.20

HPOM 9.20 provides support for the following languages:

- Japanese
- Korean
- Simplified Chinese
- Spanish

The extent of this support is detailed in the following tables as it is not the same for all languages.

Table 1 Localized Software

Locale	English	Japanese	Korean	Simplified Chinese	Spanish
Administration UI	√	√	√	√	√
Java UI	√	√	√	√	√
Manual Pages	√				
Installation	√	√	√	√	√
Encoding/Database Character Set	UTF-8 AL32UTF8	UTF-8 AL32UTF8	UTF-8 AL32UTF8	UTF-8 AL32UTF8	UTF-8 AL32UTF8

Table 2 Localized Documentation for HPOM 9.20

Locale	English	Japanese	Korean	Simplified Chinese	Spanish
HPOM Administrator's Reference	√	√			
HPOM Concepts Guide	√	√			
HPOM Installation Guide for the Management Server	√	√			
HPOM Software Release Notes	√	√			
HPOM Java GUI Operator's Guide	√	√			
HPOM Administration UI Help	√	√			
Java GUI online help	√	√			
Administration UI online help	√	√			

Note: Check the following web site for the latest versions of the localized manuals:

https://softwaresupport.hpe.com/group/softwaresupport/manuals

Documentation Updates

The following documents have been updated since the last HPOM release (that is, version 9.21.120):

- *HPOM Server Configuration Variables*
- *HPOM Virtual Appliance White Paper*
- *HPOM Administrator's Reference*
- *HPOM Installation Guide for the Management Server*
- *HPOM Service Discovery and Topology Synchronization Guide*

Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Release Notes (Operations Manager 9.21.130)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to docfeedback@hpe.com.

We appreciate your feedback!


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