HP OpenView Dashboard

For the Windows®, HP-UX, and Solaris Operating Systems

Software Version: 2.0

Operations View Integration Guide:
HP OpenView Operations
HP OpenView Service Navigator

hp

i n v e n t

Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notices

© Copyright 2006 Hewlett-Packard Development Company, L.P.

This product includes i-net OPTA software, which is © Copyright 2002-2006 i-net software GmbH, Berlin, Germany.

Trademark Notices

Adobe® and Acrobat® are trademarks of Adobe Systems Incorporated.

AMD is a trademark of Advanced Micro Devices, Inc.

HP-UX Release 11.00 and later (in both 32 and 64-bit configurations) on all HP 9000 computers are Open Group UNIX 95 branded products.

Intel and Pentium are registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Java™ is a US trademark of Sun Microsystems, Inc.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Oracle® is a registered US trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of The Open Group.

Support

Please visit the HP OpenView support web site at:

http://www.hp.com/managementsoftware/support

This web site provides contact information and details about the products, services, and support that HP OpenView offers.

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

- Search for knowledge documents of interest
- Submit enhancement requests online
- Download software patches
- Submit and track progress on support cases
- Manage a support contract
- Look up HP support contacts
- Review information about available services
- Enter 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 log in. Many also require a support contract.

To find more information about access levels, go to:

http://www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to:

http://www.managementsoftware.hp.com/passport-registration.html

Contents

Documentation Roadmap

Figure 1 on page 10 shows the documentation roadmap for HP OpenView Dashboard Operations View. This roadmap presents a suggested order for reading the manuals available with Operations View:

1 Use the *Installation Guide* to install the product.

2 Follow the path for Operations View.

   a Use the *Operations View Quick Start Guide* to carry out the tutorial.

   b Read the "Essential Concepts" chapter of the *Operations View Administrator Guide* to understand the concepts of working with portlets and portal servers.

   c Use the *Operations View Administrator Guide* to configure and maintain the product. This guide provides high-level instructions for the common tasks when working with the supplied Operations View portlets

   d If you are migrating from HP OpenView Service Information Portal to Operations View, use the *Operations View Migration Guide* to complete this task. The *Operations View Administrator Guide* refers you to the *Operations View Migration Guide* at the appropriate point in the portal view implementation process.

   e Reference the integration guides as needed for specific details on each supported HP OpenView management product. The *Operations View Administrator Guide* refers you to the integration guides at the appropriate points in the portal view implementation process.

Figure 1   Operations View Documentation Roadmap
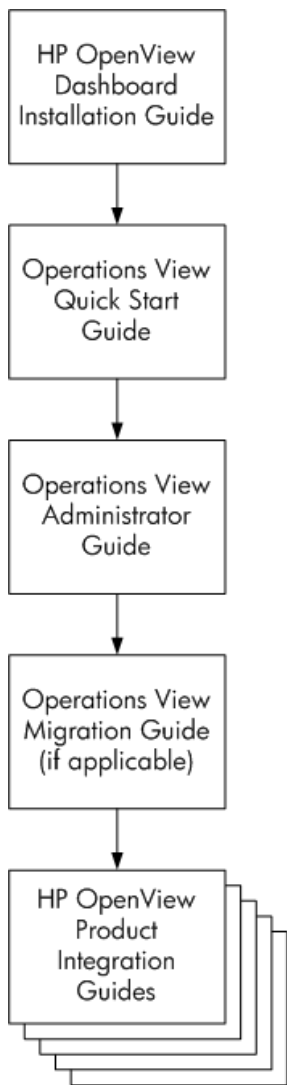
HP OpenView Dashboard Manuals

Table 1 describes the HP OpenView Dashboard manual set. These documents are provided in Adobe Acrobat (.pdf) format and can be found in the following directories:

- After HP OpenView Dashboard installation, in the following directory on the HP OpenView Dashboard management station:

    — *Windows*: `<install_dir>\paperdocs\dashboard\`

    — *UNIX*: `/opt/OV/paperdocs/dashboard/`

- On the product DVD-ROM in the following directory:

    — *Windows*: `\Docs\`

    — *UNIX*: `/Docs/`

For information on how to obtain the most recent documents, see Documentation Updates on page 15.

Table 1   HP OpenView Dashboard Documentation

Document Title and Filename	Main Topics
Installation Guide `Installation.pdf`	Installing and uninstalling HP OpenView Dashboard
Operations View Quick Start Guide `opview/Quick_Start.pdf`	• Running the Operations View demonstration portal view • Operations View tutorial
Operations View Administrator Guide `opview/Administration.pdf`	• Essential concepts • Planning roadmap for using Operations View • Connecting Operations View to management products • Configuring Operations View portlets • Configuring Operations View data filters • Deploying a portlet application • Troubleshooting

Table 1   HP OpenView Dashboard Documentation (cont'd)

Document Title and Filename	Main Topics
Operations View Migration Guide `opview/Migration.pdf`	• Overview of migrating from HP OpenView Service Information Portal (SIP) version 3.2 to Operations View • SIP and Operations View comparison • Migration use models • Using the Operations View Migration Wizard • Manual steps for migration • Troubleshooting
Operations View Integration Guide: NNM `opview/NNM_Integration.pdf`	• Connecting Operations View to HP OpenView Network Node Manager (NNM) • Configuring the NNM portlets • Customizing the NNM portlets • Filtering NNM data • Troubleshooting
Operations View Integration Guide: OVO and OVSN `opview/OVO_OVSN_Integration.pdf`	• Connecting Operations View to HP OpenView Operations (OVO) and HP OpenView Service Navigator (OVSN) • Configuring the OVO and OVSN portlets • Customizing the OVO and OVSN portlets • Filtering OVO and OVSN data • Troubleshooting
Operations View Integration Guide: OVIS `opview/OVIS_Integration.pdf`	• Connecting Operations View to HP OpenView Internet Services (OVIS) • Configuring the OVIS portlets • Customizing the OVIS portlets • Troubleshooting

Table 1   HP OpenView Dashboard Documentation (cont'd)

Document Title and Filename	Main Topics
Operations View Integration Guide: OVPM `opview/OVPM_Integration.pdf`	• Connecting Operations View to HP OpenView Performance Manager (OVPM) • Configuring the OVPM portlets • Customizing the OVPM portlets • Filtering OVPM data • Troubleshooting
Operations View Integration Guide: OVSD, OVPI, and OVR `opview/OVSD_OVPI_OVR_Integration.pdf`	• Connecting Operations View to HP OpenView Service Desk (OVSD), HP OpenView Performance Insight (OVPI), and HP OpenView Reporter (OVR) • Configuring the OVSD, OVPI, and OVR portlets • Customizing the OVSD, OVPI, and OVR portlets • Troubleshooting

Operations View Online Help

Operations View supplies the following graphical interfaces for portal and portlet configuration:

- Operations View Administrator Tool

- Operations View Migration Wizard (available from the Administrator Tool)

Each of the Operations View graphical interfaces includes online help files that explain that interface.

- To access the top level of the help content for each interface, use the commands on the **Help** menu.

- To access context-specific help information in the Operations View interfaces, click **Help** within the window for which you want more information.

Documentation Updates

This manual's title page contains the following identifying information:

- Software version number, which indicates the software version
- Document release date, which changes each time the document is updated
- Software release date, which indicates the release date of this version of the software

To check for recent updates, or to verify that you are using the most recent edition of a document, go to:

http://ovweb.external.hp.com/lpe/doc_serv/

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

Documentation Conventions

The Operations View documentation uses the following conventions:

Table 2   HP OpenView Dashboard Documentation Conventions

Symbol	Meaning
<install_dir>	(Windows only.) The HP OpenView application directory. This directory contains all of the HP OpenView Dashboard files. The default location is: `C:\Program Files\HP OpenView\`
<data_dir>	(Windows only.) The HP OpenView data directory. This directory contains product configuration and data files. The default location is: `C:\Program Files\HP OpenView\data`

<portlet_app_dir>	The top-level directory for a deployed portlet application. This directory has the same name as the portlet application. The location of this directory depends on the installation platform and the portal server.
	• Jetspeed on Windows:
	`<install_dir>\nonOV\dashboard\jetspeed\1.6\jakarta` `-tomcat-5.5.9\webapps`
	• Jetspeed on UNIX:
	`/opt/OV/nonOV/dashboard/jetspeed/1.6/` `jakarta-tomcat-5.5.9/webapps`
	• BEA WebLogic on Windows (default):
	`<bea_install_dir>\user_projects\applications`
	• BEA WebLogic on UNIX (default):
	`<bea_install_dir>/user_projects/applications`
	`<bea_install_dir>` is the BEA WebLogic directory.

▶	A note that describes special information pertaining to the current topic.
🚩	A tip that provides an alternate way to address the current topic.
⚠	A caution that indicates a potential problem to avoid.

1 Introduction to the OVO and OVSN Integrations

The Messages and Service Navigator portlets provided with HP OpenView Dashboard Operations View integrate with two HP OpenView products: HP OpenView Operations for UNIX (OVOU) and HP OpenView Operations for Windows (OVOW). This manual refers to both products collectively as OVO and makes distinctions between the products only when necessary.

OVOU and OVOW both provide central operations and problem-management for distributed multi-vendor environments. OVO provides:

- Central message-management for consolidation, simplification and automation of message processing.

- Central monitoring for proactive problem resolution.

- Central problem-management for problem notification, resolution, and tracking.

- Central control for efficient management.

HP OpenView Service Navigator (OVSN) is an add-on product for OVOU that enables you to manage an IT environment while focusing on the IT services. The same feature set is available within the OVOW product. For information about configuring OVO, see the documentation provided with that product. For information about configuring services within OVOW, see the OVOW online help. For information about configuring services within OVSN, see the *HP OpenView Service Navigator Concepts and Configuration Guide*. All HP OpenView manuals are available online at the web site: **http://ovweb.external.hp.com/lpe/doc_serv**

You can view the data that OVO and OVSN collect through the Operations View Messages portlet. See The Messages Portlet for Operations View on page 19.

You can view the data that OVSN collects through the Operations View Service Navigator portlets:

- Service Browser portlet
- Service Cards portlet
- Service Graph portlet
- Service Health portlet

See The Service Navigator Portlets for Operations View on page 20.

The Messages Portlet for Operations View

If OVO is configured and running within your management environment, Operations View can display OVO message information through the Messages portlet.

In Operations View, you control access to three possible layers of information within the Messages portlet:

- Summary
  The summary page contains a high-level list of the type and number of messages received within one or more message categories. These categories correspond to the standard OVO message attributes: Nodes, Services, Objects, Applications, and Message Groups. If you have configured *custom* OVO message attributes within OVOU, they cannot be used as Operations View message categories. However, custom message attributes are displayed on the details page. The messages are filtered according to your Operations View configuration.

- Drill-down to list page
  Accessed through links on the summary page, the list page contains a complete list of messages received within a specific category, filtered according to your Operations View configuration. In the Messages portlet, you can affect the state of these messages by changing the ownership of a message or changing its acknowledgement (ack/unack).

- Drill-down to details page
  Accessed through links on the list page, the details page presents all known information about a specific message, including *custom* attributes configured in OVOU. On this page you can also affect the specific message by adding annotations, modifying the text and/or severity, and initiating pre-configured automatic and/or operator-specific actions.

See Chapter 3, Working with the Messages Portlet for more information.

The Service Navigator Portlets for Operations View

The integration of OVSN and the service-related parts of OVOW into Operations View provides up-to-date information about managed services to your end users.

The following OVSN portlets are included in Operations View:

- Service Browser portlet

  A table-like view of services, providing links to details about specific services. See Chapter 4, Working with the Service Browser Portlet for more information.

- Service Cards portlet

  A business-card view of services, providing links to details about specific services. See Chapter 5, Working with the Service Cards Portlet for more information.

- Service Graph portlet

  A hierarchical view of the OVSN configuration settings for a particular service. See Chapter 6, Working with the Service Graph Portlet for more information.

- Service Health portlet

  A gauge-like view that shows aggregated service status and provides links to details about specific services. See Chapter 7, Working with the Service Health Portlet for more information.

Interaction Between OVO/OVSN and Operations View

Operations View running on any supported operating system can integrate with multiple OVO management servers, regardless of the OVO operating system. The *Installation Guide* includes information about supported OVO and OVSN versions and required patches.

You can install Operations View and OVO/OVSN in any order; however, you must perform at least minimum OVO/OVSN configuration before you can configure the Messages and Service Navigator portlets. For information on configuring OVO and OVSN, see the documentation that came with those products.

Before using the Messages and Service Navigator portlets, configure Operations View and OVO/OVSN to communicate with each other. See Chapter 2, Configuring the Operations View Connection to OVO and OVSN.

Figure 2 on page 22 illustrates how the Messages portlet communicates with OVOU.

Figure 3 on page 23 illustrates how the Service Navigator portlets communicate with OVSN.

Figure 4 on page 24 illustrates how the Messages and Service Navigator portlets communicate with OVOW.

Figure 2   Communication Process for the Messages Portlet
Displaying Data from OVO for UNIX
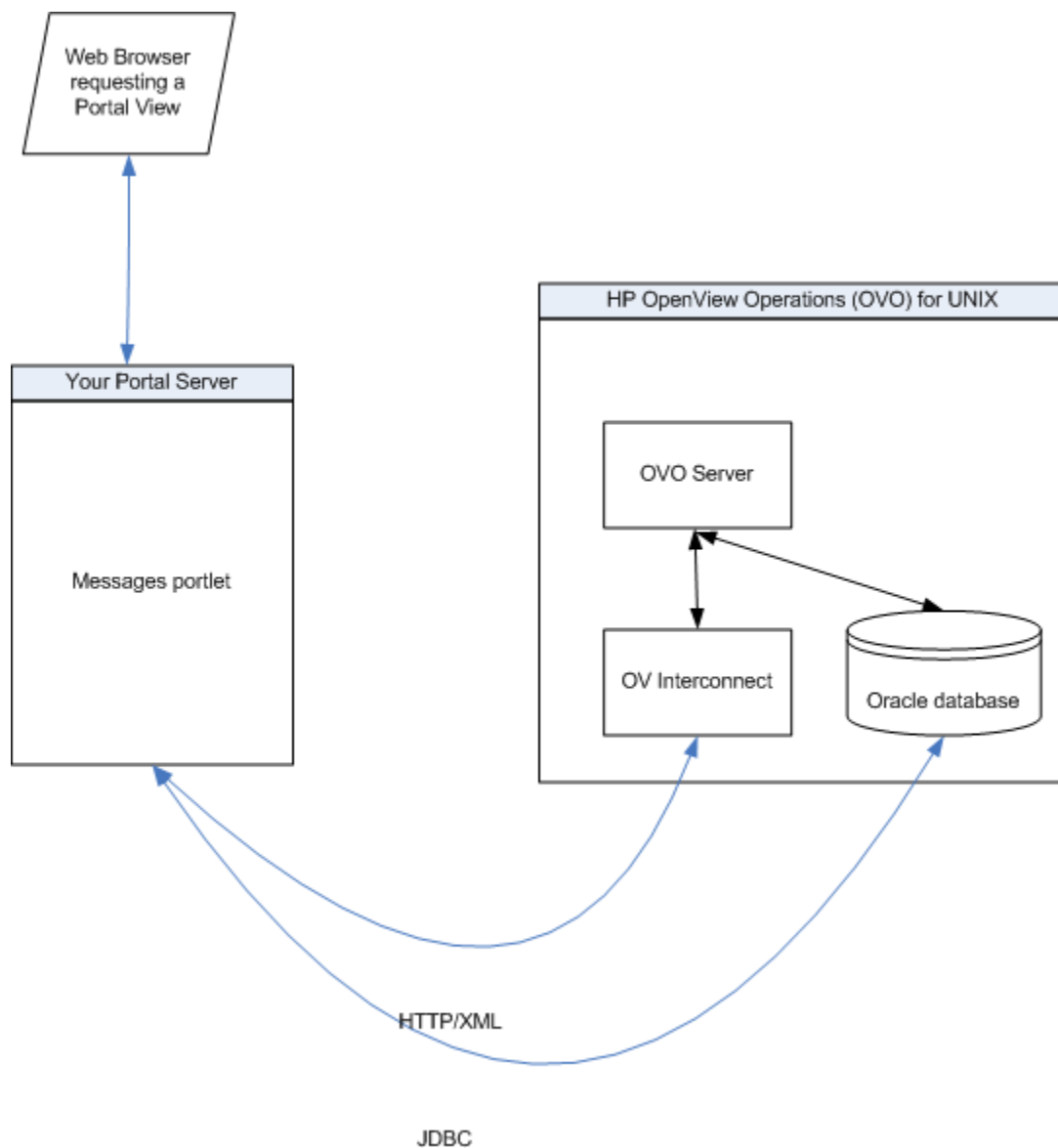
Figure 3   Communication Process for the Service Navigator Portlets Displaying Data from OVSN for UNIX
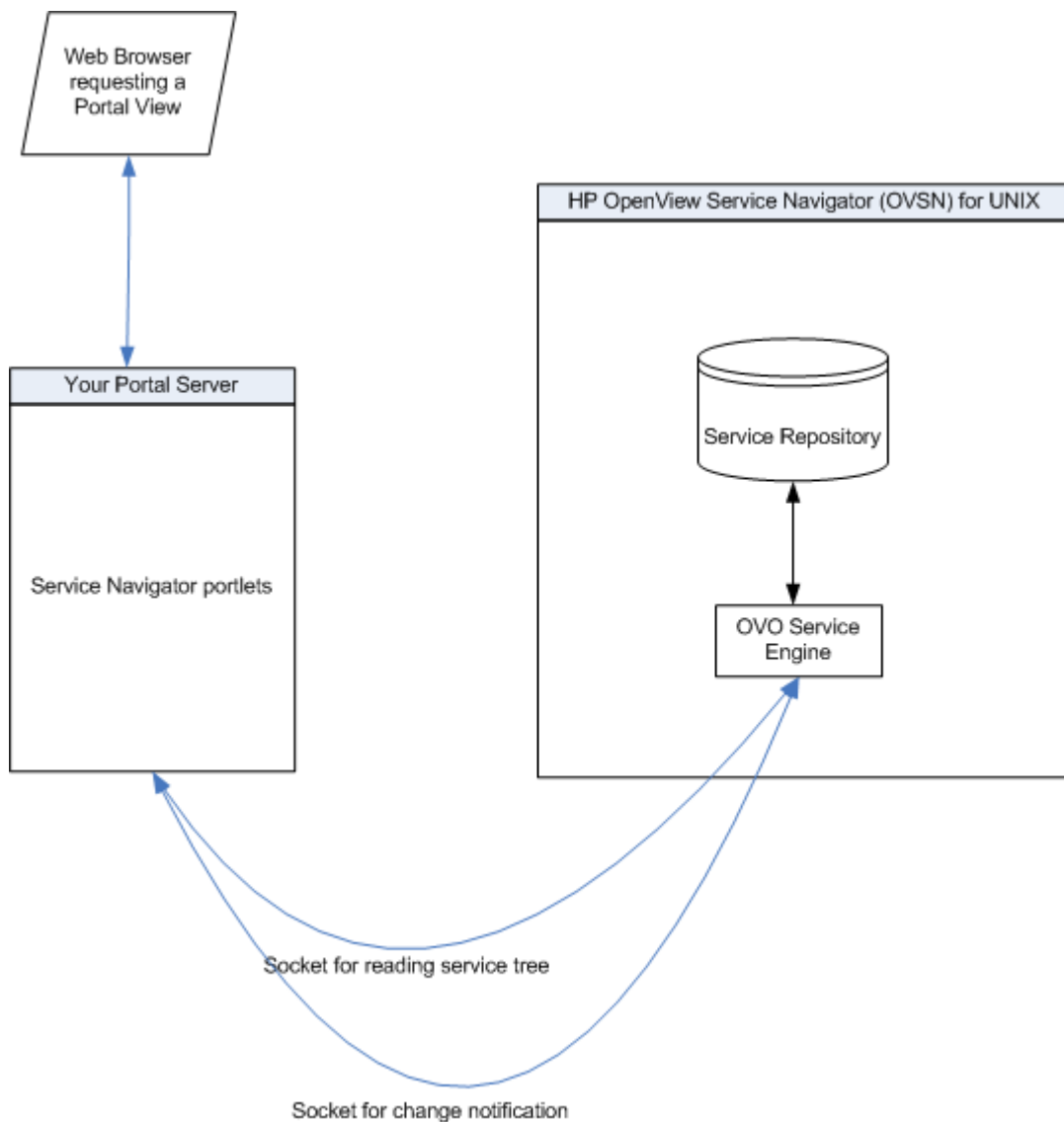
**Figure 4   Communication Process for the Messages Portlet
Displaying Data from OVO for Windows**
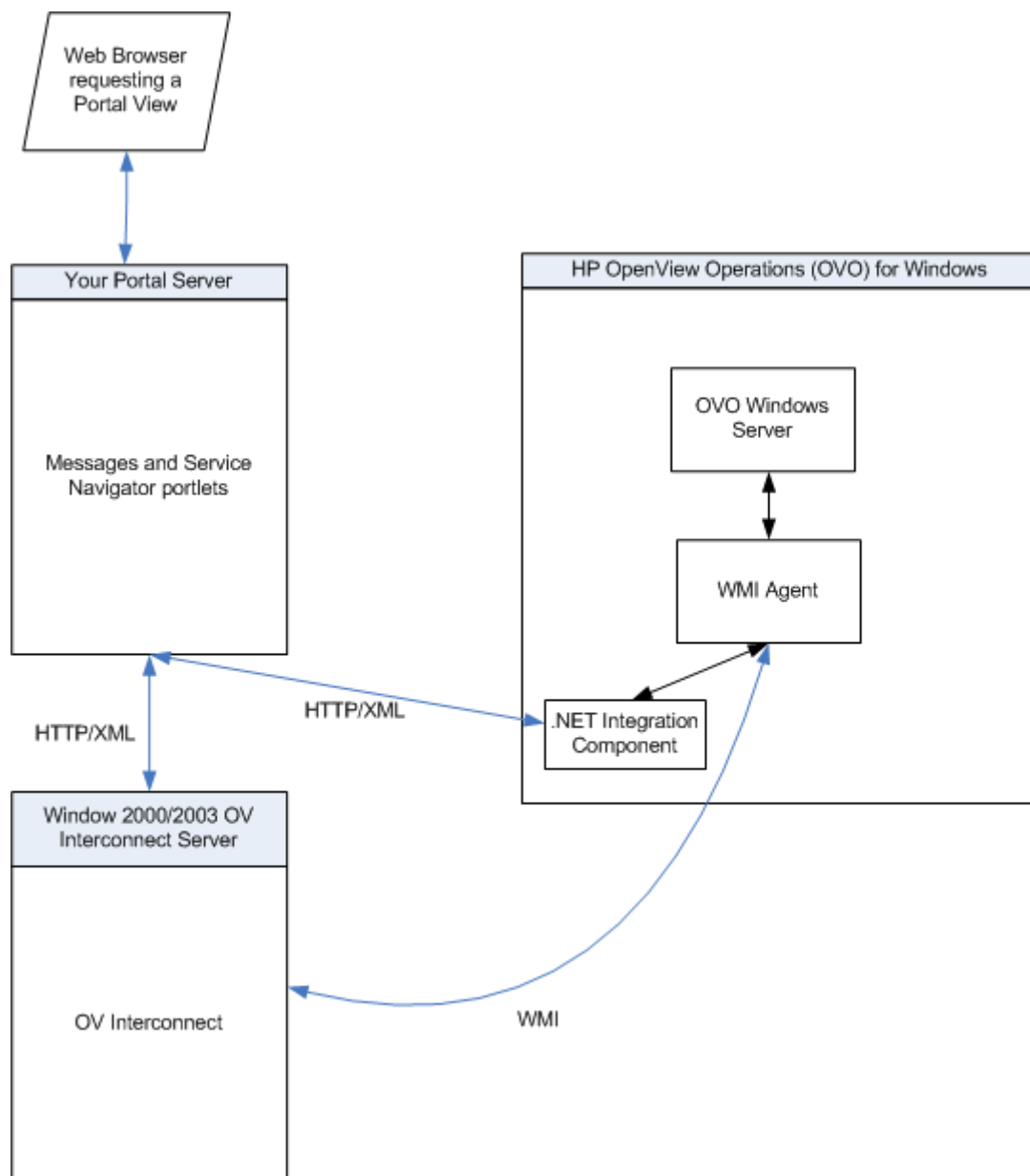
2 Configuring the Operations View Connection to OVO and OVSN

You must establish communication between HP OpenView Dashboard Operations View and your HP OpenView Operations (OVO) management servers. If HP OpenView Service Navigator (OVSN) is installed on the OVO management server, additional configuration work is required. Perform the following configurations on each OVO management server and on the Operations View server.

On the OVO for UNIX Management Server

The Messages portlet communicates with OVOU through its listener service. The Messages and Service Navigator portlets communicate with OVSN through its opcsvcterm service. In addition to these mechanisms, the OVO Messages portlet and Service-related portlets require HP OpenView Interconnect (OVI) to implement the optional Ack/Own functionality for an OVOU management station. OVI is an integration component that must be installed on the OVOU management server.

The steps for configuring the listener service and the opcsvcterm service are detailed here. The installation procedure for OVI with an OVOU/OVSN management server is found in Installing HP OpenView Interconnect on page 40.

⚠ Because the opcsvcterm service provides read-write access to the OVSN database, it is recommended that access to this service be limited to trusted hosts with the need to access it, such as the Operations View server.

Perform the following steps on each OVOU management server in your network:

1 Verify that you are using a version of OVO that is supported by Operations View. Refer to the *Installation Guide* for the list of supported product versions.

2 In any text editor, open the `/etc/services` file on each OVO management server.

3 Verify that the following lines are present:

   • *For OVOU:*
     `listener 1521/tcp #Oracle Net8 listener`

   • *For OVSN:*
     `opcsvcterm 7278/tcp # Service engine remote access`

   If not, consult the documentation that comes with OVOU and OVSN to determine how to configure remote access settings. Note that the port numbers specified in the Operations View Administrator Tool (see On the Operations View Server on page 36) and in this `/etc/services` file must be identical.

4 In any text editor, on each OVSN management server, open the `/etc/inetd.conf` file.

5 Verify that the following line is present, and if not then add it:

   • *For OVSN:*

`opcsvcterm stream tcp nowait root /opt/OV/bin/OpC/opcsvcterm opcsvcterm`

6 Trigger the `inetd` service to re-read the configuration files.

   • *HP-UX:* As superuser, run: **`/etc/inetd -c`**

   • *Solaris:* Send the hangup signal to the currently running `inetd` process.
     Run: **`kill -1 current_inetd_PID`**

7 If you are running OVOU 6.0.x, install the following patch:

   • *HP-UX:* `PHSS_24264` or later.

   • *Solaris:* `ITOSOL_00101` or later.

Optional Steps on UNIX

If SNVP is installed, the performance of the Service Navigator portlets might not be satisfactory. In this case follow these steps to improve performance:

1   On the OVSN management server open the `/etc/services` file using any text editor, and add the following line to the end of the file:

```
cadmsnd_opv 7281/tcp # Common Admin Service Navigator Deployment for
Operations View
```

The port number can be different, but ensure that the same port number is specified using the Administrator Tool as the value of Service Navigator Read Port for this OVO station. See Management Station Settings on page 36.

2   Open the `/etc/inetd.conf` file using any text editor, and add the following line to the end of the file.

```
cadmsnd_opv stream tcp nowait root /opt/OV/bin/OpC/cadmsnd cadmsnd
```

3   Trigger the `inetd` service to re-read the configuration files.

- *HP-UX:* As superuser, run: ***/etc/inetd -c***

- *Solaris:* Send the hangup signal to the currently running `inetd` process.
  Run: **kill -1 *current_inetd_PID***

On the OVO for Windows Management Server

The Messages and Service Navigator portlets utilize a .NET web application to communicate with OVOW management servers. In addition to the .NET web application, the Messages and Service Navigator portlets require HP OpenView Interconnect (OVI) to implement the optional Ack/Own functionality for an OVOW management station. OVI is an integration component that must be installed on a Windows computer other than the OVOW management server. If Operations View is installed on a Windows computer, the OVI component can also be installed on that computer.

The installation procedure for the web application is detailed below. The installation procedure for OVI with an OVOW management server is found in Installing HP OpenView Interconnect on page 40.

Installing the .NET Integration Component

The .NET implementation uses the original naming scheme, ovow2sip, which reflects the fact that it is backward compatible with HP OpenView Service Information Portal, version 3.2.

The ovow2sip.NET mechanism provides a full .NET integration component facilitating communication between Operations View and the OVOW management server. It has a semi-automated installation procedure, requiring a few manual configuration steps.

ovow2sip.NET requires that OVOW be installed and running. In addition, the ovow2sip.NET installation requires the Microsoft .NET 1.1 Framework to be installed, including the ASP.NET components.

▶ On Windows 2003 Server installations, Microsoft .NET Framework is installed with the operating system, but the ASP.NET component might not be installed or enabled. Instructions for installing the Windows ASP.NET component on a Windows 2003 Server and enabling it can be found in the Microsoft ASP.NET Home under System Requirements at the following URL: **http://msdn.microsoft.com/asp.net/support/sysreqs/default.aspx** That page also includes download and installation instructions for the NET Framework for Windows XP Professional and Windows 2000 Server.

⚠ If multiple versions of the Microsoft .NET Framework have been installed, it is referred to as a "side-by-side" installation. Some side-by-side installations result in an improperly configured ASP.NET session state service (aspnet_state). In addition, the Service Pack 1 for Windows 2003 Server and Service Pack 2 for Windows XP can cause the ASP.NET session state service to become unregistered. This seems to happen when the service packs are installed under Windows Update. To rectify this situation, re-establish the ASP.NET session state service with the following command:

**C:\WINDOWS\Microsoft.NET\Framework\<*version*>\
aspnet_regiis.exe –ir**

where <*version*> is the most recent installed version of the .NET Framework

1 Verify that you are using a version of OVO that is supported by Operations View. Refer to the *Installation Guide* for the list of supported product versions.

2 Provide to the OVOW administrator the following installation package.

   `<install_dir>\misc\dashboard\opview\integrations\ovo\`
   `ovow2sip.NET.msi`

3 *To the OVOW administrator*: Running the `ovow2sip.NET.msi` installer will create a web application and its associated virtual directory on the OVOW management server. Run the MSI installer and follow the directions provided. Enter the name of the virtual directory to use (default: `ovow2sip.NET`). If you enter a relative path, the resulting directory will end up under the IIS default web folder, typically `C:\inetpub\wwwroot` (make note of the virtual directory name you enter, as it will need to be provided to the Operations View administrator upon successful installation).

   When this initial installation process is completed, the installer will have created a virtual directory containing a few files and two sub folders: `bin` and `controlService`. The controller service contained in the `controlService` folder must be installed before the web application can be started (see step 3 below).

4 *To the OVOW administrator*: Install the controller service. The installer for the service is in the `controlService` sub folder in the virtual directory you just created. Open a file browser (such as Windows Explorer) on the folder (for example, if you used the default location, the folder would be named `C:\inetpub\wwwroot\ovow2sip.NET\controlService`), and launch the `O2SControlServiceSetup.msi` application found there. Follow the instructions for installation, making note of the install location you choose (it will be needed in the next step).

   ▶ If you are unsure of the location of the default web folder for IIS, it can be determined by visiting

   Start:Control Panel:Administrative Tools:Internet Services Manager

   , then expanding the left control pane until the "Default Web Site" item is visible. Right-click the item and select "Properties" from the resulting menu. Select the "Home Directory" tab in the "Default Web Site Properties" dialog. The default web folder is found in the "Local Path:" text area.

5   *To the OVOW administrator*: During the controller service installation, you were prompted to enter a user name and password to be used when starting and stopping the web application. If the values entered are correct, you can skip this step. If corrections are needed, you can make them after the installer completes by directly editing the configuration file used by the controller service. The configuration file is named `O2SControlConfig.xml` and is contained in the control service install folder created in the previous step. It contains 6 entries that might need modification:

- `Host` (default: `<local system name>`) - If the `local system name` is not accessible to the service (which is run under the `LocalSystem` account), replace this entry with the name of the available web server, possibly the IP address or fully qualified domain name.

- `VirtualDirectory` (default: `<virtual directory entered during install>`) - If you installed in a location other than the default, enter that location here.

- `User` (default: <username entered during install>) - Ensure the value here is a user with read and write access rights to OVOW (typically, members of the HP-OVE-ADMINS group or another group with those rights).

- `Password` (default: <password entered during install>) - Enter the appropriate password for the specified user.

- `Timeout` (default: "1800") - Enter the number of seconds the service can wait while `ovow2sip.NET` initializes.

- `TraceLevel` (default: "2") - Enter the numeric level for tracing (0 is none, 6 is most verbose). If tracing is turned on, the trace file `O2SLogFile.txt` will be written into the default temp directory configured for the ASP.NET default user. Typically, this is either `C:\Documents and Settings\MachineName\ASPNET\Local Settings\Temp` or `C:\Windows\Temp`

6   *To the OVOW administrator*: After the configuration steps are complete, ensure that the service is started. If you chose not to start the service automatically after the install completed, you will need to start the service now. This can be accomplished by either rebooting the OVOW management server to start the service automatically, or by following the procedure detailed below to start the service manually.

To manually restart the service:

a   Open:

Start:Control Panel:Administrative Tools:Services

b   Select `HP OpenView ovow2sip.NET Controller`

c   Start the service.

> ▶ Depending on the number of services and messages contained in the OVOW database, it can take seconds or minutes before `ovow2sip.NET` can build its internal caches and deliver useful information to the Operations View server. Users of the Messages and Service Navigator portlets will see "Data Unavailable" messages when those portlets are accessed during this startup period.

Troubleshooting hints: If the service fails to start, it might be that OVOW or one of the other dependent services is not currently installed or running, or the user/password combination you configured in step 4 is incorrect or does not have the necessary OVOW access rights.

Make sure that OVOW is installed and operational before attempting to restart the service. In addition to the OVOW services, `ovow2sip.NET` is dependent on the ASP.NET State (`aspnet_state`) and Windows Management Instrumentation (`winmgmt`) services.

⚠ If multiple versions of the Microsoft .NET Framework have been installed, it is referred to as a "side-by-side" installation. Some side-by-side installations result in an improperly configured ASP.NET session state service (aspnet_state). In addition, the Service Pack 1 for Windows 2003 Server and Service Pack 2 for Windows XP can cause the ASP.NET session state service to become unregistered. This seems to happen when the service packs are installed under Windows Update. To rectify this situation, re-establish the ASP.NET session state service with the following command:

```
C:\WINDOWS\Microsoft.NET\Framework\<version>\
aspnet_regiis.exe –ir
```

where *`<version>`* is the most recent installed version of the .NET Framework

A check for the existence of the dependent services is performed during installation. However, if a dependent service is removed after the initial installation, the Control Service will fail to start. The dependent services must be restored before the Control Service will operate properly.

Errors are logged in the file `O2SControlServiceLog.txt` under the control service application directory you specified in step 3. The default location for the application directory is

C:\Program Files\HP OpenView\ovow2sip.NET Control Service

If the `O2SControlServiceLog.txt` contains errors marked by `401 - Unauthorized`, you might not have configured the user/password correctly in step 4, or might have forgotten to set up appropriate authentication in step 3.

7   *To the OVOW administrator*: Provide the Operations View administrator with the following information:

- The path to the `ovow2sip.NET` web application. The path is comprised of the virtual directory specified during installation with `/ovow2sip.aspx` appended. For example, if the virtual directory specified during installation was `myOvow2sip.NET`, the path is `myOvow2sip.NET/ovow2sip.aspx`.

- The port on which the web server is running on the OVOW management server, and an indication of whether the web server is a secure web server.

- A user name and password needed to access OVOW management server.

8   *To the Operations View administrator*: Using the values provided in Step 7, configure an OVOW management server using the Administrator Tool, as described in On the Operations View Server on page 36.

On the OVSN Management Server

If OVSN is installed and configured on your OVO/OVSN management server, follow these steps:

1   Verify that you are using a version of OVO that is supported by Operations View. Refer to the *Installation Guide* for the list of supported product versions.

2   Log on as root on the system where OVSN is installed.

3   If you are running OVOU 6.0x, install the following patch:

   • *Solaris:* ITOSOL_00117 or later.

   • *HP-UX:* PHSS_24741 or later.

4   Ensure that the OVSN processes are running. At the command prompt, type:

   /opt/OV/bin/OpC/opcsv -start

On the Operations View Server

Configure one or more OVO management stations from the Operations View server.

Management Station Settings

If you are configuring Operations View to communicate with multiple OVO management servers, the system name appearing closest to the top of the Management Stations folder in the Administrator Tool scoping pane becomes the default OVO management server. Therefore, configure the station that you want to be the default first.

To establish communication between Operations View and OVO, follow these steps to define the OVO management server configuration settings:

1   In the scoping pane of the Operations View Administrator Tool, navigate to the Management Stations folder.

2 To add a new OVO management station, right-click Management Stations, click **New Management Station**, and then type the fully-qualified host name of the OVO management station.

   To add OVO settings to an existing management tcp station, select that management station in the scoping pane.

3 In the editor pane, select OVO is Installed on this System.

   The OVO tab becomes available.

4 On the OVO tab, select the operating system type for the version of OVO running on the management station that you identified in Step 2.

   The configuration options depend on the operating system type.

   • For OVOU, go to Step 5.

   • For OVOW, go to Step 6.

5 For OVOU, set the configuration options for this OVOU management station, and then go to Step 7:

   • OVO 8.0 or later: Select this check box if the OVO on this management station is version 8.0 or later.

   • Service Navigator is installed: Select this check box if OVSN in installed on this OVO management station.

   ▶ Selecting this check box makes the settings for the OVSN ports available.

   • In the General Settings area, specify the following settings:

      — Minimum Connections: Minimum number of connections to store in a pool shared by all Messages portlet instances when connecting to Oracle.

      — Maximum Connections: Maximum number of connections to store in a pool shared by all Messages portlet instances when connecting to Oracle.

      — Maximum Cached Statements: Maximum number of statements to cache in the Messages portlet.

   • If OVSN is installed, also specify the OVSN ports:

      — Service Navigator Notify Port: The TCP port to use for listening to changes in the service tree from OVSN. The default port is 7278.

- — Service Navigator Read Port: The TCP port to use for reading the service tree from OVSN. The default port is 7278. If SNVP is installed on the OVOU management station and the steps for setting up another daemon have been followed (see Optional Steps on UNIX on page 29), then that port number should be specified here.

- • In the Database Settings area, specify the following settings:

  - — Database Host: The host on which the Oracle database resides. Leaving this field blank indicates that the OVOU management server is the Oracle database host. Specify this value only if OVOU was configured for remote database access.

  - — Database Port: The Oracle TCP port to connect to for remote access to the OVOU database. The default port is 1521.

  - — Database Name: The Oracle database name (SID) that is assigned during installation of OVOU. The default is openview.

  - — Database User: The Oracle user name for Operations View to use when logging in to the Oracle database.

  - — Database Password/Confirm Database Password: The password for Operations View to use when logging in to the Oracle database.

6 For OVOW, set the configuration options for this OVOW management station, and the go to Step 7:

- • In the HTTP Related area, specify the following settings:

  - — Access method: Select whether to use HTTP or HTTPS for communicating with OVO.

  - — Web server port: Specify the port that the OVO web server uses.

    For HTTP, the default port is 80.

    For HTTPS, the default port is 443.

  - — User Name: A user name required to access a virtual directory that requires authentication. If the virtual directory entered in the OVO URL field requires authentication, the User Name and Password entries are required.

  - — Password/Confirm Password: The password required for the above User Name.

- • In the General Settings area, specify the following settings:

      — OVO Language: The language used by the OVOW management server. As of OVOW 7.21, only English and Japanese are supported.

      — OVO URL: The path to the installed OVOW integration component provided by the OVOW administrator. The default is ovow2sip.NET/ovow2sip.aspx.

      — SN Polling Interval: The amount of time between polls of current service state. The default is 600 seconds.

7   Click **Save**.

8   Repeat Step 2 though Step 7 for each OVIS management station with which Operations View should communicate.

Installing HP OpenView Interconnect

This section describes how to install the HP OpenView Interconnect (OVI) package. The Messages and Service Navigator portlets use OVI to perform actions (Ack/Own) on messages.

- To perform actions on messages from OVOU/OVSN, you must install the OVI package on the OVOU management server.

- To perform actions on messages from OVOW you must install the OVI package on a Windows computer other than the OVOW management server.

Installing OVI on UNIX

To install OVI on the UNIX operating system, follow these steps:

1   Log on to the OVO Unix computer as user root.

2   Insert the HP OpenView Dashboard DVD-ROM into the DVD drive.

3   Mount the DVD.

4   Change the working directory to the dvdrom directory using the cd command.

5   Start the install script by typing:

   ./dashboard_opview_ico_integration_2.00.000_setup.bin

6   On Introduction page appears, click **Next**.

7   The license agreement appears. If you agree with the license statement select the I Accept the Terms of the License Agreement check box, and then click **Next**.

8   On the Pre-Install Summary page, click **Install** to start the installation.

9   After the install completes, you can optionally configure a port for OVI to listen on as described in .

10   Run the following command to start OVI:

`/opt/OV/lbin/ICO/ICO.sh -b -env /var/opt/OV/conf/ICO_OpView/ICO_OpView.env`

Installing OVI on Windows

To install OVI on the Windows operating system, follow these steps:

1   Log on to the Windows computer as a user with administrator privileges.

2   Disable any anti-virus software (including script blocking) running on this computer.

3   Insert the HP OpenView Dashboard DVD-ROM into the DVD drive.

4   The HP OpenView Installer should start automatically and display the Introduction page. Close this window and browse the DVD drive using Windows Explorer. In the top-level directory on the DVD drive, double-click **dashboard_opview_ico_integration_2.00.000_setup.exe**.

5   On Introduction page appears, click **Next**.

6   The license agreement appears. If you agree with the license statement select the I Accept the Terms of the License Agreement check box, and then click **Next**.

7   On the Pre-Install Summary page, click **Install** to start the installation.

8   During installation, enter the name of the OVOW management server. Enter the hostname of the OVOW management server that you plan to integrate with Operations View.

9   The ICO_OpView service is installed and started automatically. This service listens on port 8081 for any requests from the OVO portlets in Operations Viewto execute on the OVOW management server.

10 After the install completes, you can optionally configure a different port for OVI to listen on as described in .

Configuring the OVI Port Number

By default the ICO_OpView service listens on port 8081. To change this port to any other value, follow these steps:

1   In any text editor, open the following file:

   • *Windows*: *<data_dir>*\conf\ICO_OpView\
     ResponderProxyPluglet_OpView.http.config

   • *UNIX*: /var/opt/OV/conf/ICO_OpView/
     ResponderProxyPluglet_OpView.http.config

2   Look for the line <serverPort>8081</serverPort> and change the port number to the preferred value.

3   Restart OVI:

   • *Windows*:

     — Click **Start**→ **Control Panel**→ **Administrative Tools**→ **Services** to open the Services window.

     — Right-click on the ICO_OpView service, and then click **Restart**.

   • *UNIX*:

     — Stop OVI:

/opt/OV/lbin/ICO/ICO.sh -stop -env /var/opt/OV/conf/ICO_OpView/ICO_OpView.env

     — Start OVI:

/opt/OV/lbin/ICO/ICO.sh -b -env /var/opt/OV/conf/ICO_OpView/ICO_OpView.env

4   Verify that OVI is running before attempting to deploy Messages or Service Navigator portlets. If OVI is not running, the Ack/Own features will not work properly.

OVO Ports for Operations View

The Operations View server to OVO management server communication can go through a firewall. The ports that need to be opened through the firewall to gather data for the Messages and Service Navigator portlets are specified on the OVO tab of the management station configuration settings in the Administrator Tool (see On the Operations View Server on page 36).

Table 3   Port Requirements for Messages and Service Navigator Portlets

Server Product	Protocol	Default Port	Configuration Location
OVO for UNIX	OVO DB	1521	On the Operations View server, use the Administrator Tool to configure protocol and port (OVO tab for management stations).
OVO for Windows	http	80	
	https	443	

Table 4   Port Requirements for OVSN on Unix

Protocol	Default Port	Configuration Location
opsvcterm	7278	This service is available only if the OVSN add-on is installed on the OVO management server. On the Operations View server, use the Administrator Tool to configure "Service Navigator Notify Port" port (OVO tab for management stations).
cadmsnd (optional)	7281	This service is available only if SNVP is installed on the OVO management server and a daemon is configured as described in Optional Steps on UNIX on page 29. On the Operations View server, use the Administrator Tool to configure "Service Navigator Read Port" port (OVO tab for management stations).

Table 5   **Port Requirements for OVI**

Protocol	Default Port	Configuration Location
ovi	8081	This port will be in use if an OVI station has been installed and configured to enable the Ack/Own features in the Messages or Service Navigator portlets.

Running in Languages Other Than English

Any language that can be displayed within the UTF-8 codeset can be displayed through Operations View.

Configuring Operations View to Access UTF-8 Data From OVO/OVSN

For OVOU, no additional configuration tasks are required to allow Operations View to access non-ASCII data from OVO/OVSN (provided that you have completed the steps in the previous sections of this chapter).

For OVOW, if an OVOW management server is running in a language that uses non-ASCII characters, change the OVO Language field for the OVOW management server configured in Operations View.

After the OVO Language field is set to Japanese, the portal server automatically translates OVO message data into Shift JIS characters.

1   In the scoping pane of the Operations View Administrator Tool, expand the Management Stations folder, and select the management station to modify.

2   In the editor pane, on the OVO tab, type the appropriate value into the OVO Language field.

3   Click **Save**.

Getting Japanese Node Lists and Service Lists from OVO for Windows

When setting up a customer model that segments the OVOW data by user, you might need to determine which nodes and services to add to the customer model (explained in Manually Creating Node List and Service List Filters on page 107).

To generate node list and service list filters in Japanese, in a web browser on the OVOW management server, run the ovow2sip.aspx application with the lang=japanese parameter, as shown here:

```
ovow2sip.aspx?lang=japanese&query=ListNodes
```

```
ovow2sip.aspx?lang=japanese&query=ListServices
```

```
ovow2sip.aspx?lang=japanese&query=ListServices&includeDisplay
=true
```

HTTPS Support

The Operations View server to OVO management server communication cannot be configured to use the secure hypertext transfer protocol (HTTPS) at this time.

3 Working with the Messages Portlet

HP OpenView Dashboard Operations View provides the Messages portlet for integrating with HP OpenView Operations (OVO).

This chapter describes how to create, configure, use, and customize the Messages portlet. For an overview of the portlet's functionality, see Chapter 1, Introduction to the OVO and OVSN Integrations.

The portal view development process includes a variety of tools:

1 Use the Operations View Administrator Tool to create the Operations View portlets within a portlet application. See Creating the Messages Portlet on page 50.

2 Use the Administrator Tool to perform initial configuration of the Operations View portlets. See Configuring the Messages Portlet on page 51.

3 Deploy the portlet application to the portal server. For information, refer to the *Operations View Administrator Guide*.

4 Use the portal server software tools to create a portal view that includes the Operations View portlets. For information, refer to the portal server software documentation.

5 In a web browser, view the portal view and customize the contained portlets. See Using the Messages Portlet on page 54.

   This is the only point at which end users can interact with the Operations View portlets. If you allow portlet customization, refer to the *Operations View Administrator Guide* for information about the scope and effects of portlet customization.

6 Use the Administrator Tool to maintain the Operations View portlet configurations. See Customizing the Messages Portlet on page 56.

Creating the Messages Portlet

Use the Administrator Tool to create the Operations Messages portlet within an existing portlet application.

To create the Messages portlet, follow these steps:

1   In the Administrator Tool, click **File**→ **New**→ **Portlet**.

2   In the Add New Portlet window, enter the following information:

   • Portlet Name: The name of the portlet as it appears in the portlet application in the scoping pane and in the portal server software tools.

   • The portlet name must be unique, start with a letter or underscore character, and consist of only alphanumeric and underscore characters.

   • Portlet Title: The name of the portlet as it appears in the portal server software tools and the portal view. Defaults to the portlet name.

   • Description (optional): The portlet description as it appears in the portal server software tools.

   • Portlet Type: Select OVOMessages from the list.

   • Destination Portlet Application: Select the portlet application to contain the new portlet.

The new portlet appears in the selected portlet application in the scoping pane, and the configuration information for this portlet appears in the editor pane.

Configuring the Messages Portlet

For information on the Operations Messages portlet configuration options, click **Help** at the bottom of the editor pane to view the online help page.

To configure the default settings for the Messages portlet, follow these steps:

1   In the scoping pane of the Administrator Tool, expand the Portlet Applications folder, expand the desired portlet application, and then click the name of the Messages portlet (named OVOMessages by default).

    The editor pane displays the configuration for this portlet as shown here.

General Settings

Portlet Name*:   OVOMessages

Portlet Title*:   HP OVO Messages

Portlet Class*:   com.hp.ov.portal.portlets.ovo.OVOPortlet

Description: Demo: HP OpenView Operations Messages Portlet. Provides access to messages within OVO.

Mime Type*:   text/html

Portlet Modes*:   ☑ VIEW   ☑ EDIT   ☑ HELP

OVO Portlet Edit

General Parameters | Message Categories | Message Properties

Display Stylesheet*:   ovo_html.xsl

Help Content URI: /C/help/OVO/OVOView.jsp

OVO Server: OVOStation

Ack/Own Operator Login: opc_op

Ack/Own Operator Password: ******

Confirm Ack/Own Operator Password: ******

Priority of Filter Assignments:

AllData

Add

Move Up

Move Down

Remove

Save   Cancel   Help

2   In the General Settings area, make any desired changes.

3   On the General Parameters tab of the OVO Portlet Edit area, set the configuration options. At a minimum, specify the correct values for the following options:

- OVO Server

- Ack/Own Operator Login

- Ack/Own Operator Password (and Confirm Ack/Own Operator Password)

- Priority of Filter Assignments

4   On the Message Categories tab of the OVO Portlet Edit area, select the message categories to display.

5   On the Message Properties tab of the OVO Portlet Edit area, make any desired changes.

6   Click **Save**.

Using the Messages Portlet

Use the Operations Messages portlet to display OVO messages through Operations View. Each message within the OVO message database has five standard OVO message attributes. The Messages portlet can be configured to group and display messages based upon any or all of these five standard attribute categories:

- Applications
- Message Groups
- Nodes
- Objects
- Services

Each message category displays a list of the OVO database elements in that attribute category, along with the number of messages received within each severity level for that element. Drilling down through any of the summary page links opens the list page that presents an overview of each message included in the category's summarized total.

Click on any link to display details about the received messages, such as: date, time, source of the message, message description, and any custom message attributes you configured.

▶ You can further narrow down which messages are displayed in the Messages portlet by creating filters (see Filtering the OVO and OVSN Data for more information).

Figure 5 shows an example of the Messages portlet.

Figure 5   Deployed Messages Portlet

HP OVO Messages						🖉🖳❓❌➖🗖
All Applications		1 0			8477	
Name	❌	❗	⚠	❗	✅	**Total**
/usr/sbin/cron(1M) Clock Daemon	263	0	0	0	2	265
alarmgen	119	0	448	0	484	1051
email	0	1	1	1	0	3
HP OpenView Operations	5971	0	0	535	6	6512
SNMPTraps	0	1	591	0	54	646
test app	0	0	0	0	1	1

Customizing the Messages Portlet

You can modify the Operations Messages portlet in your portal view:

1   Access the portal view by logging on to the portal as a user with access to edit portlet preferences.

    The portlet must also have the EDIT mode enabled.

2   In the title bar of the Messages portlet, click the edit button.

3   Make any desired changes. Click the help button for specific instructions:

   • Choose the message categories to be displayed in this portlet (Applications, Message Groups, Nodes, Objects, and/or Services). The messages displayed in the Messages portlet are only those messages received from either (union of):

      — Nodes that pass the node list of the filter assignment for the current user.

      — Services that pass the service list of the filter assignment for the current user.

   • Only one OVO management server communicates with a Messages portlet. This portlet instance gathers data from the first OVO management server listed in the Administrator Tool, *unless* you specify from which OVO management server to gather the data. Choose from the OVO management servers currently configured for communication with Operations View (see Chapter 2, Configuring the Operations View Connection to OVO and OVSN if you need to add one).

   • Change the ownership filter. Only messages associated with the indicated owners are displayed in this portlet.

   • Select a different data filter.

   • Choose the message categories to be displayed within the Messages portlet (Applications, Message Groups, Nodes, Objects, and/or Services). The messages displayed in the Messages portlet are only those messages received from *either* (union of):

      — Nodes that pass the node portion of the filter assignment associated with the current portal role.

— Services that pass the service portion of the filter assignment associated with the current portal role.

- Add or remove message categories to be displayed in this portlet.

- Change the display order of message categories.

4   Click **OK** to save the changes and return to the main portal page.

5   View the portal page to ensure that you have the desired results.

Editing OVO Message Categories

Each message category for the Operations Messages portlet must be based upon *one* of the standard five OVO message categories:

- Applications

- Message Groups

- Nodes

- Objects

- Services

Operations View provides a simple message category definition file for each of the five standard OVO message categories. You can add, delete, and modify message categories by using the Administrator Tool. Each Operations View message category must be defined in the Administrator Tool before being displayed in Messages portlets. For more information, see:

Message Category Configuration

The choices explained in this section are specified in each message category definition.

Messages that pass the filter assignment (see Chapter 8, Filtering the OVO and OVSN Data) and the filter defined for the message category (see Filtering Within a Message Category on page 59) are further filtered by the following configuration as an AND condition before being displayed in any Messages portlet:

• ID: Required. The name of this message category. This name is used as a reference for displaying the category in the Messages portlet.

• Title: Required. The text that appears in the title bar of the message category when displayed within any instance of the Messages portlet and displayed in the OVO Categories selection list on the portlet edit page.

• Older Than X Minutes: Optional. Filters out the newer messages.

• Newer Than X Minutes: Optional. Filters out the older messages.

• Show Details: Optional. Specifies whether "detail" links are displayed for each message in the list page of the Messages portlet. This link provides access to additional information about the message.

• Display Count: Optional. Specifies the maximum number of messages that are displayed in the list page.

• Filtering for Category: Required. Specifies which one of the five OVO database attributes is used for grouping and displaying messages in this category: Service Selection, Node Selection, Message Group Selection, Object Selection, or Application Selection.

Filtering Within a Message Category

A filter is *required* for each individual message category. This filter actually determines which of the five standard message attributes are used to sort the message category. The messages displayed in the Messages portlet result from the *intersection* of the filter assignment and the filter from the category. It is possible at runtime for the *intersection* of these lists to be the empty set. In this case, no messages are output for the message category. (See Chapter 8, Filtering the OVO and OVSN Data for information about filter assignments and the simple customer model.)

The filtering possibilities for message categories include the following. Only one of these filters can be used per OVO message category definition:

- Application Filter: Passes only messages from specified applications (as defined within OVO).

  — For example, the following application filter allows all applications to pass:

    .*

  — The following example allows application1, application2, and application3 to pass (application# values can be Perl5 regular expressions):

    (application1 | application2 | application3)

- Message Group Filter: Passes only messages from specified OVO message groups (as defined within OVO).

  — For example, the following filter allows all groups to pass:

    .*

  — The following example allows 3 groups to pass (messageGroup# values can be Perl5 regular expressions):

    (messageGroup1 | messageGroup2 | messageGroup3)

- Object Filter: Passes only messages from specified OVO objects.

  — For example, the following object filter allows all objects to pass:

    .*

  — The following example allows object1, object2, and object3 to pass (object# values can be Perl5 regular expressions):

    (object1 | object2 | object3)

  — The following example allows objects that end with "mail" to pass:

    (.*mail)

- Service Filter: Passes only messages from the OVSN services specified by name and/or type (as defined within OVO).

  — For example, the following service filter allows all services to pass:

  .*

  — The following example allows service1, service2, and service3 to pass (service# values can be Perl5 regular expressions):

  (service1|service2|service3)

  — The following example allows services that begin with "exch_" to pass:

  (exch_.*)

- Node Selection Filter: Passes messages from devices specified by hostname or capability, or can refer to an organization defined within the simple customer model.

  If no filter is specified in the Administrator Tool, the node selection filter allows all nodes to pass.

  The following node selection filter example passes all nodes that meet all three criteria:

  — Any node specifically listed in the IPHost Filter:

  15\.2\.5\.125

  15\.2\.6\.254

  eagle\.wingnuts\.com

  hawk\.wingnuts\.com

  — That has the isServer capability or is currently in a critical state (the capability filter commonly refers to the capability field within the NNM database, with values such as isRouter or isNode. However, this filter can search upon any field in the NNM database):

  field="IPStatus" value="Critical"

  field ="isServer"

— And any node that is included in OrganizationOne or
OrganizationTwo definition:

OrganizationOne

OrganizationTwo

▶ When you specify more than one filter (IPHost Filter, Capability Filter, or
Organization Filter), they are AND'd together. That is, messages must pass
all filtering to be displayed, not just a single criterion.

▶ When writing filters, use Perl5 regular expressions. For
example:.*\.eagle\.wingnuts\.com

See **http://www.perl.com** or **http://perldoc.perl.org** for information about
Perl5 regular expressions.

Modifying An Existing Message Category

To modify an OVO message category, follow these steps:

1   In the scoping pane of the Administrator Tool, expand the Portlet Shared
Configurations folder, expand the HP OpenView Operations folder, expand
the Message Categories folder, and then select the message category to
modify.

The editor pane displays the configuration for the selected message
category.

2   Configure the message category as desired (see Message Category
Configuration on page 59 for information), and then click **Save**.

3   In a web browser, log in to the portal to verify that the message categories
appear as desired.

Creating A New Message Category

Operations View ships with predefined message category configurations for the five standard OVO message categories. To create multiple versions of the same message category, each with unique configuration settings, follow these steps:

1   In the Administrator Tool, click **File→ New→ OVO Message Category**.

2   In the Add New OVO Message Category window, type the ID and file name of the new message category.

    The editor pane displays the configuration for the new message category.

3   Configure the message category as desired (see Message Category Configuration on page 59 for information), and then click **Save**.

4   In a web browser, log in to the portal to verify that the message categories appear as desired.

Deleting a Message Category

To remove a message category, follow these steps:

1   In the scoping pane of the Administrator Tool, expand the Portlet Shared Configurations folder, expand the HP OpenView Operations folder, and then expand the Message Categories folder.

2   Right-click the name of the message category to delete, and then click **Delete OVO Message Category**.

    You can choose to retain the message category configuration file for later use. This message category is no longer allowed to display in portal views, even if it is specifically listed in a Messages portlet.

3   In a web browser, log in to the portal to verify that the message categories appear as desired.

4   To completely remove any trace of this Operations View message category:

    a   Eliminate the category from all default portlet preferences, using the Administrator Tool to locate and correct all Messages portlet configurations.

b   Access the portal and find wherever the default portlet preferences
have been customized and correct their settings by using the portlet
edit pages.

Establishing Global Settings for Messages Portlets

There are global settings that affect all message categories in every instance of a Messages portlet.

OVO Management Server Settings (UNIX Only)

Configuration settings for each OVO management server are entered onto the OVO tab of the Management Stations configurations in the Administrator Tool. A few settings for the OVOU management servers have a global affect on all instances of the Messages portlet communicating with an OVOU management server. These settings are useful when troubleshooting issues and tuning performance:

- Minimum Connections

  The minimum number of connections to store in a pool shared by all Messages portlet instances when connecting to Oracle.

- Maximum Connections

  The maximum number of connections to store in a pool shared by all Messages portlet instances when connecting to Oracle.

- Maximum Cached Statements

  The maximum number of statements to cache in the Messages portlet.

See the online help within the Administrator Tool for more information.

Advanced Topic: OVOConfig.xml/dtd

The following is an example of the possible settings in the XML file OVOConfig.xml, and involves working with XML files. Making changes to this file should only be done by those comfortable making changes to XML files and applies to all OVO Messages portlets:

```
<OVOModuleConfig
      labelCacheRefresh="60"
      messageDisplayCount="50"

      editStyle="ovoEdit"
      summaryStyle="ovo"
      listStyle="ovo"
      detailStyle="ovo"
/>
```

The following attributes control the behavior of all Messages portlets:

- labelCacheRefresh (zero or greater): The number of minutes to wait before retrieving label values for MessageGroups, Nodes, and Services from the OVO database. Labels are retrieved for display within the Messages portlet. If no label can be found, the value in the id field is used until the next refresh cycle.

- messageDisplayCount (zero or greater): The default number of messages to show in the message list page. This can be overridden for a particular category by setting the displayCount attribute within a message category definition file.

The following style-related attributes are provided for backwards compatibility. They are no longer used and have no impact:

- summaryStyle

- listStyle

- detailStyle

- editStyle

See the comments in the OVOConfig.dtd and OVOConfig.xml files for more information.

To modify the OVOConfig.xml file, follow these steps:

1   Make a backup of the XML file before you make changes. If you edit the XML file and get incorrect XML syntax, you might want to revert to the previous version of the file.

2   Before you start, access the following file as a reference:

   • *Windows*: `<data_dir>\conf\dashboard\opview\share\portlet-config\ovo\OVOConfig.dtd`

   • *UNIX*: `/var/opt/OV/conf/dashboard/opview/share/portlet-config/ovo/OVOConfig.dtd`

3   In an ASCII or XML editor, open the `OVOConfig.xml` file, stored in the same location as the `OVOConfig.dtd` file.

4   Make your changes and save the file.

5   Validate the syntax of your XML files. Refer to the *Operations View Administrator Guide* for information on the `ovopviewxmlvalidate` tool provided with Operations View.

6   Log in to the portal as the appropriate user to ensure that you have the desired results.

4 Working with the Service Browser Portlet

HP OpenView Dashboard Operations View provides the Service Browser portlet for integrating with HP OpenView Service Navigator (OVSN).

This chapter describes how to create, configure, use, and customize the Service Browser portlet. For an overview of the portlet's functionality, see Chapter 1, Introduction to the OVO and OVSN Integrations.

The portal view development process includes a variety of tools:

1 Use the Operations View Administrator Tool to create the Operations View portlets within a portlet application. See Creating the Service Browser Portlet on page 70.

2 Use the Administrator Tool to perform initial configuration of the Operations View portlets. See Configuring the Service Browser Portlet on page 71.

3 Deploy the portlet application to the portal server. For information, refer to the *Operations View Administrator Guide*.

4 Use the portal server software tools to create a portal view that includes the Operations View portlets. For information, refer to the portal server software documentation.

5 In a web browser, view the portal view and customize the contained portlets. See Using the Service Browser Portlet on page 74.

   This is the only point at which end users can interact with the Operations View portlets. If you allow portlet customization, refer to the *Operations View Administrator Guide* for information about the scope and effects of portlet customization.

6 Use the Administrator Tool to maintain the Operations View portlet configurations. See Customizing the Service Browser Portlet on page 76.

Creating the Service Browser Portlet

Use the Administrator Tool to create the Service Browser portlet within an existing portlet application.

To create the Service Browser portlet, follow these steps:

1 In the Administrator Tool, click **File**→ **New**→ **Portlet**.

2 In the Add New Portlet window, enter the following information:

- Portlet Name: The name of the portlet as it appears in the portlet application in the scoping pane and in the portal server software tools.

- The portlet name must be unique, start with a letter or underscore character, and consist of only alphanumeric and underscore characters.

- Portlet Title: The name of the portlet as it appears in the portal server software tools and the portal view. Defaults to the portlet name.

- Description (optional): The portlet description as it appears in the portal server software tools.

- Portlet Type: Select OVSNBrowser from the list.

- Destination Portlet Application: Select the portlet application to contain the new portlet.

The new portlet appears in the selected portlet application in the scoping pane, and the configuration information for this portlet appears in the editor pane.

Configuring the Service Browser Portlet

For information on the Service Browser portlet configuration options, click **Help** at the bottom of the editor pane to view the online help page.

To configure the default settings for the Service Browser portlet, follow these steps:

1   In the scoping pane of the Administrator Tool, expand the Portlet Applications folder, expand the desired portlet application, and then click the name of the Service Browser portlet (named OVSNBrowser by default).

The editor pane displays the configuration for this portlet as shown here.

General Settings

Portlet Name*:   OVSNCards

Portlet Title*:   HP OVSN Service Cards

Portlet Class*:   com.hp.ov.portal.portlets.service.SvcCardPortlet

Description: Demo: HP OpenView Service Navigator Service Cards Portlet. Provides a view to the most im

Mime Type*:   text/html

Portlet Modes*:   ☑ VIEW   ☑ EDIT   ☑ HELP

OVSN Card Browser Portlet Edit

General Parameters | Services

Display Stylesheet*:   svccard_html.xsl

Help Content URI: /C/help/VPNavigator/cardView.jsp

Service Navigator System: hmxj5k3.cnd.hp.com   ▼

Ack/Own Operator Login: opc_op

Ack/Own Operator Password: ******

Confirm Ack/Own Operator Password: ******

☑ **Allow Details View Drill-down**

Priority of Filter Assignments:

AllData   Add

                                                         Move Up

                                                         Move Down

                                                         Remove

Save   Cancel   Help

2   In the General Settings area, make any desired changes.

3   On the General Parameters tab of the OVSN Card Browser Portlet Edit
    area, set the configuration options. At a minimum, specify the correct
    values for the following options:

    • Service Navigator System

    • Priority of Filter Assignments

    If HP OpenView Interconnect (OVI) is configured, also specify the correct
    values for the following options:

    • Ack/Own Operator Login

    • Ack/Own Operator Password (and Confirm Ack/Own Operator
      Password)

4   On the Services tab of the OVSN Card Browser Portlet Edit area, select
    the services to monitor.

5   Click **Save**.

Using the Service Browser Portlet

The Service Browser portlet displays a list of the top-level services or selected services currently defined in OVSN. To quickly locate and display a particular service or child service, use the search feature. The order of services can be easily changed by clicking the column title:

- **Sort by Status column**

  The first column on the left tells you how healthy your service currently is by displaying the current status. The status ranges from normal to warning, minor, major, and critical. Appendix A, Service Status describes the meaning of each color and gives a detailed explanation of each status. Click on this column title to sort the table by status.

  Clicking on the status icon in this column might or might not display the defined service properties (such as actions, propagation rules, and calculation rules as defined within OVSN). Access to service properties is configurable. By default, access to service details is disabled.

- **Sort by Label column**

  The second column from the left displays the label of the service. Click on this column title to sort the table by label. Clicking on an underlined service label displays the Service Browser with a list of the child services of this service.

- **Sort by Description column**

  The third column from the left displays a description of the service. Click on this column title to sort the services by description.

Figure 6 shows an example of the Service Browser portlet.

Figure 6   Deployed Service Browser Portlet
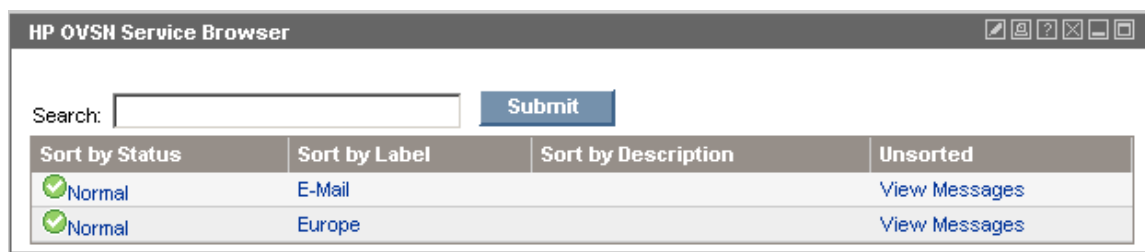
The Service Browser portlet includes the following features:

- Search box.

  To use the search feature, type a string in the Search box, and then click **Submit**.

  The search tool searches all service labels. Text strings in lowercase match words in any case. Search terms can be complete words, syllables, or single letters.

  The search results in a list of all services whose label or name matches the search term.

- Service table.

  The actual number and selection of services displayed in the Service Browser portlet depends upon the configuration settings of the Service Browser portlet (see Customizing the Service Browser Portlet on page 76) and the configuration of filtering for the current filter assignment (see Chapter 8, Filtering the OVO and OVSN Data for information about filtering).

Customizing the Service Browser Portlet

You can modify the Service Browser portlet in your portal view:

1   Access the portal view by logging on to the portal as a user with access to edit portlet preferences.

    The portlet must also have the EDIT mode enabled.

2   In the title bar of the Service Browser portlet, click the edit button.

3   Make any desired changes.

- Only one OVO/OVSN management server communicates with any Service Navigator portlet. This portlet instance gathers data from the first OVO management server listed in the Administrator Tool, *unless* you specify from which OVO management server to gather the data. Choose from the OVO management servers currently configured for communication with Operations View (see Chapter 2, Configuring the Operations View Connection to OVO and OVSN if you need to add one).

- To allow access to service properties (such as actions, propagation rules, and calculation rules as defined within OVSN), select the Allow Details View Drill-down check box.

- Choose the services to be displayed within the Service Browser portlet (either all top-level services or selected services).

  To select specific services, use **SHIFT+CLICK** or **CTRL+CLICK** to move groups of services from side to side. Only those services that pass the service list of the filter assignment used by the current portal user are displayed.

- Remove a service from the Service Browser portlet's displayed list.

- Change the display order of selected services.

4   Click **OK** to save the changes and return to the main portal page.

5   View the portal page to ensure that you have the desired results.

5 Working with the Service Cards Portlet

HP OpenView Dashboard Operations View provides the Service Cards portlet for integrating with HP OpenView Service Navigator (OVSN).

This chapter describes how to create, configure, use, and customize the Service Cards portlet. For an overview of the portlet's functionality, see Chapter 1, Introduction to the OVO and OVSN Integrations.

The portal view development process includes a variety of tools:

1 Use the Operations View Administrator Tool to create the Operations View portlets within a portlet application. See Creating the Service Cards Portlet on page 78.

2 Use the Administrator Tool to perform initial configuration of the Operations View portlets. See Configuring the Service Cards Portlet on page 79.

3 Deploy the portlet application to the portal server. For information, refer to the *Operations View Administrator Guide*.

4 Use the portal server software tools to create a portal view that includes the Operations View portlets. For information, refer to the portal server software documentation.

5 In a web browser, view the portal view and customize the contained portlets. See Using the Service Cards Portlet on page 82.

   This is the only point at which end users can interact with the Operations View portlets. If you allow portlet customization, refer to the *Operations View Administrator Guide* for information about the scope and effects of portlet customization.

6 Use the Administrator Tool to maintain the Operations View portlet configurations. See Customizing the Service Cards Portlet on page 84.

Creating the Service Cards Portlet

Use the Administrator Tool to create the Service Cards portlet within an existing portlet application.

To create the Service Cards portlet, follow these steps:

1 In the Administrator Tool, click **File→ New→ Portlet**.

2 In the Add New Portlet window, enter the following information:

- Portlet Name: The name of the portlet as it appears in the portlet application in the scoping pane and in the portal server software tools.

- The portlet name must be unique, start with a letter or underscore character, and consist of only alphanumeric and underscore characters.

- Portlet Title: The name of the portlet as it appears in the portal server software tools and the portal view. Defaults to the portlet name.

- Description (optional): The portlet description as it appears in the portal server software tools.

- Portlet Type: Select OVSNCards from the list.

- Destination Portlet Application: Select the portlet application to contain the new portlet.

The new portlet appears in the selected portlet application in the scoping pane, and the configuration information for this portlet appears in the editor pane.

Configuring the Service Cards Portlet

For information on the Service Cards portlet configuration options, click **Help** at the bottom of the editor pane to view the online help page.

To configure the default settings for the Service Cards portlet, follow these steps:

1   In the scoping pane of the Administrator Tool, expand the Portlet Applications folder, expand the desired portlet application, and then click the name of the Service Cards portlet (named OVSNCards by default).

    The editor pane displays the configuration for this portlet as shown here.

General Settings

Portlet Name*:   OVSNCards

Portlet Title*:   HP OVSN Service Cards

Portlet Class*:   com.hp.ov.portal.portlets.service.SvcCardPortlet

Description: Demo: HP OpenView Service Navigator Service Cards Portlet. Provides a view to the most im

Mime Type*:   text/html

Portlet Modes*:   ☑ VIEW ☑ EDIT ☑ HELP

OVSN Card Browser Portlet Edit

| General Parameters | Services |

Display Stylesheet*:   svccard_html.xsl

Help Content URI: /C/help/VPNavigator/cardView.jsp

Service Navigator System: hmxj5k3.cnd.hp.com   ▼

Ack/Own Operator Login: opc_op

Ack/Own Operator Password: ******

Confirm Ack/Own Operator Password: ******

☑ **Allow Details View Drill-down**

Priority of Filter Assignments:

AllData	Add
	Move Up
	Move Down
	Remove

Save   Cancel   Help

2   In the General Settings area, make any desired changes.

3   On the General Parameters tab of the OVSN Card Browser Portlet Edit area, set the configuration options. At a minimum, specify the correct values for the following options:

   • Service Navigator System

   • Priority of Filter Assignments

   If HP OpenView Interconnect (OVI) is configured, also specify the correct values for the following options:

   • Ack/Own Operator Login

   • Ack/Own Operator Password (and Confirm Ack/Own Operator Password)

4   On the Services tab of the OVSN Card Browser Portlet Edit area, select the services to monitor.

5   Click **Save**.

Using the Service Cards Portlet

Service cards show at a glance the most important information about a service. You can drill down to details about each service or to any of the child services. To quickly locate and display a particular child service, use the search feature on the details window.

The number and selection of service cards depends upon the configuration settings of the Service Cards portlet (see Customizing the Service Cards Portlet on page 84) and the configuration of filtering for the current portal user (see Chapter 8, Filtering the OVO and OVSN Data for information about filtering).

Figure 7 shows an example of the Service Cards portlet.

Figure 7   Deployed Service Cards Portlet

The Service Cards portlet includes the following features:

- **Title label of the service**
  Above the service icon, the title label of the service is displayed. If you click the icon, a Service Browser opens, displaying all children of the service. See Using the Service Cards Portlet on page 82.

- **Icon of the service**
  The color of the icon indicates the current status of the service. See Appendix A, Service Status for a description of the meaning of each color.

  If you click the icon, the details of the Service Properties (such as actions, propagation rules, and calculation rules as defined within OVSN) are displayed.

  Access to service details can be configured in portlet preferences. By default, user access to service details is enabled.

- **Description of the service**
  Below the icon, a description of the service is displayed. If no description is available, this is indicated as well.

- **Label of the service**
  To the right of the icon, the label of the service is displayed.

- **Status of the service**
  To the right of the icon, below the label of the service, the current status of the service is indicated.

Customizing the Service Cards Portlet

The Service Cards portlet lets you add individual services in a business card format.

You can modify the Service Cards portlet in your portal view:

1   Access the portal view by logging on to the portal as a user with access to edit portlet preferences.

    The portlet must also have the EDIT mode enabled.

2   In the title bar of the Service Cards portlet, click the edit button.

3   Make any desired changes. Click the help button for specific instructions:

    • Only one OVO management server communicates with any Service Navigator portlet. This portlet instance gathers data from the first OVO management server listed in the Administrator Tool, *unless* you specify from which OVO management server to gather the data. Choose from the OVO management servers currently configured for communication with Operations View (see Chapter 2, Configuring the Operations View Connection to OVO and OVSN if you need to add one).

    • To allow access to service properties (such as actions, propagation rules, and calculation rules as defined within OVSN), select the Allow Details View Drill-down check box.

    • Choose the services to be displayed as business card graphics within the portlet (either all top-level services or selected services).

      To select specific services, use **SHIFT+CLICK** or **CTRL+CLICK** to move groups of services from side to side. Only those services that pass the service list of the filter assignment used by the current portal user are displayed.

    • Remove a service from the Service Cards portlet's displayed list.

    • Change the display order of selected services.

4   Click **OK** to save the changes and return to the main portal page.

5   View the portal page to ensure that you have the desired results.

6 Working with the Service Graph Portlet

HP OpenView Dashboard Operations View provides the Service Graph portlet for integrating with HP OpenView Service Navigator (OVSN).

This chapter describes how to create, configure, use, and customize the Service Graph portlet. For an overview of the portlet's functionality, see Chapter 1, Introduction to the OVO and OVSN Integrations.

The portal view development process includes a variety of tools:

1 Use the Operations View Administrator Tool to create the Operations View portlets within a portlet application. See Creating the Service Graph Portlet on page 86.

2 Use the Administrator Tool to perform initial configuration of the Operations View portlets. See Configuring the Service Graph Portlet on page 87.

3 Deploy the portlet application to the portal server. For information, refer to the *Operations View Administrator Guide*.

4 Use the portal server software tools to create a portal view that includes the Operations View portlets. For information, refer to the portal server software documentation.

5 In a web browser, view the portal view and customize the contained portlets. See Using the Service Graph Portlet on page 90.

   This is the only point at which end users can interact with the Operations View portlets. If you allow portlet customization, refer to the *Operations View Administrator Guide* for information about the scope and effects of portlet customization.

6 Use the Administrator Tool to maintain the Operations View portlet configurations. See Customizing the Service Graph Portlet on page 92.

Creating the Service Graph Portlet

Use the Administrator Tool to create the Service Graph portlet within an existing portlet application.

To create the Service Graph portlet, follow these steps:

1   In the Administrator Tool, click **File→ New→ Portlet**.

2   In the Add New Portlet window, enter the following information:

   • Portlet Name: The name of the portlet as it appears in the portlet application in the scoping pane and in the portal server software tools.

   • The portlet name must be unique, start with a letter or underscore character, and consist of only alphanumeric and underscore characters.

   • Portlet Title: The name of the portlet as it appears in the portal server software tools and the portal view. Defaults to the portlet name.

   • Description (optional): The portlet description as it appears in the portal server software tools.

   • Portlet Type: Select OVSNServiceGraph from the list.

   • Destination Portlet Application: Select the portlet application to contain the new portlet.

The new portlet appears in the selected portlet application in the scoping pane, and the configuration information for this portlet appears in the editor pane.

Configuring the Service Graph Portlet

For information on the Service Graph portlet configuration options, click **Help** at the bottom of the editor pane to view the online help page.

To configure the default settings for the Service Graph portlet, follow these steps:

1   In the scoping pane of the Administrator Tool, expand the Portlet Applications folder, expand the desired portlet application, and then click the name of the Service Graph portlet (named OVSNServiceGraph by default).

The editor pane displays the configuration for this portlet as shown here.

General Settings

Portlet Name*:   OVSNServiceGraph

Portlet Title*:   HP OVSN Service Graph

Portlet Class*:   com.hp.ov.portal.portlets.service.SvcGraphPortlet

Description: Demo: HP OpenView Service Navigator Service Graph Portlet. Provides a hierarchical view of the

Mime Type*:   text/html

Portlet Modes*:   ☑ VIEW   ☑ EDIT   ☑ HELP

OVSN Graph Portlet Edit

| General Parameters | Services |

Display Stylesheet*:   svcgraph_html.xsl

Help Content URI: /C/help/VPNavigator/graphView.jsp

Service Navigator System: OVOStation ▼

Ack/Own Operator Login: opc_op

Ack/Own Operator Password: ******

Confirm Ack/Own Operator Password: ******

Priority of Filter Assignments:

AllData

| Add |
| Move Up |
| Move Down |
| Remove |

| Save | Cancel | Help |

2   In the General Settings area, make any desired changes.

3   On the General Parameters tab of the OVSN Graph Portlet Edit area, set the configuration options. At a minimum, specify the correct values for the following options:

- Service Navigator System

- Priority of Filter Assignments

If HP OpenView Interconnect (OVI) is configured, also specify the correct values for the following options:

- Ack/Own Operator Login

- Ack/Own Operator Password (and Confirm Ack/Own Operator Password)

4   On the Services tab of the OVSN Graph Portlet Edit area, select the services to monitor.

5   Click **Save**.

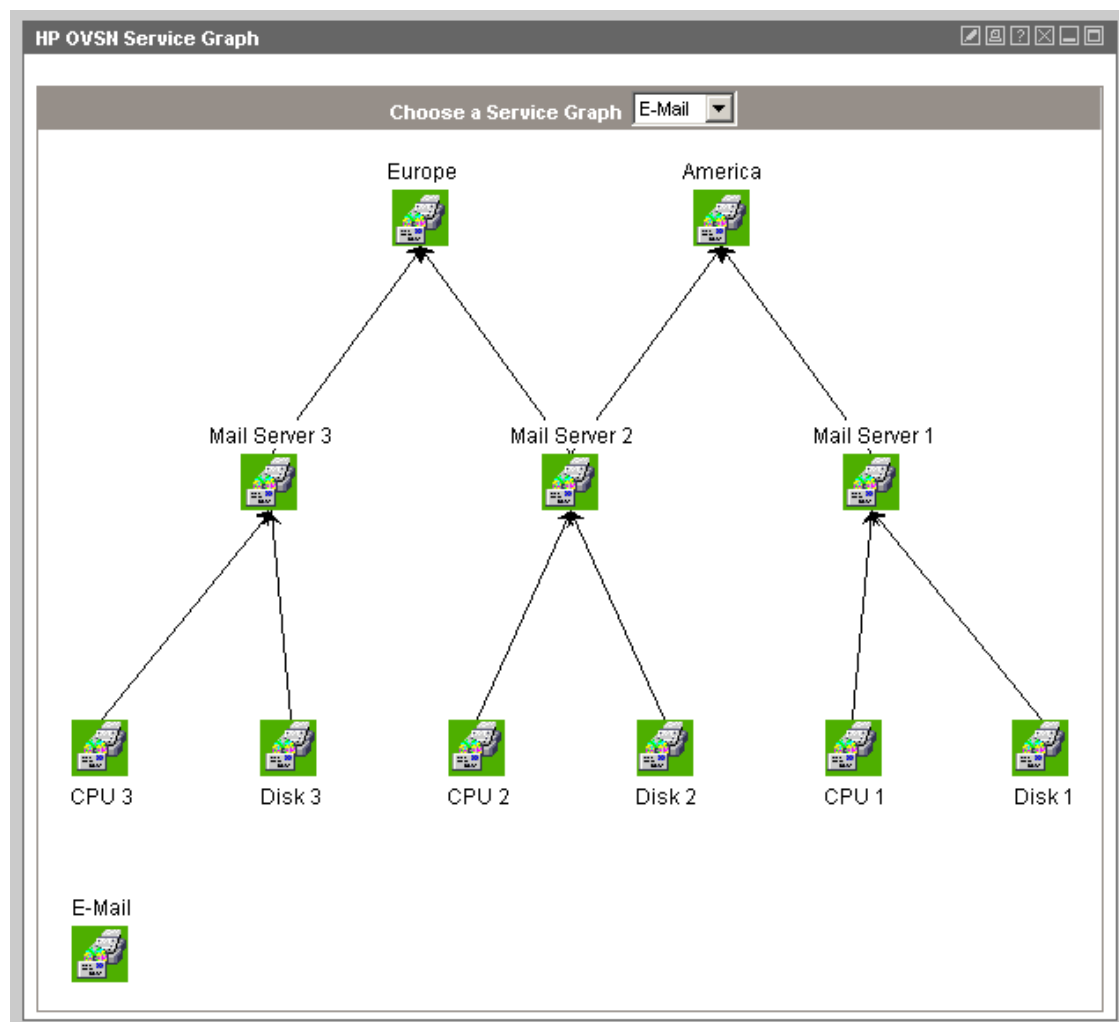# Using the Service Graph Portlet

The Service Graph portlet displays the OVSN service hierarchy in a graphical view. Service Graph also provides drill-down capability. You can click on any service to get a summary view of child services. To select a Service Graph, select a graph from the Choose a Service Graph box at the top of the Service Graph portlet.

The number and selection of available graphs depends upon the configuration settings of the Service Graph portlet (see Customizing the Service Graph Portlet on page 92) and the configuration of filtering for the current portal user (see Chapter 8, Filtering the OVO and OVSN Data for information about filtering).

Figure 8 shows an example of the Service Graph portlet.

▶ If there are more than 200 nodes in the selected service's hierarchy, the graph is automatically limited to a depth of three child-service layers.

Figure 8   Deployed Service Graph Portlet

Customizing the Service Graph Portlet

The Service Graph portlet provides a graphical view of the service hierarchy.

▶ Editing the portlet from your portal versus editing the portlet default preferences has a unique difference. The Administrator Tool allows you to set image sizes for the graph in default portlet preferences.

You can modify the Service Graph portlet in your portal view:

1 Access the portal view by logging on to the portal as a user with access to edit portlet preferences.

   The portlet must also have the EDIT mode enabled.

2 In the title bar of the Service Graph portlet, click the edit button.

3 Make any desired changes. Click the help button for specific instructions:

   • Only one OVO management server communicates with any Service Navigator portlet. This portlet instance gathers data from the first OVO management server listed in the Administrator Tool, *unless* you specify from which OVO management server to gather the data. Choose from the OVO management servers currently configured for communication with Operations View (see Chapter 2, Configuring the Operations View Connection to OVO and OVSN if you need to add one).

   • Choose the services to be displayed within the Service Graph portlet (either all top-level services or selected services).

      To select specific services, use **SHIFT+CLICK** or **CTRL+CLICK** to move groups of services from side to side. Only those services that pass the service list of the filter assignment used by the current portal user are displayed.
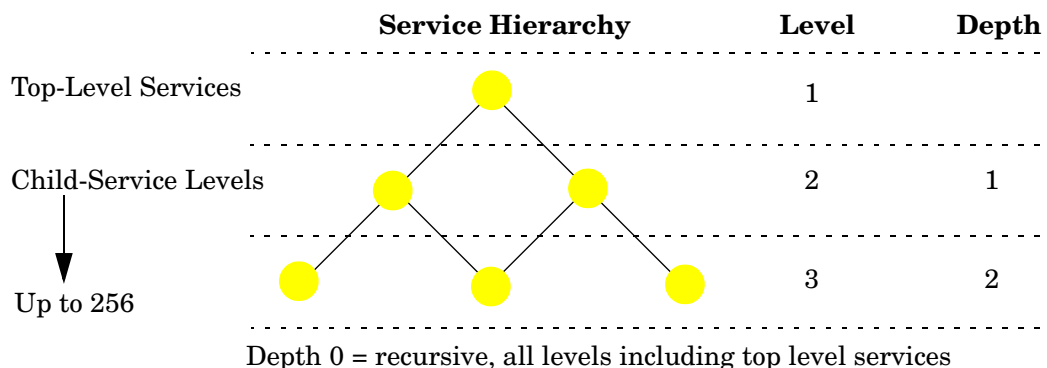
   • Remove a service from the Service Graph portlet's displayed list.

   • Change the display order of selected services.

   • Set the display depth for services.

4 Click **OK** to save the changes and return to the main portal page.

5 View the portal page to ensure that you have the desired results.

Additional Information Regarding the Service Graph Depth Setting

You can optionally specify how many of child-service levels (depth) to display in the graph. The depth is the number of child-service levels within the OVSN hierarchy that are allowed to display in your Operations View portlet. The depth value always indicates depth starting from level 2. For example:

- *(Default)* Depth of 0 stands for *recursive* and means that the portlet is allowed to display all service information.

- Depth of 1 means that the portlet is allowed to display service information from levels 1 and 2.

- Depth of 7 means the portlet is allowed to display service information from levels 1, 2, 3, 4, 5, 6, 7, and 8.

Figure 9   Deciding Upon the Child-Service Depth Setting

	Service Hierarchy	Level	Depth
Top-Level Services		1	
Child-Service Levels		2	1
Up to 256		3	2

Depth 0 = recursive, all levels including top level services

If there are more than 200 nodes in the selected service's hierarchy, the graph is automatically set at depth=3, three child-service layers.

7 Working with the Service Health Portlet

HP OpenView Dashboard Operations View provides the Service Health portlet for integrating with HP OpenView Service Navigator (OVSN).

This chapter describes how to create, configure, use, and customize the Service Health portlet. For an overview of the portlet's functionality, see Chapter 1, Introduction to the OVO and OVSN Integrations.

The portal view development process includes a variety of tools:

1   Use the Operations View Administrator Tool to create the Operations View portlets within a portlet application. See Creating the Service Health Portlet on page 96.

2   Use the Administrator Tool to perform initial configuration of the Operations View portlets. See Configuring the Service Health Portlet on page 97.

3   Deploy the portlet application to the portal server. For information, refer to the *Operations View Administrator Guide*.

4   Use the portal server software tools to create a portal view that includes the Operations View portlets. For information, refer to the portal server software documentation.

5   In a web browser, view the portal view and customize the contained portlets. See Using the Service Health Portlet on page 100.

    This is the only point at which end users can interact with the Operations View portlets. If you allow portlet customization, refer to the *Operations View Administrator Guide* for information about the scope and effects of portlet customization.

6   Use the Administrator Tool to maintain the Operations View portlet configurations. See Customizing the Service Health Portlet on page 102.

Creating the Service Health Portlet

Use the Administrator Tool to create the Service Health portlet within an existing portlet application.

To create the Service Health portlet, follow these steps:

1   In the Administrator Tool, click **File→ New→ Portlet**.

2   In the Add New Portlet window, enter the following information:

- Portlet Name: The name of the portlet as it appears in the portlet application in the scoping pane and in the portal server software tools.

- The portlet name must be unique, start with a letter or underscore character, and consist of only alphanumeric and underscore characters.

- Portlet Title: The name of the portlet as it appears in the portal server software tools and the portal view. Defaults to the portlet name.

- Description (optional): The portlet description as it appears in the portal server software tools.

- Portlet Type: Select OVSNSvcHealth from the list.

- Destination Portlet Application: Select the portlet application to contain the new portlet.

The new portlet appears in the selected portlet application in the scoping pane, and the configuration information for this portlet appears in the editor pane.

Configuring the Service Health Portlet

For information on the Service Health portlet configuration options, click **Help** at the bottom of the editor pane to view the online help page.

To configure the default settings for the Service Health portlet, follow these steps:

1 In the scoping pane of the Administrator Tool, expand the Portlet Applications folder, expand the desired portlet application, and then click the name of the Service Health portlet (named OVSNSvcHealth by default).

The editor pane displays the configuration for this portlet as shown here.

General Settings

Portlet Name*:	OVSNSvcHealth
Portlet Title*:	HP OVSN Service Health
Portlet Class*:	com.hp.ov.portal.portlets.service.SvcHealthPortlet
Description:	Demo: HP OpenView Service Navigator Service Health Portlet. Provides access to health informatio
Mime Type*:	text/html

Portlet Modes*:   ☑ VIEW   ☑ EDIT   ☑ HELP

OVSN Health Portlet Editor

General Parameters | Gauges | Gauge Edit

Display Stylesheet*:	svchealth_html.xsl
Help Content URI:	/C:/help/VPNavigator/healthView.jsp
Service Navigator System:	OVOStation
Ack/Own Operator Login:	opc_op
Ack/Own Operator Password:	******
Confirm Ack/Own Operator Password:	******

☑ **Allow Details View Drill-down**

Priority of Filter Assignments:

AllData

Add

Move Up

Move Down

Remove

Save   Cancel   Help

2   In the General Settings area, make any desired changes.

3   On the General Parameters tab of the OVSN Health Portlet Edit area, set the configuration options. At a minimum, specify the correct values for the following options:

  •   Service Navigator System

  •   Priority of Filter Assignments

  If HP OpenView Interconnect (OVI) is configured, also specify the correct values for the following options:

  •   Ack/Own Operator Login

  •   Ack/Own Operator Password (and Confirm Ack/Own Operator Password)

4   On the Gauges tab of the OVSN Health Portlet Edit area, configure the list of gauges to be displayed in the portlet.

5   On the Gauge Edit tab of the OVSN Health Portlet Edit area, make any desired changes.

6   Click **Save**.

Using the Service Health Portlet

The Service Health portlet displays gauges measuring the percentage of services in a particular state (health status) or set of states. Service health is scored as a percentage from 0-100.

Figure 10 shows an example of the Service Health portlet. Depending upon how the Service Health portlet is configured, you might see one or more gauges, with each gauge presenting different data.

Figure 10 The Service Health Gauges
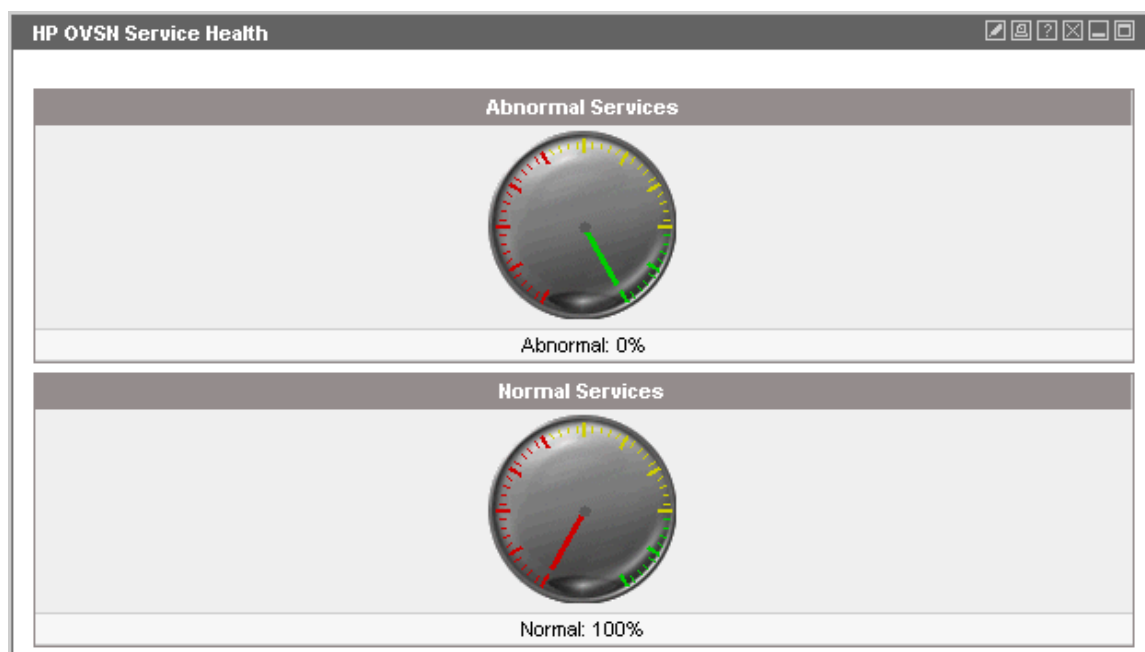
The Service Health portlet provides access to the following:

- The gauges indicate the percentage of all services being monitored that fall into the configured *status* category or categories. (See Appendix A, Service Status for an explanation of the status categories.)

   For example:

   — The first gauge in Figure 10 is measuring the percentage of all services that currently report *normal* status (operating as expected). The high reading of 83.15% means that your service environment is healthy; a high reading here is good. The scale used by the gauge is:

      – 0-40% = red/bad

      – 41-80% = yellow/warning

      – 81-100% = green/good

   — The second gauge in Figure 10 on page 100 is measuring the percentage of all services that currently report *critical* status (immediate corrective action required). The low reading of 3.37% means that a small number of services are probably not available at this time; a low reading here is good. The scale used by the gauge is:

      – 100-60% = red/bad

      – 61-20% = yellow/warning

      – 19-0% = green/good

- The gauge title is a link. Click the title to display details about what is being measured. For example, if the gauge is monitoring all services currently reporting a *critical* status, a list of all *critical* services is displayed.

- The gauge icon is a link. Click the gauge icon to display details about each possible status and how many services are currently reporting each status. (See Appendix A, Service Status for an explanation of the status categories.)

Customizing the Service Health Portlet

The Service Health portlet shows calculated service health in a gauge-like view.

You can modify the Service Health portlet in your portal view:

1   Access the portal view by logging on to the portal as a user with access to edit portlet preferences.

    The portlet must also have the EDIT mode enabled.

2   In the title bar of the Service Health portlet, click the edit button.

3   Make any desired changes. Click the help button for specific instructions:

    •   Only one OVO management server communicates with any Service Navigator portlet. This portlet instance gathers data from the first OVO management server listed in the Administrator Tool, *unless* you specify from which OVO management server to gather the data. Choose from the OVO management servers currently configured for communication with Operations View (see Chapter 2, Configuring the Operations View Connection to OVO and OVSN if you need to add one).

    •   To allow access to service properties (such as actions, propagation rules, and calculation rules as defined within OVSN), select the Allow Details View Drill-down check box.

    •   Create new health gauges to be displayed within the Service Health portlet. Click **Add** to advance to the Service Health Gauge Configuration page. Click the help button for specific instructions. For each gauge, you can select the following:

        —   Title: Enter or modify the title for your Service Health Gauge. This is the text that appears at the top of the gauge.

        —   Score Name: Enter a description of the score. This is the text that appears to the left of the percent (%) result at the bottom of the gauge. For example, if you type in "Normal", the results might be Normal: 83.7%

        —   Follow Service Tree Recursively: Controls how many levels of the tree are included in this gauge's calculation. A tree configuration of services and subservices is configured in your OVSN database.

If selected, all subservices (all levels of the tree) under any specified service are included in the calculation. Each service must pass the current filter assignment.

If not selected, only the specified services and their immediate child services are included in the gauge's calculation (one layer deep).

— Invert calculation: If a high percentage score is a bad thing, select this item. This setting controls which way the needle moves across the gauge.

If selected, the "inverted" scale is:

   100-60% = red/bad

   61-20% = yellow/warning

   19-0% = green/good

If not selected, the normal (not inverted) scale is:

   0-40% = red/bad

   41-80% = yellow/warning

   81-100% = green/good

— In the Service State Selection list, select the status settings (as received from OVSN) that should contribute toward this health calculation. For example, if you select Critical and Major, a resulting score of 5% means that 5% of your services are either in a critical or major state.

— In the Gauge - Service Selection section: Select either for the gauge's calculation:

Use all top-level services: To include all top-level services that pass the current filter assignment.

Use selected services: To specify a subset of services. Select services in the list and click **Add Service** and **Remove Service** until the Selected Services list contains all the services you want to include in this gauge's calculation formula. The selected services must pass the current filter assignment.

- Modify an existing health gauge. Select the gauge title, and then click **Modify** to advance to the Service Health Gauge Configuration page. Click the help button for specific instructions, or see the information for adding a new service gauge for specific settings.

- Remove a service from the Service Health portlet's displayed list.

- Change the display order of selected services.

4 Click **OK** to save the changes and return to the main portal page.

5 View the portal page to ensure that you have the desired results.

8 Filtering the OVO and OVSN Data

The HP OpenView Dashboard Operations View customer model allows you to associate resources (nodes and services) with o*rganizations*. These o*rganizations* are associated with portlets and portal users so that data is automatically filtered appropriately when a user displays any of the Messages or Services Navigator portlets. This process is required to enable the OVO/OVSN portlets.

Before you proceed, decide for which groups you need to filter data. For example, you might need to provide portals for several divisions within your company: accounting, marketing, R&D, legal, support. You could create node and service lists of the resources assigned to each of these organizations. Because of the assigned resource lists, each of these organizations could view the same instance of the Messages or Service Navigator portlets, yet see only the data appropriate for them.

The remainder of this chapter explains how to create node lists and service lists for use in your organizations.

➤ An even finer level of data control is available at the portlet-type or portlet-instance level. This finer level of control determines what the user *actually* sees in a particular portlet. For more information, see the chapter for each portlet. You can combine the Operations View customer model with this filtering to achieve the desired results in the Messages portlet and the Service Navigator portlets.

The Messages portlet responds to *both* node lists and service lists. The Messages portlet displays any data that passes *either* the node or service list (the union of the two sets). Service Navigator portlets respond only to service lists:

- **Node List elements**
  In the OVO message database, there is a `node` field and a `source node` field. The Operations View node list definitions key off of the `node` field.

- **Service List elements**

  If HP OpenView Service Navigator (OVSN) is installed and configured on your OVO/OVSN management server, the Operations View service list definitions key off of the currently defined `services`.

Your node lists and service lists can be defined in one or more customer model sources:

- Manually Creating Node List and Service List Filters on page 107
- Customer-to-Node Mappings on page 107
- Customer-to-Service Mappings on page 109

Operations View provides several tools that simplify the process of defining node lists by gathering the required data from the NNM object database (a component of OVO). If these tools might be useful in your particular situation, refer to the data filtering chapter in the *Operations View Integration Guide: NNM*.

You can also create your own program to generate your node lists and/or service lists from a data store or provisioning system, and express it in XML that conforms to the SimpleCustomerModel.dtd. Refer to the information on custom customer model sources in the *Operations View Administrator Guide*.

Manually Creating Node List and Service List Filters

The Operations View customer model allows you to associate lists of resources with organizations. This section explains how to create lists of nodes and lists of services specifically for use with the Messages and Service Navigator portlets. You can use one customer model source that contains all of your node lists and service list filters, or you can create customer model sources, each containing one of more of these filters. Your lists can be directly inserted into your organization definitions or inserted by reference

Customer-to-Node Mappings

To create node list filters that are associated with an organization in your customer model, do the following. These node list filters control which messages are displayed in the Messages portlet.

➤ The Operations View portlets that communicate with HP OpenView Network Node Manager (NNM) also are affected by this node list. See the *Operations View Integration Guide: NNM* for more information:

- Alarms portlet
- Network Device Health portlet
- Topology portlet

Determining Which Nodes to Add to the Customer Model

If you do not already know the fully-qualified hostname or IP address of the nodes to include in the node list filters, follow the steps appropriate to the OVO operating system to gather that information.

On the OVO for UNIX Management Server:

1   As `root`, run the `/opt/OV/bin/OpC/utils/opcnode` command to get a list of current `node` values in the OVO database:

   opcnode -list_nodes

   The following is an example of the output generated by this command for one database node value:

```
List of all Nodes in the ITO database:
===================================================================
Name          = serverName.div.co.com
Label         = serverName
IP-Address    = 192.168.1.1
Network Type  = MACH_S400, NETWORK_IP, CONSOLE_TEMPLATE, COMM_NCS
Machine Type  = MACH_HP11_PA_RISC
Comm Type     = MACH_S800, COMM_DCE_UDP
===================================================================
Operation successfully completed.
```

2   To list all nodes assigned to a specific group, run:

   opcnode -list_ass_nodes group_name=xx

   See the *opcnode.1m* manpage for more information.

3   Use this information when creating the node list filters on the Operations View server.

On the OVO for Windows Management Server

To establish communication between OVO and Operations View, you followed steps in Chapter 2, Configuring the Operations View Connection to OVO and OVSN to install an application called ovow2sip.aspx onto the OVOW management server. You can use this application to generate a list of nodes.

1   From a web browser on the OVOW management server, run the ovow2sip.aspx application as follows:

   http://*ovowserver*/ovow2sip.NET/ovow2sip.aspx?query=ListNodes

2   Use this information when creating the node list filters on the Operations View server.

Adding Node Lists to the Customer Model

To create a node list filter, do the following steps on the Operations View server:

1   In the scoping pane of the Administrator Tool, expand the Data Filters folder, expand the Customer Model Sources folder, expand the appropriate customer model source, and then select the organization to modify.

Alternatively, click **File**→ **New**→ **Organization** to create a new organization for this node list filter.

The editor pane displays the configuration for this organization. On the Nodes tab, you can work with the organization's default node list, create a new node list, remove an existing node list, or refer to a named node list defined elsewhere in your customer model sources.

2   *Optional*: Create a node list with a name that you can reference later when you are assigning node lists to a specific organization.

3   *Required*: For each node in this list, enter a fully-qualified hostname or IP address into the Name field.

4   Click **Save**.

You are now ready to associate these node list filters with other organizations in your customer model. You can also set up filter assignments to specify the portal users to which the organization applies. Refer to Chapter 10, Configuring Operations View Data Filters in the *Operations View Administrator Guide* for information.

Customer-to-Service Mappings

If OVSN is installed and configured on your OVO/OVSN management server, you *must* create a service list filter within each organization to enable the Service Navigator portlets.

HP recommends that you include only top-level services in your service lists. For each top-level service, you then specify the allowable depth (up to a maximum of 256 child-service levels).

Figure 11 Deciding Upon the Child-Service Depth Setting

Service Hierarchy	Level	Depth

Top-Level Services — 1

Child-Service Levels — 2 — 1

↓

Up to 256 — 3 — 2

Depth 0 = recursive, all levels including top level services
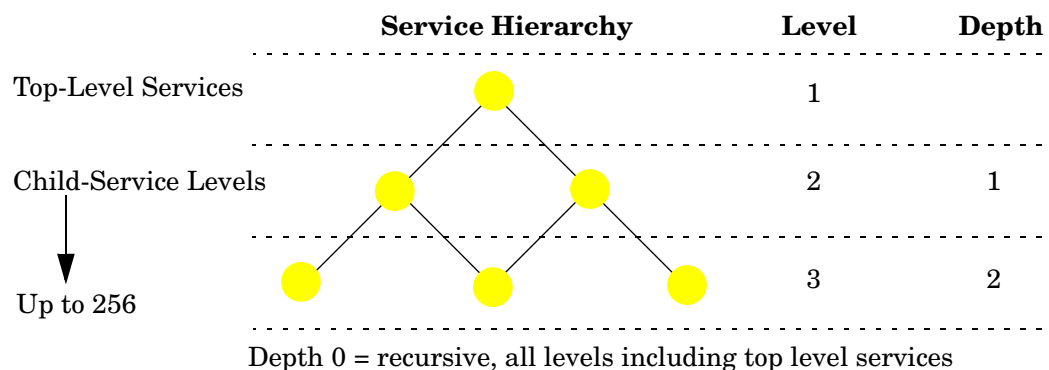
The depth is the number of child-service levels within the OVSN hierarchy that are displayed in the Service Navigator portlet. The depth value always indicates depth starting from level 2. For example:

- Depth of 0 or unset: Recursive. The Service Navigator portlets display all service information.

- Depth of 1: The Service Navigator portlets display service information from levels 1 and 2.

- Depth of 7: The Service Navigator portlets display service information from levels 1, 2, 3, 4, 5, 6, 7, and 8.

Determining Which Services to Add to the Customer Model

If you do not already know the names of the services that you want to include in your server list filters, follow the steps appropriate to the OVO operating system to gather that information.

On the OVO for UNIX Management Server:

As `root`, run the following commands to generate lists of currently configured services:

*   To generate a list of top-level services, run this command (in `/opt/OV/bin/OpC/`):
    opcservice -list

    The following is an example of the output generated by this command:

    Service: clusterapps
    Service: email
    Service: geo_orga

*   To generate a list of all services (top-level and child services), run this command (in `/opt/OV/bin/OpC/`):
    opcservice -list -recursive | grep Service: > *filename*

Use this information when creating the service list filters on the Operations View server.

On the OVO for Windows Management Server

To establish communication between OVO and Operations View, you followed steps in Chapter 2, Configuring the Operations View Connection to OVO and OVSN to install an application called ovow2sip.aspx onto the OVOW management server. You can use this application to generate a list of services.

1   From a web browser on the OVOW management server, run the ovow2sip.aspx application as follows:

    http://*ovowServer*/ovow2sip.NET/ ovow2sip.aspx?query=ListServices

    http://*ovowServer*/ovow2sip.NET/ ovow2sip.aspx?query=Listservices&includeDisplay=true

2   Use this information when creating the service list filters on the Operations View server.

Adding Services to the Customer Model

To create a service list filter, do the following steps on the Operations View server:

1   In the scoping pane of the Administrator Tool, expand the Data Filters folder, expand the Customer Model Sources folder, expand the appropriate customer model source, and then select the organization to modify.

Alternatively, click **File→ New→ Organization** to create a new organization for this node list filter.

The editor pane displays the configuration for this organization. On the Services tab, you can work with the organization's default service list, create a new service list, remove an existing service list, or refer to a named service list defined elsewhere in your customer model sources.

2   *Optional*: Create a service list with name that you can reference later when you are assigning service lists to a specific organization.

3   *Required*: For each service in this list, enter service name as defined in the OVSN database into the Name field.

4   *Optional*: Specify the depth for each service specification. Depth controls how many child-service levels are displayed in the Service Navigator portlets. If no depth is specified, the default is zero (0). Valid entries are as follows:

0 (or empty): Recursive. All levels of child services in the service tree pass through.

1 - 256: A specific number of child-service levels in the service tree pass through.

5   *Optional*: Specify the type for each service specification. This field is used by the Messages portlet and can be used for filtering within categories defined as service categories.

6   *Optional*: Specify a display string for each service specification. The display string appears as the service name in the Service Navigator portlets.

7   Click **Save**.

You are now ready to associate these service list filters with other organizations in your customer model. You can also set up filter assignments to specify the portal users to which the organization applies. Refer to the *Operations View Administrator Guide* for information.

A Service Status

Table 6 describes the meaning of each severity color.

Table 6   Service Status

Status	Color	Meaning
Critical	Red	A service-affecting condition has occurred and immediate corrective action is required.
Major	Orange	The severity of the problem is relatively high and normal use of the object is likely to be impeded.
Minor	Yellow	A problem of relatively low severity has occurred, which should not impede normal use of the object.
Warning	Cyan	A potential or impending, service-affecting fault has occurred. Action should be taken to diagnose and correct the problem.
Normal	Green	Message output is expected: for example, a process is starting or completing, or status information is displayed.

Index