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# Table of Contents

1 Overview..........................................................................................................................7
   Documentation Updates........................................................................................................7
   HP Systems Insight Manager (HP SIM)................................................................................7
      Features..............................................................................................................................7
      Benefits..............................................................................................................................8
   Insight Management Agents...............................................................................................8
   HP Operations Integration for HP SIM................................................................................8
      Features and Functionality..............................................................................................9

2 Installing HP SIM Integration..........................................................................................11
   Prerequisites.......................................................................................................................11
   Hardware Requirements.......................................................................................................11
   Software Requirements.........................................................................................................11
      HPOM Management Server Versions.............................................................................11
      HP Insight Management Agents.....................................................................................11
      HP Systems Insight Manager CMS Versions...................................................................11

3 Integration Architecture Overview..................................................................................13
   Forwarding Events..............................................................................................................13
   Forwarding Cleared Events...............................................................................................13
   Changes from Previous Version.........................................................................................13

4 Installing HP SIM Integration..........................................................................................15
   Installation on the HP OM server........................................................................................15
      Verifying Installation..........................................................................................................15
   Installation on the HP SIM Server.....................................................................................15
   Installed File Locations.......................................................................................................15

5 Configuring HP SIM Integration......................................................................................17
   Task 1: Identify the nodes to be managed by OM...............................................................17
   Task 2: Install the HP Operations Agent on Nodes............................................................17
   Task 3: Assign Nodes to HP SIM Integration Node Groups.............................................17
   Task 4: Configure HP SIM Integration to Forward HP SIM Events..................................17
      Configuring Event Forwarding from HP SIM to OM for Windows–Default.....................17
      Configuring Event Forwarding from HP SIM to HPOM for Windows–Custom................18
   Task 5: Configure Uni-directional Event Acknowledgement............................................18
      Configuring Event Acknowledgement from HP SIM to HPOM for Windows–Default........18
      Configuring Event Acknowledgement from HP SIM to HPOM for Windows–Custom........19
   Task 6: Deploy Policies on HP SIM Integration Nodes....................................................19

6 Using HP SIM Integration...............................................................................................21
   HP SIM Integration Policies...............................................................................................21
   Using HP SIM Integration Message Groups.......................................................................21
      Launching the HP SIM Web Portal from the Message Browser......................................23
   Command Line Switches....................................................................................................23
7 Removing HP SIM Integration ...............................................................25
   Removing HP SIM Integration from the HP SIM CMS..........................25
   Removing HP SIM Integration from the HPOM Management Server ......25

8 Troubleshooting .................................................................................27
   HP SIM event details in HPOM do not describe the problem adequately ..27
   The integration does not forward message from SIM running on 64-bit Windows ...27
   The integration scripts and executable will not run on a UNIX CMS: ...............27
   Errors sending a test message ..............................................................27
   No messages arrive in Operations Manager .........................................28
   Message appears without source node name .......................................28

9 Technical support ...............................................................................29

A Applications ......................................................................................31
   HP Systems Insight Manager ............................................................31
   Insight Management Agents ............................................................31

B Policies ...............................................................................................33
   HP SIM CMS Policy Groups ............................................................33
   Insight Management Agents Policy Groups ........................................33
List of Tables

2-1  HPOM Management Server Versions...........................................................................................11
2-2  HP Insight Management Agents...................................................................................................11
2-3  HP Systems Insight Manager CMS Versions................................................................................11
4-1  Installed File Locations..................................................................................................................15
6-1  HP SIM Integration Message Groups...........................................................................................21
6-2  HP SIM Integration Mapping........................................................................................................22
A-1  Applications for HP SIM Nodes...................................................................................................31
A-2  Applications for Insight Management Agents................................................................................31
B-1  HP SIM Policy Group....................................................................................................................33
B-2  Insight Management Agents Policy Group...................................................................................33
B-3  IM Agents Hardware Traps Policies..............................................................................................33
1 Overview

Documentation Updates

This guide’s title page contains the following identifying information for Software Version 3.00:

- Document Release Date, which changes each time the document is updated.

To check for recent updates, or to verify that you are using the most recent edition of a document, go to http://h20230.www2.hp.com/selfsolve/manuals.

This site requires that you register for an HP Passport and sign-in. To register for an HP Passport ID, go to http://h20229.www2.hp.com/passport-registration.html

Or click the New users please register link on the HP Passport login page.

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

HP Systems Insight Manager (HP SIM)

HP SIM is the foundation for the unified server-storage management strategy of HP. It is a hardware management product that supports HP ProLiant, Integrity, and HP 9000 servers running multiple operating systems; HP StorageWorks MSA, EVA and XP arrays; and other third-party arrays. HP SIM provides the basic management features of device discovery and identification, single event view, inventory data collection, and reporting.

HP SIM can be extended to provide system management with plug-ins for HP clients, storage, power, and printer products. It uses plug-in applications for rapid deployment, performance management, partition management, and workload management. This enables you to choose the value-added software required to deliver complete life cycle management of your hardware assets.

Features

- Delivers fault monitoring, inventory reporting, and configuration management for ProLiant, Integrity, and HP 9000 systems; HP StorageWorks MSA, EVA and XP arrays; and various third-party arrays through a web-based GUI or command line.
- Provides base-level management of HP clients and printers. Can be extended with HP Client Management software and HP Web JetAdmin for advanced management capabilities.
- Provides notification and automates response to pre-failure or failure conditions through automated event handling.
- Facilitates secure and scheduled execution of operating system commands, batch files, and custom or off-the-shelf applications across groups of Windows, HP-UX, Linux, and Nonstop systems.
- Enables centralized updates of BIOS, drivers, and agents across multiple ProLiant servers with system software version control.
- Enables secure management through Secured Socket Layer (SSL), Secure Shell (SSH), and operating system authentication. SSL is a system for encrypting data sent over the Internet, including e-commerce transactions and passwords. With SSL, client and server computers exchange public keys, enabling them to encode and decode their communication.
Benefits

- **Role-based security**
  Enables effective delegation of management responsibilities by providing system administrators with granular control over users and management operations.

- **Tools definitions**
  Defines tools using simple XML documents that enable you to integrate off-the-shelf or custom tools. These tools can be command-line tools, Web-based tools, or scripts. Access to these integrated tools is governed by role-based security.

- **Data collection and inventory reports**
  Performs comprehensive system data collection, and enables you to generate detailed inventory reports for managed systems. Reports can be generated in HTML, XML, or CSV format.

- **Snapshot comparisons**
  Enables you to compare configuration snapshots of up to four different servers or a single server at a time. This functionality enables the system administrator in identifying configuration issues that can cause to system instability. The snapshot comparisons can also be used to save a picture of standard configuration for comparisons with other systems.

- **HP Version Control**
  Downloads the latest BIOS, driver, and agent updates for HP ProLiant servers running on Windows and Linux. It also identifies system running obsolete software, and updates system software across groups of servers. For HP-UX systems, the software distributor is integrated with HP SIM.

For more information about HP SIM, visit the following website:
http://www.hp.com/go/hpsim

**Insight Management Agents**

HP Insight Management Agents (IM Agents) are tools that enhance the management of HP Proliant and Integrity servers. Insight Management Agents are part of the Proliant Support Pack or Integrity Support Pack available for download from the HP Software and Drivers downloads. You can find more information about Insight Management Agents at the following websites:


**HP Operations Integration for HP SIM**

The HP SIM Integration provides a smart link between HP SIM, Insight Management (IM) Agents, and HP Operations Manager for Windows (HPOM for Windows), a market leading management solution for network systems, databases, and applications in heterogeneous IT environments. The HP SIM Integration implements features for event forwarding and event acknowledgement from HP SIM to HPOM. It comprises commands, policies, applications, and groups. The HP SIM Integration can be installed in environments with multiple HP SIM management servers and IM Agent nodes.
Features and Functionality

- **ProLiant and Integrity server system monitoring**
  These policies generate events for server hardware problems. If the default event forwarding and the IM Agent trap templates are both deployed, duplicate events are forwarded from each of these applications.

- **Event forwarding from HP SIM**
  HP SIM events can be forwarded to the HPOM message browser. Forwarding can be configured to use a default event collection, or any customized collection of HP SIM events. The integration also associates an operator action with each HP SIM event to launch the HP SIM web interface for further investigation.

- **Uni-directional event acknowledgement/clearing on HP SIM**
  Event forwarding can be optionally configured to acknowledge events in HPOM if the events forwarded from HP SIM to HPOM are cleared in HP SIM. When configured, events that are cleared on HP SIM are acknowledged on HPOM if they were forwarded from HP SIM and they exist on the HPOM active message browser.

- **Policy groups**
  Contain policies clearing or acknowledging events, and IM Agents SNMP trap interpretation.

- **Contextual launch to HP SIM System page**
  This feature enables users to initiate contextual launch of HP SIM for a selected device. This page is provided by the HP SIM Central Management Server (CMS).

- **Web interface applications**
  This feature provides applications to launch the web interface for HP SIM, and the HP System Management Homepage.
2 Installing HP SIM Integration

Prerequisites

To avoid problems during the installation of the software, you should read this section and the documents named in this section before you start the installation process.

Hardware Requirements

The HP Operations Manager documentation explains all the hardware requirements for the HPOM Agents.

Approximately 5 megabytes of disk space are required for the integration on the SIM and the OM server. This includes the documentation. Only 1 megabyte of disk space is required for the actual integration components.

Software Requirements

HP Operations for Windows, version 8.10 or 8.16

HPOM Management Server Versions

<table>
<thead>
<tr>
<th>HPOM Management Server</th>
<th>Operating Systems</th>
<th>HPOM Agent Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPOM for Windows 8.10</td>
<td>Windows 2003</td>
<td>HTTPS</td>
</tr>
<tr>
<td>or 8.16</td>
<td>Windows 2008</td>
<td></td>
</tr>
</tbody>
</table>

HP Insight Management Agents

<table>
<thead>
<tr>
<th>HP Insight Management Agents</th>
<th>Operating System</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP SmartStart CD v 8.0</td>
<td>• Windows Server 2003</td>
</tr>
<tr>
<td>HP SmartStart CD v 8.1</td>
<td>• Windows Server 2008</td>
</tr>
<tr>
<td>HP SmartStart CD v 8.2</td>
<td>• RedHat Linux</td>
</tr>
<tr>
<td>HP SmartStart CD v 8.3</td>
<td>• SUSE Linux</td>
</tr>
<tr>
<td>HP SmartStart CD v 8.4</td>
<td></td>
</tr>
</tbody>
</table>

HP Systems Insight Manager CMS Versions

<table>
<thead>
<tr>
<th>HP Systems Insight Manager CMS</th>
<th>Operating System</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP SIM 5.2 SP2</td>
<td>• Windows 2003 (32-bit and 64-bit)</td>
</tr>
<tr>
<td>HP SIM 5.3</td>
<td>• Windows 2003 R2 (32-bit and 64-bit)</td>
</tr>
<tr>
<td>HP SIM 6.0</td>
<td>• Windows 2008 (32-bit and 64-bit)</td>
</tr>
<tr>
<td>HP SIM 6.1</td>
<td>• Windows 2008 R2 (32-bit and 64-bit)</td>
</tr>
<tr>
<td></td>
<td>• HP-UX 11.00/11.11</td>
</tr>
<tr>
<td></td>
<td>• HP-UX 11.23 PA/IA</td>
</tr>
<tr>
<td></td>
<td>• HP-UX 11.31 PA/IA</td>
</tr>
<tr>
<td></td>
<td>• RedHat Linux AS 4/5 (32-bit and 64-bit)</td>
</tr>
<tr>
<td></td>
<td>• SuSE Linux ES 9/10 (32-bit and 64-bit)</td>
</tr>
</tbody>
</table>
3 Integration Architecture Overview

There are two components installed in the integration package: one on the HP SIM server and one on the Operations Manager server.

SIM server integration installer actions:
- Create a query named “HPSIMInt_ImportantEvents”
- Create a query named “HPSIMInt_ClearedEvents”
- Create a custom tool named “HPSIMInt_SendOMEvent”
- Create a custom tool named “HPSIMInt_AcknowledgeOMEvent”
- Create a task named “HPSIMInt_SendOMEventTask”
- Create a task named “HPSIMInt_AcknowledgeOMEventTask”
- Copy the files hpsimopcmsg.exe, hpsimopcmsg.cmd, and hpsimopcmsgack.cmd to the HPSIM\bin directory.

OMW server installation script actions:
- Loads the SNMP trap policies
- Loads the integration message group definitions
- Loads the integration node group definitions
- Loads the integration tool definitions
- Loads the opcmsg policy for messages from the SIM server

Forwarding Events

When an event is received that matches the “HPSIMInt_ImportantEvents” query, the HP SIM Automatic Event Handling (AEH) task “HPSIMInt_SendOMEventTask” is executed. In turn, this task executes the custom tool “HPSIMInt_SendOMEvent”. The custom tool collects the details for the event from the environment variables set by HP SIM.

The custom tool “HPSIMInt_AcknowledgeOMEvent” runs the script “hpsimopcmsgack.cmd” to set the correct environment variables and launch the hpsimopcmsg.exe program, which acknowledges the event in OM. The script will need to be edited if the user wants to change the options or path settings for the command.

The hpsimopcmsg.exe program takes the environment variables provided by SIM and uses those to build and execute the opcmsg.exe command.

Forwarding Cleared Events

When an event is received that matches the “HPSIMInt_ClearedEvents” query, the HP SIM Automatic Event Handling (AEH) task “HPSIMInt_AcknowledgeOMEventTask” is executed. This task executes the custom tool “HPSIMInt_AcknowledgeOMEvent”. The custom tool collects the details for the event from the environment variables set by HP SIM.

The custom tool “HPSIMInt_AcknowledgeOMEvent” runs the script “hpsimopcmsgack.cmd” to set the correct environment variables and launch the hpsimopcmsg.exe program, which acknowledges the event in OM. The script will need to be edited if the user wants to change the options or path settings for the command.

The hpsimopcmsg.exe program reads the information about the event from the environment variables provided by SIM and uses those to build and execute the opcmsg.exe command.

Changes from Previous Version

The HP SIM integration for HP Operations Manager for Windows has been changed from the previous release to be more streamlined and a better fit with the HP OM architecture.
• The event listener process (smevtl) has been removed and events from SIM are now forwarded to OM through opcmsg policy.
• Many of the integration tool definitions have been removed.
• The HP Insight Management Agent SNMP trap policies have been updated.
• Event acknowledgement is in one direction only. Events acknowledged in HP SIM are cleared in HP OM.
• Service maps of Insight Agents and HP SIM CMS services have been removed.

The new integration for HP Operations Manager uses custom queries, tools, and tasks in HP SIM to forward events to HPOM. This combination replaces the “SIM Event Listener” process in the existing SPI.
4 Installing HP SIM Integration

Installation on the HP OM server

Log into the HPOM Management server as an Administrator and extract the integration files to a directory.

Open a command prompt.

Change to the HPSIMInt-OMW directory.

Run the script HPSIMInt_omw_install.cmd.

Verifying Installation

The following elements should be present in the OMW GUI after running the installation script.

- Node Groups: HP SIM CMS
- Node Groups: IM Agents
- Tools: HP SIM Integration
- Policy groups: HP SIM Integration

Installation on the HP SIM Server

Log into the SIM server and extract the integration files to a directory.

For a Windows CMS, run the HPSIMInt_sim_win_install.cmd script, passing it the location of the HP SIM\bin directory. For example:

HPSIMInt_sim_win_install.cmd "c:\program files\hp\systems insight manager\bin"

For a Unix CMS, change the permissions on the install scripts and on the hpsimopcmsg files before installation (chmod 755 filename).

Run the HPSIMInt_sim_unix_install.sh script, passing it the SIM platform OS information (IA for Itanium, PA for PA-RISC, and Linux for x86). For example:

HPSIMInt_sim_unix_install.sh IA
HPSIMInt_sim_unix_install.sh PA
HPSIMInt_sim_unix_install.sh Linux

The integration files are installed to the /opt/mx/bin directory.

After the script completes, verify the creation of the Queries, Custom Tools, and Tasks through the SIM web interface.

Installed File Locations

The installation process copies the necessary files on the HPOM management server and creates the following files and directories:

**Table 4-1 Installed File Locations**

<table>
<thead>
<tr>
<th>Component</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP SIM Binaries and scripts</td>
<td>HP SIM\bin directory</td>
</tr>
<tr>
<td>HPOM Server</td>
<td>No files are copied to the OM server. The policies are loaded into the database.</td>
</tr>
</tbody>
</table>
5 Configuring HP SIM Integration

Once HP SIM Integration is configured, the following functions are enabled:

- Forwarding and interpreting IM agent SNMP traps
- Event forwarding from HP SIM to HPOM
- Event acknowledgement on OM when corresponding events are cleared on HP SIM

To configure HP SIM Integration, complete the following tasks.

**Task 1: Identify the nodes to be managed by OM**

The first step is to identify the nodes that have to be managed by the OM. The OM must manage the nodes that are required to be monitored either as agent Managed Nodes or agentless Nodes otherwise all the events generated from those nodes will be discarded by OM.

The next step is to install the HPOM agent on all the nodes where HP SIM or IM Agents are installed.

**Task 2: Install the HP Operations Agent on Nodes**

Before starting the HP Operations agent installation, ensure that the system on which you want to install the HP Operations agent meets the installation requirements described in prerequisites.

You can install the HP Operations agent on a managed node by various methods. These methods are described in the *HP Operations for Windows Installation Guide and in the manuals for HP Operations Manager*.

**Task 3: Assign Nodes to HP SIM Integration Node Groups**

HP SIM Integration automatically creates the following node groups with the appropriate policy groups already assigned:

- HP SIM CMS
- Insight Management Agents

HP SIM CMS nodes will be added to the HP SIM CMS node group if those nodes are forwarding events to HPOM. Nodes with the IM Agents installed will be added to the Insight Management Agents node group.

To add a managed node to the HP SIM CMS node group or the IM Agent node group, follow these steps:

1. Browse to the HP SIM Integration tools.
2. Double click on the Assign node tool.
3. Select the desired nodes and click Launch.

**Task 4: Configure HP SIM Integration to Forward HP SIM Events**

**Configuring Event Forwarding from HP SIM to OM for Windows–Default**

The default event forwarding is configured when you install the integration on the SIM server. The default event forwarding creates two collections named HPSIMInt_ImportantEvents and HPSIMInt_ClearedEvents and two tasks named HPSIMInt_ImportantEvents and HPSIMInt_ApplicationEvents.

The collection HPSIMInt_ImportantEvents is created on the HP SIM CMS node for the events whose severity is either critical or major.

The collection HPSIMInt_ClearedEvents is created on the HP SIM CMS node for the events whose severity is either critical or major and whose status is cleared.
Configuring Event Forwarding from HP SIM to HPOM for Windows—Custom

If the default event query and task do not meet your needs, you can create a custom query and task in addition to the default query and task.

**NOTE:** Creating a user-defined query and task for event forwarding may result in duplicate copies of HP SIM events being received on the OM management server.

To create an event query through the HP SIM web interface, follow these steps:

1. Create an event query on HP SIM to forward events to OM.
   a. Log on to the HP SIM management console.
   b. Click **Customize** in the Systems and Events panel. The Customize Collections page opens.
   c. In the **Show** drop-down list, select Events. All available event collections open.
   d. Click **New**. The New Collection section opens.
   e. Select **Choose members by attributes**. The New Collection section opens.
   f. Enter the criteria of your requirement to forward events to OM.
   g. Click **Save As** to save the collection. The Save Collection As section opens.
   h. In the **Name** field, enter a name for the collection.
   i. Select **Private** or **Shared** folder to select the location in which to save the collection
   j. Click **OK** to save the collection.

   **NOTE:** The same event collection can be customized using the HP SIM command line interface `mxquery` command.

   For more information, see the *HP SIM Command Line Interface Reference Guide*.

2. Create task on HP SIM to forward events to OM.
   a. Log on to the HP SIM management console.
   b. Click **Options – Events – Automatic Event Handling – Manage Tasks**.
   c. Click **New**. The New Task section opens.
   d. Name the task and click **Next**.
   e. Choose the desired event collection and click **Next**.
   f. Choose the desired system collection and click **Next**.
   g. Under **Actions**, check **Run a Custom CMS Tool**, then select the `HPSIMInt_SendOMEvent` tool.
   h. Choose the time filter.
   i. Verify the desired setting in the summary screen and click **Finish**.

**Task 5: Configure Uni-directional Event Acknowledgement**

When duplicate message suppression is enabled on the management server, the HP SIM integration requires the "Keep latest message text and severity" criteria to be selected for Uni-directional event acknowledgement for duplicate events to work correctly. Please refer to the HPOM guide for more details on Configuring HPOM server for message suppression.

**Configuring Event Acknowledgement from HP SIM to HPOM for Windows—Default**

The installer creates a default event query and task to select the cleared events on HP SIM that correspond to the events displayed through the `HPSIMInt_ImportantEvents` query and forward them to OM.
Configuring Event Acknowledgement from HP SIM to HPOM for Windows–Custom

If you configured a user-defined query and task to forward HPSIM events to OM, to acknowledge these events you must create a second query with the same selection criteria as the original user-defined query, and select the “cleared state is Cleared” criteria. Additionally, you must create a task on HP SIM to forward the cleared events to OM.

Task 6: Deploy Policies on HP SIM Integration Nodes

Before deploying policies, ensure that the node is added to the appropriate HP SIM Integration node group. There is one opcmsg policy for the HP SIM CMS node: HPSIMInt-HPSIM_Events. There are several SNMP trap policies provided for the IM Agents.

To deploy policies on the managed nodes, follow these steps:
1. Select the HP SIM Integration policy from the policy groups.
2. Right-click on the specific policy and select All Tasks – Deploy on
3. Select the desired nodes.
4. Select Force to ensure that the modifications are distributed.
5. Click Ok to distribute the policies to the OM agent node.

NOTE: HP SIM Integration contains policies for IM Agent SNMP trap interpretation. The Insight Management Agent trap destination must be manually configured to send traps to the OM agent on the node.
6 Using HP SIM Integration

HP SIM Integration Policies

All the policies provided with HP SIM Integration are grouped under the HP SIM Integration policy group.

All the messages generated by the HP SIM Integration policies belong by default to the HPSIMInt-Systems_Insight_Manager message group.

Message policies handle messages forwarded from HP SIM.

Trap policies define the interpretation of SNMP traps from the Insight Management Agent nodes.

Using HP SIM Integration Message Groups

HPOM uses message groups to combine management information about similar or related managed objects under a chosen name, and provides status information at a group level. Messages are categorized into groups to simplify message management.

All messages generated by HP SIM Integration are grouped into one of the following message groups:

<table>
<thead>
<tr>
<th>Message Groups</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSIMInt-IMAgents</td>
<td>HP SIM Integration Messages for IM Agents</td>
</tr>
<tr>
<td>HPSIMInt-Systems_Insight_Manager</td>
<td>HP SIM Integration Messages for HP SIM</td>
</tr>
</tbody>
</table>

One operator can be responsible for HP SIM and another operator can be responsible for Insight Manager HPOM message management. The messages generated by the HP SIM Integration policies are displayed in the HPOM Message Browser window. These messages contain information that is vital for understanding the problems being reported.

The following table describes the mapping that is performed by HP SIM Integration of HP SIM event severities to HPOM event severities.

<table>
<thead>
<tr>
<th>HP SIM Event Severity</th>
<th>HPOM Event Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>Critical</td>
</tr>
<tr>
<td>Warning</td>
<td>Warning</td>
</tr>
<tr>
<td>Information</td>
<td>Information</td>
</tr>
<tr>
<td>NotDefined</td>
<td>NotDefined</td>
</tr>
</tbody>
</table>

HP SIM Integration Policies 21
### Table 6-2 HP SIM Integration Mapping

<table>
<thead>
<tr>
<th>HP SIM Severity Level</th>
<th>HPOM Message Severity Level</th>
<th>HP SIM Integration Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>Critical</td>
<td>A critical problem is detected that needs immediate attention.</td>
</tr>
<tr>
<td>Major</td>
<td>Major</td>
<td>A very significant event has occurred, where immediate attention is advised. Some parts of the system or device may have ceased functioning properly.</td>
</tr>
<tr>
<td>Minor</td>
<td>Minor</td>
<td>An event of some significance has occurred. Potential or impending problems have occurred that may escalate to become a serious problem.</td>
</tr>
<tr>
<td>Warning</td>
<td>Warning</td>
<td>A problem has been detected that must be corrected. This event is not likely to be escalated to a more severe condition.</td>
</tr>
<tr>
<td>Informational</td>
<td>Informational</td>
<td>A notable event has occurred, one without any obvious detrimental effects. This is purely an information event.</td>
</tr>
<tr>
<td>Normal</td>
<td>Normal</td>
<td>An event of this type indicates that this event is not a problem.</td>
</tr>
</tbody>
</table>

**NOTE:** Some events with a severity of Normal from HP SIM are redirected to HPOM acknowledged message browser.

The message content indicates the scope of the problem. This information is provided in the following columns:

- **Node** – Name of the node that generates the message.
- **Application** – Systems Insight Manager
- **Message Group** – Values for messages generated by HP SIM Integration; for example, HPSIMInt-IMAagents, HPSIMInt-Systems_Insight_Manager.
- **Text** – A single line description of the event
- **Object** – The system name of the event source

Event forwarded from HP SIM
Launching the HP SIM Web Portal from the Message Browser

Each message forwarded to the HPOM message browser from HPSIM contains an Operator Action to launch into the HPSIM web interface. It launches in the context of the device that the HPSIM event references. This allows the HPOM operator to determine the cause of the problem and perform corrective tasks for the events which belong to **HPSIMInt-Systems_Insight_Manager** message group.

To launch the HP SIM web interface, follow these steps:

1. Select an **event**, right-click the event, and select **Commands > Start > Operator Initiated**. The HPSIM logon page opens.
2. Sign in to HPSIM with proper credentials.
3. On clicking on the system name, the HPSIM System page displays the device. In case of HPSIM 5.2, the **Operator-Initiated Action** from a message launches the event details page.

**NOTE:** The consecutive operator-initiated actions display a new web interface, and the user must provide credentials again to HP SIM CMS web interface.

---

Command Line Switches

The program `hpsimopcmsg.exe` requires two command line switches. The first option determines whether you are sending or acknowledging a message.

The second option allows you to specify whether or not URL links are sent as part of the message.

**Usage:** `hpsimopcmsg.exe Option1 Option2`

Option1: `/s` (send message) or `/a` (acknowledge message)
Option2: `/u` (send URL links) or `/n` (no URL links)

For example: `hpsimopcmsg.exe /s /u`

The defaults for both of these options are already specified in the `hpsimopcmsg` and `hpsimopcmsgack` scripts.
7 Removing HP SIM Integration

Removing HP SIM Integration from the HP SIM CMS

To stop event forwarding from HP SIM to HPOM, disable the HPSIMInt_SendOMEventTask and HP SIMInt_AcknowledgeOMEventTask using the HP SIM Options->Events->Automatic Event Handling screen.

To permanently remove the integration components, remove the event forwarding query and its corresponding task from the HP SIM management server.

If you were using the default queries and tasks to forward events, log into the SIM server and run the command HPSIMInt_sim_win_remove.cmd from the integration directory.

If you created custom queries and tasks to forward events to Operations Manager, remove those through the SIM web interface.

To verify whether HP SIM Integration event tasks and queries are deleted, follow these steps:
1. Log on to the HP SIM web interface and ensure that there is no HPSIMInt_ImportantEvents or HPSIMInt_ClearedEvents query in the Events > Shared tree on the Systems and Events panel.
2. Check for any custom event queries that you added.

**NOTE:** You can delete queries from the HP SIM web interface or using the HP SIM CLI. You can delete tasks from the HP SIM web interface or using the HP SIM CLI.

For more information on HP SIM CLI, see the HP SIM Command Line Interface Reference Guide.

Removing HP SIM Integration from the HPOM Management Server

**NOTE:** If the HP SIM integration is installed, remove the policies from all managed nodes before proceeding with this procedure.

Follow these steps to remove the integration components from the OMW server:
1. Log in to the HPOM management server as a root user.
2. Start the Operations Manager Console.
3. Remove the integration policies from the HP SIM CMS nodes.
   a. Right-click on the HPSIMInt-HPSIM_Events policy.
   b. Select All Tasks then select Uninstall from.
   c. Choose “Select all nodes on which any version of the policy is deployed”.
   d. Check “Force removal of policy”.
   e. Click OK.
4. De-assign any nodes from the HP SIM CMS and IM Agent node groups.
5. Remove the integration SNMP trap policies from all nodes.
   a. Select all the Insight Management Agents Hardware Traps policies and right-click.
   b. Select All Tasks then select Uninstall from.
   c. Select the desired nodes.
   d. Check “Force removal of policy”.
   e. Click OK.
   f. Select HPSIMInt-IMAgents_FwdRIBTraps under HP Integrated Lights-Out.
   g. Select All Tasks then select Uninstall from.
   h. Choose “Select all nodes on which any version of the policy is deployed”.
i. Check “Force removal of policy”.

j. Click OK.

6. Once the policies have been removed from all nodes, select Policy Management – Policy groups – HP SIM Integration, right-click and choose delete.

7. Remove the tool definitions:
   a. Select Tools – HP SIM Integration
   b. Right-click and choose Configure - Tools.
   c. Right-click on HP SIM Integration and select Delete.
   d. Click OK.

8. Remove the Node Groups:
   a. Right-click on Nodes and choose Configure – Nodes.
   b. Right-click on the HP SIM CMS node group and select Delete.
   c. Right-click on the IM Agents node group and select Delete.

The HP SIM Integration components are now removed from the OM server.
8 Troubleshooting

Start by verifying that the procedures explained in Chapter 2, Installing HP SIM Integration were completed successfully. In a successful installation, HP SIM Integration is configured as recommended and the messages that appear in the HPOM Events Browser are:

- Generated by HP SIM
- Interception by the HP SIM Integration templates
- Appears in the HPOM message browser in the form you are expecting

If the problem persists, refer to the following list of error messages.

**HP SIM event details in HPOM do not describe the problem adequately**

**Solution:**

1. Select an HP SIM event from the HPSIMInt-Systems_Insight_Manager message group.
2. Right-click the event and select **Commands > Start > Operator Initiated**. The HP Systems Insight Manager logon page opens.
3. If the page is HP SIM 5.2, the page displays the HP SIM GUI in the event details page of the reported event.

**The integration does not forward message from SIM running on 64-bit Windows**

**Solution:**

Open the hpsimopcmess.cmd and hpsimopcmessack.cmd files in the SIM\bin directory and verify they have the correct path to the opcmsg.exe file in the opcmsgdir environment variable.

```bash
@set opcmsgdir=c:\progra~1\hp\hpbtos~1\bin
and the default for 64-bit:
@set opcmsgdir=c:\progra~1\hp\hpbtos~1\bin\win64
```

**The integration scripts and executable will not run on a UNIX CMS:**

Installation scripts or executables will not run.

**Solution:**

After installation, change to the /opt/mx/bin directory and change the permissions on hpsimopc* to 755 ("chmod 755 hpsimopc*"").

If the installation script will not execute, in the integration directory run `chmod 755 HPSIMInt*.sh`.

**Errors sending a test message**

The following occurs when trying to send a test message:

```
[root@SIMdevRH bin]# ./opcmsg severity=minor application="Systems Insight Manager" node=simserver object=managednode msg_text="Testing OpcMsg"
```

The OVO Message Command is not configured on this system.

Contact your OVO Administrator to configure it. (OpC30-913)

**Solution:**

The SIM server node may not be configured correctly in Operations Manager. Configure the node in Operations Manager and send the test message again.
No messages arrive in Operations Manager

Solution:
Verify that the HP SIM event forwarding policy (HPSIMInt-HPSIM_Events) is deployed on the SIM CMS node.

Message appears without source node name

Messages appear with the Node attribute set to the name of the SIM server.

Solution:
Verify that the SIM server and the OMW server agree on the name of the node. For example, if SIM only recognizes the system by its IP address, then the message will not have the correct node name in OMW.
In this case, setup the SIM server so the node is discovered by the correct name.
9 Technical support

You can visit the HP Software Support web site at http://www.hp.com/go/hpsoftwaresupport. This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software Support Online provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the HP Software Support web site to

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To find more information about access levels, go to http://h20230.www2.hp.com/new_access_levels.jsp.

To register for an HP Passport ID, go to http://h20229.www2.hp.com/passport-registration.html.
A Applications

This appendix describes configuration and troubleshooting utilities provided by the following HP SIM Integration applications.

HP Systems Insight Manager

The HP Systems Insight Manager application group includes applications for HP SIM nodes.

Table A-1 Applications for HP SIM Nodes

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign node</td>
<td>Assigns the node to the HP SIM CMS node group</td>
</tr>
<tr>
<td>De-assign node</td>
<td>De-assigns the node from the HP SIM CMS node group</td>
</tr>
<tr>
<td>Launch HP SIM Console</td>
<td>Launches the HP SIM console</td>
</tr>
</tbody>
</table>

Insight Management Agents

The Insight Management Agents application group includes applications for Insight Management Agents.

Table A-2 Applications for Insight Management Agents

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign node</td>
<td>Assigns node to the Insight Management Agents node group</td>
</tr>
<tr>
<td>De-assign node</td>
<td>De-assigns node from the Insight Management Agents node group</td>
</tr>
<tr>
<td>Launch HP SIM Console</td>
<td>Launches System Management Homepage</td>
</tr>
</tbody>
</table>
B Policies

When HP SIM Integration is installed, a number of policy groups are uploaded to the HPOM database. The following high-level HP SIM Integration policy groups are available.

**HP SIM CMS Policy Groups**

HP SIM CMS policy groups consist of policies for HP SIM. These policies are deployed to the HP SIM CMS managed nodes.

Table B-1 HP SIM Policy Group

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP SIM Event Forwarding</td>
<td>Policies for forwarding events from HP SIM to HPOM</td>
<td>Message</td>
</tr>
</tbody>
</table>

**Insight Management Agents Policy Groups**

The IM Agents-Win policy groups consist of policies for Insight Management Agents on Windows nodes. These policies are deployed to the IM Agent managed nodes.

Table B-2 Insight Management Agents Policy Group

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM Agents Hardware Traps</td>
<td>Policies for forwarding SNMP Traps from Insight Management Agents to HPOM</td>
<td>Group</td>
</tr>
</tbody>
</table>

The IM Agents Hardware Traps policy group contains list of hardware trap policies listed in the following table.

Table B-3 IM Agents Hardware Traps Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSIMInt-IMAgents_FwdCIMTraps</td>
<td>Forwards IM Agents ProLiant GbE Switches SNMP Traps.</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdCMCTraps</td>
<td>Forwards IM Agents Console Management Controller SNMP Traps.</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdCMCTraps</td>
<td>Forwards IM Agents Console Management Controller SNMP Traps.</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdChannelArray-Traps</td>
<td>Forwards IM Agents Fibre Channel Array SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdClusterTraps</td>
<td>Forwards IM Agents Cluster SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdDMITraps</td>
<td>Forwards IM Agents DMI SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdDriveArrayTraps</td>
<td>Forwards IM Agents Intelligent Drive Array SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdHostOSTraps</td>
<td>Forwards IM Agents Host Operating System SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdICATraps</td>
<td>Forwards IM Agents Manageable IDE Drive SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdIDEDriveTraps</td>
<td>Forwards IM Agents Manageable IDE Drive SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdNICTraps</td>
<td>Forwards IM Agents Network Interface Card SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdPCConfigTraps</td>
<td>Forwards IM Agents PC Equipment Configuration SNMP Traps</td>
<td>Trap</td>
</tr>
</tbody>
</table>
### Table B-3 IM Agents Hardware Traps Policies (continued)

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSIMInt-IMAgents_FwdPowerDevices-Traps</td>
<td>Forwards IM Agents Power Devices SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdRPMTraps</td>
<td>Forwards IM Agents Rack Power Manager SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdRackTraps</td>
<td>Forwards IM Agents Rack Information SNMP traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdRaidController-Traps</td>
<td>Forwards IM Agents Raid Controller SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdRecoverySvr-Traps</td>
<td>Forwards IM Agents Recovery Server SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdSANTraps</td>
<td>Forwards IM Agents Storage Area Networks SNMP traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdSCSIDevices-Traps</td>
<td>Forwards IM Agents SCSI Devices’ SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdSTEAMTraps</td>
<td>Forwards IM Agents StorageWorks Enterprise Array Manager SNMP traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdSCWCTraps</td>
<td>Forwards IM Agents ‘StorageWorks Command Console’ SNMP traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdServerMgrTraps</td>
<td>Forwards IM Agents Server Manager SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdServiceIncident-Traps</td>
<td>Forwards IM Agents Service Incident Information SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdStorageSysTraps</td>
<td>Forwards IM Agents ‘Storage Systems’ SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdSvrHealthTraps</td>
<td>Forwards IM Agents Server Health SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdSysInfoTraps</td>
<td>Forwards IM Agents System Information SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdThresholdMgmt-Traps</td>
<td>Forwards IM Agents Threshold Management SNMP Traps</td>
<td>Trap</td>
</tr>
<tr>
<td>HPSIMInt-IMAgents_FwdUPSTraps</td>
<td>Forwards IM Agents Uninterrupted Power Supply SNMP Traps</td>
<td>Trap</td>
</tr>
</tbody>
</table>

The HP Remote Insight Lights Out policy contains the following policy:

- **HPSIMInt-IMAgents_FwdRIBTraps**
  
  **Description:** Forwards IM Agents Remote Insight Board SNMP Traps
  
  **Type:** Trap