

HP OpenView Internet Services Integration with Service Information Portal

Version: 3.1

Windows® 2000, HP-UX, and Solaris



Manufacturing Part Number: None

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Support

Please visit the HP OpenView web site at:

<http://openview.hp.com/>

There you will find contact information and details about the products, services, and support that HP OpenView offers.

You can go directly to the HP OpenView eCare web site at:

<http://support.openview.hp.com/>

The eCare support site includes:

- Downloadable documentation
- Troubleshooting information
- Patches and updates
- Problem reporting
- Training information
- Support program information

1 How OVIS Works with SIP

HP OpenView Internet Services and SIP

The HP OpenView Internet Services (OVIS) program lets you take a proactive approach to monitoring standard internet services such as HTTP, HTTPS, DNS, SMTP, and POP3. The integration of OVIS into HP OpenView Service Information Portal (SIP) offers a secure and highly customizable portal view of OVIS's current monitoring processes.

In OVIS and its integration with SIP, each internet service is modeled as a service type. OVIS monitors the following service types:

- TCP - TCP Port Service
- DHCP - Dynamic Host Addresses
- DIAL - Dial-up Networking Service
- DNS - Domain Name Server
- FTP - File Server
- HTTP - Web Pages
- HTTP_TRANS - Web Transactions
- HTTPS - Secure Web Pages
- ICMP - TCP/IP Availability (ping)
- IMAP4 - Email Service
- LDAP - Directory Service
- NNTP - News Service
- NTP - Network Time Service
- POP3 - Mail Server
- RADIUS - Authentication Service
- SMTP - Mail Service
- WAP - Wireless Service

OVIS collects information about these services and displays the data in SIP as a set of gauges, charts, and graphs. SIP communicates with OVIS and requests information for display through the gauges, or it requests that OVIS generate the images that SIP presents to the user.

SIP protects OVIS information by mapping a SIP user to an OVIS-defined *customer*. The SIP administrator sets up this mapping through SIP Role *property* settings. After the SIP Role properties are configured, the Internet Services module displays only information related to a specific OVIS customer. For more information about role properties, see “Establishing Communication Between OVIS and SIP” on page 16.

For more information about the OVIS software, such as establishing *customer* definitions, see the documentation that came with OVIS, such as the *Active Monitoring Concepts Guide*. All OVIS manuals are available online at the web site:

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

The Internet Services Module

You can easily perform a real-time export of information from OVIS through SIP. The Internet Services module offers a secure and highly customizable view of the internet services that OVIS monitors. You can:

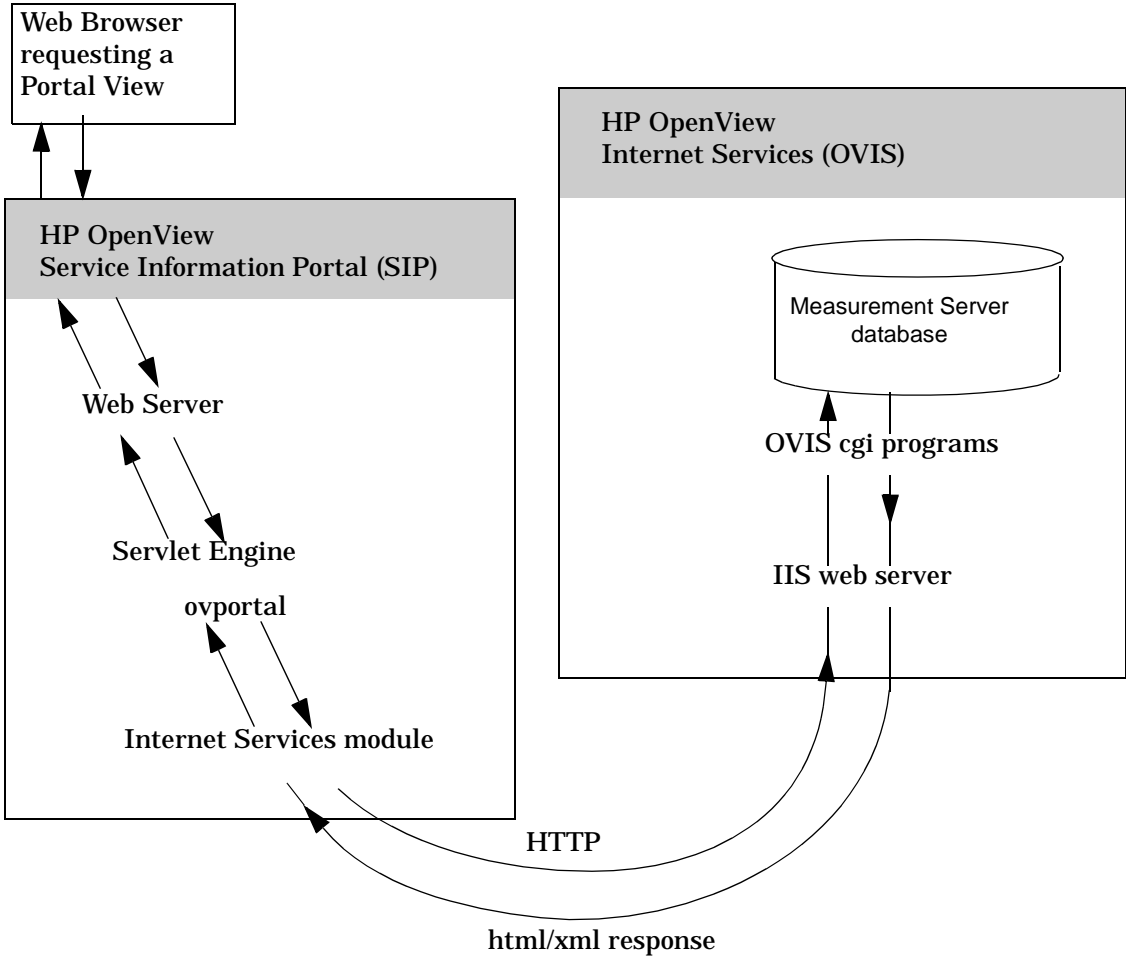
- View a “snapshot” for any OVIS customer and for any OVIS defined service (for example, HTTP, DNS, FTP).
- View detailed availability information and response time charts and graphs by clicking on the gauge icons.
- View detail on service-level violation reports.
- Customize which gauges, graphs, and charts are displayed.
- Select the time interval of gauges, charts, and graphs.
- Connect remotely to OVIS measurement servers.
- Use multiple instances of the Internet Services module simultaneously.
- Enable single-sign-on: Your customer logs into SIP and the system displays only the customer’s configured information from OVIS.
- Define mapping of a portal user to an OVIS customer.

Communication Paths Between OVIS and SIP

The following diagram illustrates the processes involved in communicating data from SIP to OpenView Internet Services and visa versa:

Figure 1-1 illustrates how OVIS works with SIP.

Figure 1-1 Communication Process for the Internet Services Module



Installation of the Service Information Module

SIP can run on Windows 2000, HP-UX, or Solaris and can communicate with multiple OVIS measurement servers running on any combination of Windows NT or Windows 2000. You configure each SIP role to communicate with one defined OVIS *customer* and a default OVIS measurement server. Within SIP's Internet Services module, you can override the default OVIS measurement server; however, you must ensure that the same OVIS *customer* definition is available on the new OVIS measurement server.

The Internet Services module for SIP is automatically installed with the Service Information Portal software. If you have not already installed SIP, see the SIP *Installation Guide* ([SIP_Install_Guide.pdf](#)) for SIP installation instructions, and OVIS version and patch requirements.

Before using the module, you must configure SIP and OVIS to communicate with each other. See "Establishing Communication Between OVIS and SIP" on page 16.

2 Configuration Steps

Establishing Communication Between OVIS and SIP

To establish communication between your OVIS measurement servers and SIP, you need to take the following steps on each OVIS measurement server and on the SIP server.

SIP can run on Windows 2000, HP-UX, or Solaris and can communicate with multiple OVIS measurement servers running on any combination of Windows NT/2000 (the probes that supply data to OVIS can run on Windows NT/2000, HP-UX, Solaris, and/or Linux).

On the OVIS Measurement Server

NOTE

Verify that you are using a version of HP OpenView Internet Services that is supported by SIP, see the *SIP Installation Guide* ([SIP_Install_Guide.pdf](#)) for the list of supported product versions.

HP OpenView Internet Services 3.x, you *must* run OVIS in non-restricted mode before SIP can collect the desired information.

HP OpenView Internet Services 4.x, you can run OVIS in *either* restricted mode or non-restricted mode.

To verify or change modes, use the OVIS Configuration Manager:

1. Click `File:Configure->Restricted Views`.
2. Uncheck the `Enable Restricted Views` option.

SIP enforces security by mapping SIP Roles to OVIS *customer* settings. The Internet Services module only displays data for the specified OVIS *customer*. Make note of the currently defined OVIS *customer* settings and their respective *passwords*, if applicable. You must use this information in the following section.

You can use the OVIS Configuration Manager to view the current list of customer/password pairs.

For more information about configuring *customers* within OpenView Internet Services, itself, see the documentation set that comes with OVIS. All OVIS manuals are available online at the web site:

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

On the SIP Server

To enable communication between SIP and OVIS, you need to associate *properties* with SIP Roles and establish the OVIS measurement server configuration settings.

1. On the SIP server, open the SIP Configuration Editor:

Windows 2000: Start:Programs:HP OpenView->Service Information Portal->Configuration Editor

UNIX: /opt/OV/SIP/bin/SIPConfig

2. In the SIP Configuration Editor, navigate to your Management Stations definitions.

3. To add a new OVIS measurement server, right-click the title Management Stations, select New. Type in the fully-qualified host name of the OVIS measurement server.

To add OVIS settings to an existing management station, right-click the name of the management station, and select Properties.

4. In the Properties dialog box, navigate to the OVIS tab.
5. Select OVIS Is Installed On This System.
6. Select Access OVIS Using http and verify that the default HTTP Port Number matches the port number configured on your OVIS measurement server. This specifies the http port that SIP uses to contact the OVIS measurement server. The default is 80. Change the number, if necessary. See “Secure Socket Layer (SSL) Support” on page 21.
7. Repeat from step 2 for each OVIS measurement server with which SIP should communicate.
8. Navigate to your Role definition (other than SIP Administrator).
9. Right-click the role name and select Properties.
10. Move to the Properties tab and enter the three properties shown in Table 2-1 for this role.

Only one set of OVIS properties are allowed per role.

For more information about configuring SIP roles, see the *SIP Deployment and Integration Guide*, “Creating Users and Roles” ([SIP_Deployment_Integration.pdf](#)). This document also provides detailed information about the elements and attributes of the `UserRole.dtd` file.

Table 2-1

Name	Value
VPIS.server	Enter the fully-qualified hostname of the OVIS measurement server that is the default server for this role (can be overridden at the module instance level).
VPIS.customer	Enter the OVIS <i>customer</i> name (exactly as configured within the OVIS database).
VPIS.password	<p>If your OVIS measurement server runs in restricted mode (skip this property pair if OVIS is <i>not</i> running in restricted mode):</p> <p>Enter this OVIS customer's <i>password</i> (exactly as configured within the OVIS database). The password is supplied to OpenView Performance Manager's <code>Analyzer.exe cgi</code> program.</p> <p>OVIS has two types of passwords. You can enter either type of password as the value of <code>VPIS.password</code>:</p> <ul style="list-style-type: none"> • A single Administrative “All Customer” password allows access to data for any customer. • A password defined for each OVIS customer allows access to data for that customer.

11. Repeat from step 8 for each SIP Role that is allowed to view the Internet Services module.
12. Save your changes and exit the SIP Configuration Editor.
13. You can now add the “Internet Services” module to the desired portal tab.

SIP Distribution Model

SIP can be configured in a tiered distribution model. For example:

- Web Browser Tier
- Web Server Tier
- SIP Server Tier
- Management Server Tier

For more information about the tiered distribution model, see the “Distribution Model” section of the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf).

The web browser to SIP server communication can go through a firewall and only requires HTTP or HTTPS.

The SIP server to OVIS measurement server communication can also go through a firewall, if desired. The port that needs to be opened through the firewall to gather data for the Internet Services module is specified through the SIP Configuration Editor program, Management Station configuration settings, on the OVIS tab (see “On the SIP Server” on page 17).

Table 2-2 **Port Requirements for SIP to OVIS Communication**

Protocol	Default Port	Configuration Location
http	80	On the SIP server, use the SIP Configuration Editor to configure protocol and port (OVIS tab for management stations).

Running in Languages Other Than English

Following are required configuration tasks to prepare the Internet Services module to operate in non-English language mode.

For information about configuring SIP and your web browser for non-English language mode, see the *SIP Deployment and Integration Guide* (*SIP_Deployment_Integration.pdf*), “Running SIP in Non-English Language Mode” section.

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

Configuring SIP to Access UTF-8 Data From OVIS

OVIS does not use the UTF-8 character set that is required by SIP. SIP still displays data from OVIS running in languages other than English, provided that you take the following precautions.

1. On the SIP server, when entering the OVIS property pairs into SIP configuration settings, use only ASCII characters (“On the SIP Server” on page 17).
2. On the OVIS measurement server:
 - You must ensure that the OVIS *customer* names that SIP accesses are configured with ASCII characters.
 - If running OVIS in restricted mode, you must ensure that the OVIS customer *passwords* are configured with ASCII characters.

NOTE

In SIP’s Internet Services module, the graph’s X- and Y-axis titles always appear in English at this time.

Secure Socket Layer (SSL) Support

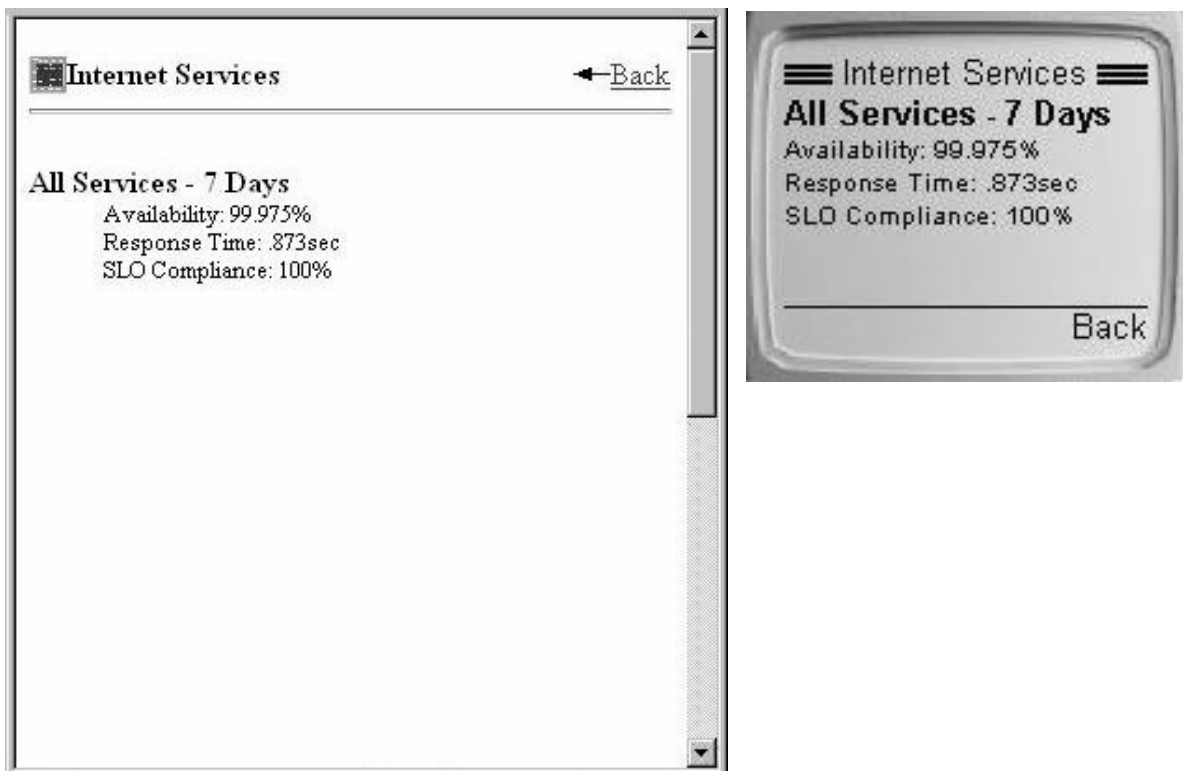
The SIP server to OVIS measurement server communication cannot be configured to use Secure Socket Layer (SSL) at this time.

Running the Internet Services Module in a Wireless Environment

If you configure SIP for portals that are accessed through wireless devices, the Internet Services module is displayed as shown below. See the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf) for general information about setting up SIP to run on wireless devices.

Less information is displayed in wireless environments than in the full HTML web version of the module. Only gauge data is displayed (no chart or graph data). No links to details are available with the PDA (hand-held device) or WML (cell phone) display types.

Figure 2-1 PDA and WML Format for Gauges in the Internet Service Module

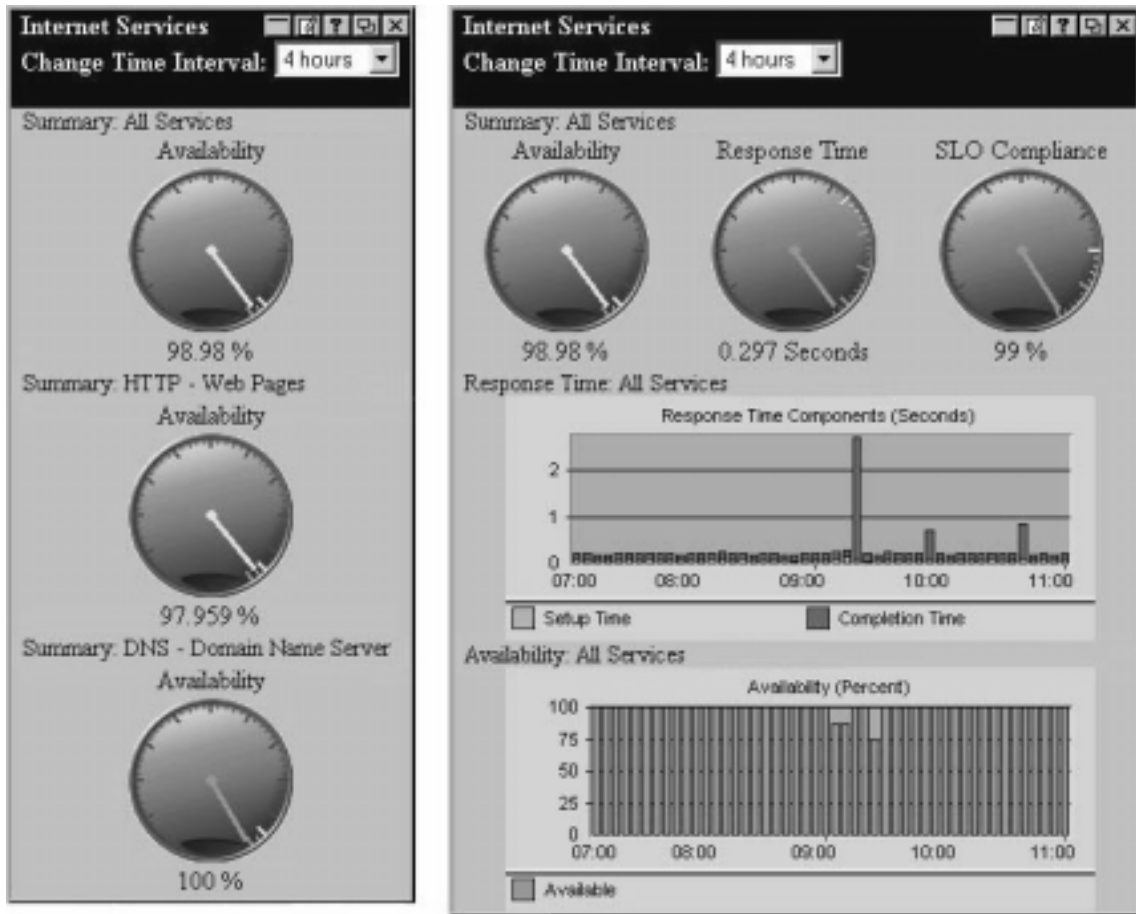


3 The Internet Services Module

Using the Internet Services Module

The Internet Services module shows, at a glance, the most important information about a service. Figure 3-1 shows a couple examples of the Internet Services module.

Figure 3-1 The Internet Services Module

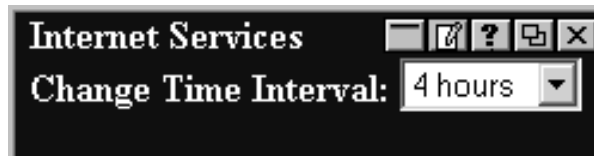


The **Change Time Interval** drop-down list in the title bar of the Internet Services module lets the user select a different time interval for the current session's display. After logging off and logging back into SIP, the Internet Services module reverts to the *default* time interval.

For information about how to change the default time interval, see “Editing the Internet Services Module” on page 29.

Figure 3-2

Change Time Interval



For each service type, the following information from OVIS can be displayed in the Internet Services module:

- Availability gauge — Is the service available?
- Response Time gauge — How quickly is the service responding to requests?
- Service Level (SLO) Compliance gauge — Have the OVIS service objectives been met?
- Response Time Components graph — What is the response time of the service and its subcomponents over the last specified time period?
- Availability history graph — Has the service been available over the past couple hours or weeks?
- Service Level Violations graph — Which services have not met the defined objectives?

The Gauges

Each gauge represents a summary of subcomponent information. Click on a gauge icon to view information organized into the following categories:

- **Service Groups** — Displays a breakdown of the target groupings that are included in a service type. For example, in OVIS, you can split your HTTP web servers into three or more groups. The response time, availability, and service-level violations are reported for each group of web servers.
- **Customers** — Displays performance, availability, response time, and service-level violations by customer.
- **Work Shifts** — Displays availability, response time, and service-level violations over different periods of time.

Figure 3-3 The Gauges



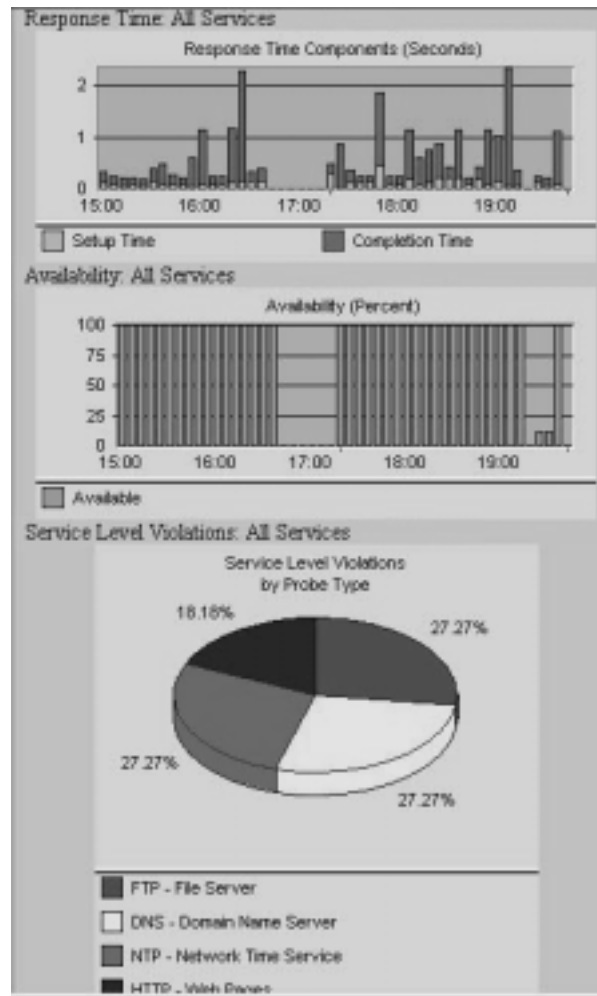
Click on a gauge
to view its details

The Graphs

The Response Time, Availability, and Service-Level Violation graphs provide information relevant to the service type.

Figure 3-4

The Graphs



Adding the Internet Services Module

To insert the Internet Services module into a portal view:

1. Access the portal view by logging on to SIP as a user with access to the appropriate role. If this user has access to multiple roles, switch to the appropriate role.

Your currently assigned SIP role must have `ViewAdmin` editing permissions.

2. Navigate to the appropriate tab.
3. At the bottom of any narrow column or any wide column, either:
 - Select `Internet Services` from the `Select Module to Add` list box, and click `[Add]`, or
 - Click `[Edit]` to access the `Edit Column` page. Insert the `Internet Services` module and place it into the desired location among other modules in the column. Click `[OK]` to save the changes and return to the main portal page.

A copy of the default Internet Services module is inserted into your `PortalView.xml` file.

- If you want to modify this module instance, turn to “Editing the Internet Services Module” on page 29.
- If you want to change the default module, see “Relevant Files” on page 35.

If you have more than one OVIS measurement server configured to communicate with SIP, the default OVIS measurement server (as configured for the current SIP Role) is accessed. You can override the default OVIS measurement server selection, see “Editing the Internet Services Module” on page 29. (See “Establishing Communication Between OVIS and SIP” on page 16 for information about setting the *default* OVIS measurement server for a particular SIP Role.)

TIP

If you want to add a module to the list of available modules, see “Relevant Files” on page 35. You can create and add another instance of any module.

Editing the Internet Services Module

Using the Internet Services - Edit Page

You can easily modify the Internet Services module in your portal view:

1. Access the portal view by logging on to SIP as a user with access to the appropriate role. If this user has access to multiple roles, switch to the appropriate role.

Your currently assigned SIP role must have ViewAdmin editing permissions.

2. Navigate to the appropriate tab.
3. In the Internet Services module, click the edit button:



The Internet Services - Edit page appears. Click [Help] for specific instructions.

Figure 3-5 Internet Services - Edit Page

The screenshot shows the 'Edit' page for Internet Services. At the top, there is a 'Select OVIS Management Station' dropdown menu with 'sleamboat.cnd.hp.com' selected. Below it is a 'Default Time Interval' dropdown menu set to '4 hours'. There is also an 'Available Service Types' dropdown menu set to 'All Services' with an 'Add' button next to it. The main part of the page is a table with the following columns: Row, Service Type, Availability Gauge, Response Time Gauge, Service Level Gauge, Response Time Components, Availability History, and Service Level Objectives By Probe Type. The first row is for 'All Services' and has checkboxes for each of the remaining columns, all of which are checked. To the right of the table are three buttons: 'Delete Row', 'Move Row Up', and 'Move Row Down'. At the bottom of the page are three buttons: 'OK', 'Cancel', and 'Help'.

Row	Service Type	Availability Gauge	Response Time Gauge	Service Level Gauge	Response Time Components	Availability History	Service Level Objectives By Probe Type
1	All Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

4. To override the default OVIS server, select an available server from the Select OVIS Management Station drop down list.

By default, SIP contacts the OVIS measurement server specified in the current SIP Role's properties (see "On the SIP Server" on page 17). SIP gathers OVIS data from the selected server.

NOTE

If you override the default OVIS measurement server, the exact OVIS *customer/password* Role properties associated the current SIP Role must match configuration settings on the specified OVIS measurement server. SIP only gathers data from OVIS measurement servers that return the correct customer/password combination.

5. To change the `Default Time Interval`, select a time interval from the drop down list. Sets of service measurements (gauges and graphs) are provided for each specific time interval, such as "the last four hours" or "the last hour." This `Default Time Interval` setting determines which set of service measures (gauges or graphs) are visible to your customers when they first log into their portal view. The specified time interval applies to all service measures within this instance of the Internet Services module.

The new default value does not take effect until you log off and log back into the portal. This default time is used unless another time interval is temporarily selected from the `Change Time Interval` drop-down list within the Internet Services module during a viewing session.

You can add the Internet Services module multiple times to the same portal view. Each module can have a different default time interval.

6. To select a service whose graphs and/or gauges you wish to display, select an available service type from the drop-down list, then click [Add].

Your selection appears in the table.

NOTE

You can add any number of service types. You can also add the same service type more than once and select different information to be displayed in each module instance. However, the more services you choose, the slower the modules display.

7. To configure specific gauges and graphs:

- **Specify the information to display:** Click the check box underneath the availability, response time, and/or service level objective data you want to display.
- **Delete the service type:** Select the row, then click [Delete Row].
- **Move the row:** Select the row, then click either [Move Row Up] or [Move Row Down].

TIP

To vertically display the multiple gauges from a single Service Type, insert multiple rows for the same service type. Then, uncheck all gauges except one in each row.

8. To save the changes and return to the main portal page, click [OK].
9. Log off of the SIP portal.
10. Log into the SIP portal as the appropriate user to ensure that you have the desired results.

Directly Editing the PortalView.XML Files

TIP

For the following adjustments, you must edit the XML file. It is recommended that you use the *Internet Services - Edit page* for all other editing changes.

- Change the displayed title for this module instance.
 - Add your own online help to the [?] button for this module.
-

To directly modify the XML code for an Internet Services module:

1. Make a backup of XML files before you make changes. If you edit the XML file and get incorrect XML syntax, you may want the ability to revert to the previous version of the file.
2. Open your *PortalView.xml* file with an ASCII or XML editor. Portal view files are stored in the following directory or subdirectories below this one:

Windows 2000: %SIP_HOME%\conf\share\views

UNIX: /opt/OV/SIP/conf/share/views

If a portal view file does not yet exist, see the “Customizing Portal Views” section of the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf) and follow the procedure for creating a portal view.

3. Search for the following string to find your existing module to edit:

```
classid="com.hp.ov.portal.modules.vpis"
```

Module instances are wrapped in the `ModuleInstance` element. The `ModuleInstance` `id` must be unique among all module instances in the portal view file. For information about the `ModuleInstance` element, see the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf), “PortalView DTD” section.

For example:

```
<ModuleInstance
  classid="com.hp.ov.portal.modules.vpis"
  display="yes"
  help="/OvSipDocs/C/help/VPIS/VPISView.html"
  id="module4"
  rollupState="down"
  title="Internet Services">
</ModuleInstance>
```

4. Copy the following text into the XML file, between the `ModuleInstance` starting and closing tags. Alternately, copy the contents from this module’s default XML file (see “Relevant Files” on page 35):

```
<VPIS days="0" hours="4" mgmtStationRef="">
  <ServiceType
    name="All Services"
    availability="yes"
    availabilityReport="yes"
    responseTime="yes"
    responseTimeComponents="yes"
    serviceLevelViolations="yes"
    serviceLevelViolationsReport="yes"
  />
</VPIS>
```

See the comments in the `OVVPIS.dtd` file for more information about the correct XML syntax:

- *Windows 2000*: %SIP_HOME%\conf\share\views\OVVPIS.dtd
 - *UNIX*: /opt/OV/SIP/conf/share/views/OVVPIS.dtd
5. To change the title of this Internet Services module instance, change the title attribute: <ModuleInstance title="new title">

To change the title of all Internet Services modules, change the title attribute in the registration file, see “Relevant Files” on page 35.

6. To launch your own help topic from the module’s [?] button, insert the help attribute into the <ModuleInstance>:

```
help="/OVSipDocs/C/help/VPIS/topic.html"
```

Replace *topic.html* with the name of your help file. The help attribute allows you to override the default help URL defined in the module registration file. See the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf), “Adding and Customizing Module Help Topics” for more information about writing your own online help.

7. To specify the default time interval setting:

```
<VPIS days="0" hours="4" >
```

For days, possible values are 0, 1, 2, 4, 7, or 30.

For hours, possible values are 1, 2, 4, 6, 8, or 12.

NOTE

If you enter a value greater than 0 for days, the hour value is ignored.

8. To contact an OVIS measurement server other than the default server for the current SIP Role, enter the OVIS measurement server’s fully-qualified hostname into the `mgmtStationRef` attribute. You must configure this OVIS measurement server within the SIP Configuration Editor program (see “Establishing Communication Between OVIS and SIP” on page 16).

NOTE

If you override the default OVIS measurement server, the exact OVIS *customer/password* Role properties associated the SIP Role must match configuration settings on the specified OVIS server. SIP only gathers data from OVIS measurement servers that return the correct customer/password combination.

9. To add a new service, copy the <ServiceType> block and paste it below the old one:

- The name attribute (for example name="All Services") needs to match one of the service types available for display (see page 10 for the list of available service types).
- Enter "yes" for the gauges or charts you want to display, and "no" for those you do not want to display.

Table 3-1

ServiceType Attribute	Displays the Internet Services Module:
availability	Availability gauge
responseTime	Response Time gauge
serviceLevelViolations	Service Level Compliance gauge
responseTimeComponents	Response time graph
availabiltyReport	Availability history graph
serviceLevelViolationsReport	Service Level Violations graph

10. Place the <ServiceType> blocks in the order in which they should be displayed in the module.
11. Save the XML file.
12. After you make modifications to XML files, validate the syntax. See "Validating XML Files" on page 49 for more information.
13. Log into the SIP portal as the appropriate user to ensure that you have the desired results.

Relevant Files

The Internet Services module must follow the rules defined in the following DTD files. See the comments in the DTD files for an explanation of each element used in the XML files:

- `mgmtStations.dtd` & `ovisConfig.dtd` & `mgmtStations.xml`

This XML file configures communication between OVIS measurement servers and Service Information Portal servers. Use the SIP Configuration Editor to make changes to this XML file. See the “Establishing Communication Between OVIS and SIP” on page 16.

- `OVMModuleRegistraton.dtd` & `OVRRegVPIS.xml`

This XML file grants access to the Internet Services module through the SIP framework so that it is available for your use. To add another instance of the Internet Services module to the SIP module selection list, you copy and rename the `OVRRegVPIS.xml` and the `OVDDefaultVPIS.xml` files. Then update the description, title, classid, help, and `defaultConfigXML` attribute values in the new registration file.

If you make any changes to a registration file, you must follow the directions in “Restarting the Servlet Engine” on page 44.

- `OVPIS.dtd` & `OVDDefaultVPIS.xml`

This DTD defines the rules for configuring any Internet Services module. The XML file contains the *default* Internet Services module. The contents of the default file are inserted into your portal each time you use the [Add] button to insert the Internet Services module.

You can modify the `OVDDefaultVPIS.xml` file to meet your needs. Either:

- Directly edit the XML code in the `OVDDefaultVPIS.xml` file, or
- Insert a Internet Services module into any portal. Modify the module to meet your needs. Then, copy the modified XML code for the module from your portal view file, and paste it into the `OVDDefaultVPIS.xml` file.

Relevant Files

See “Directly Editing the PortalView.XML Files” on page 31 for more information

- InsightTemplate.dtd & Graphs.xml

These are the definition files for formatting the graphs used by the Internet Services module. Do not modify these files.

PortalView.dtd & PortalView.xml

This DTD provides the rules for formatting the XML code in your portal view files. See the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf), “Customizing Portal Views” section for more information about creating portal view files.

- /htdocs/C/help/VPIS/*.html

This directory contains help topics for this module, and can be accessed by clicking [?] on the module title bar. If you want to supply your own customized help files, see the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf), “Adding and Customizing Module Help Topics” section.

Table 3-2 Internet Services Module Files on the SIP Server

File Name	Windows 2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
mgmtStations.dtd	conf\share\stations\	conf/share/stations/
ovisConfig.dtd	conf\share\stations\	conf/share/stations/
mgmtStations.xml	conf\share\stations\	conf/share/stations/
OVMModuleRegistration.dtd	registration\	registration/
OVRRegVPIS.xml	registration\	registration/
OVVPIS.dtd	conf\share\views\	conf/share/views/
OVDDefaultVPIS.xml	registration\defaults\	registration/defaults/
InsightTemplate.dtd	conf\share\modules\ovis\ \	conf/share/modules/ovis/ /
Graphs.xml	conf\share\modules\ovis\ \	conf/share/modules/ovis/ /

Table 3-2 Internet Services Module Files on the SIP Server (Continued)

File Name	Windows 2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
PortalView.dtd	conf\share\views\	conf/share/views
<i>PortalView.xml</i>	conf\share\views\	conf/share/views
*.html	\htdocs\C\help\VPIS	htdocs/C/help/VPIS

4**Segmenting OVIS Data by
Customer**

Creating a Customer Model Source

SIP allows you to associate resources with customers so that data is automatically filtered appropriately when a user displays the Internet Services module.

The Internet Services module filtering is accomplished through the *customer* configuration on the OVIS measurement server.

The SIP Role Properties point to a specific OVIS *customer* configuration. The Internet Services module displays only the data assigned to the specified OVIS customer. See “Establishing Communication Between OVIS and SIP” on page 16.

5 Display Filtering for OVIS

Introduction to Display Filtering

Some SIP modules support display filters that allow a subset of the assigned *customer* data to be visible in a particular module instance.

The Internet Services module does not support display filtering. All filtering is accomplished through the assigned *customer* configuration on the OVIS measurement server (Chapter 4, “Segmenting OVIS Data by Customer,” on page 39).

A Restarting Tomcat

Restarting the Servlet Engine

After making certain configuration changes, you must restart the servlet engine before changes take effect:

- After adding or changing a module registration file.
- After making changes to the authentication provider configuration.
- In other situations where you are specifically instructed to do so.

To Restart the Servlet Engine from the SIP Administration Pages

Be aware that you and all other SIP users will be logged out when you restart the servlet engine.

1. Log in as a user who has access to a special SIP Administrator role. For more information, see “Understanding Special SIP Administrator Roles” in the *SIP Deployment and Integration Guide* (SIP_Deployment_Integration.pdf).
2. Switch to the SIP Administrator role, if it is not already displayed.
3. Click the SIP General Admin tab.
4. In the Servlet Engine Control segment, click [Restart].

To Restart the Servlet Engine from Outside of SIP

Windows 2000:

From the Control Panel, select Services. Stop and then restart Tomcat. Alternatively, you can use the command line: `net stop tomcat` and `net start tomcat`.

UNIX:

As root, stop and restart the web server and servlet engine by running the following. (The `DISPLAY` variable must be configured prior to restarting the web server and servlet engine, unless `DISPLAY` is set in `/etc/rc.config.d/ovsip`.)

Stop on HP-UX: /sbin/init.d/ovsip stop
Start on HP-UX: /sbin/init.d/ovsip start

Stop on Solaris: /etc/init.d/ovsip stop
Start on Solaris: /etc/init.d/ovsip start

Restarting Tomcat
Restarting the Servlet Engine

B Working with XML

Rules for Direct Editing of XML Files

- Make a backup before modifying XML files.
- Understand editing permissions on XML files.
- Validate the XML after you modify it.
- Be careful not to lose changes made through the GUI. This can happen when you edit through the XML file and edit through the GUI at the same time.

Backing Up XML Files

Make a backup of XML configuration files before you customize them. If you edit the file and get incorrect XML syntax, you may want the ability to revert to the previous version of the file.

Understanding Editing Permission on XML Files

When using the editing windows within the SIP portal, the web server needs to have read/write permissions to the underlying files in order to save your changes. The apache web server and SIP run as:

Solaris: user "nobody"

HP-UX: user "www"

At runtime, `umask` is set by the `tomcat.sh` script to `022`, so files are created mode `0644` and directories created mode `0755`.

Therefore, at install time, SIP sets permissions and ownership for files to mode `0644` and directories to mode `0755`. If you add or change anything, make sure directories are owned by the appropriate user specified above, files set to mode `0644`, and directories set to mode `0755`.

For `tomcat` to operate properly, the following directories and all files underneath them need to have the correct permissions set (user as specified above, files set to mode `0644`, and directories are set to mode `0755`):

- `/opt/OV/SIP/tomcat`
(directory only, so `tomcat` can create the work directory when needed)

- `/opt/OV/SIP/tomcat/conf`
(directory only)
- `/opt/OV/SIP/tomcat/logs`
(directory, all subdirectories, and all files)
- `/opt/OV/SIP/tomcat/webapps`
(directory, all subdirectories, and all files)
- `/opt/OV/SIP/tomcat/work`
(directory, all subdirectories, and all files)

For SIP to operate properly, these directories and all `.xml` files (not `.dtd` files) underneath them need to have the correct permissions set (user set to anyone with editing permissions, files set to mode 0644, and directories are set to mode 0755):

- `/opt/OV/SIP/conf/share/organizations`
(directory, all subdirectories, and all `.xml` files)
- `/opt/OV/SIP/conf/share/users`
(directory, all subdirectories, and all `.xml` files)
- `/opt/OV/SIP/conf/share/modules`
(directory, all subdirectories, and all `.xml` files)
- `/opt/OV/SIP/conf/share/roles`
(directory, all subdirectories, and all `.xml` files)
- `/opt/OV/SIP/conf/share/views`
(directory, all subdirectories, and all `.xml` files)

Validating XML Files

The Service Information Portal will detect and report an invalid XML configuration file. However, after you make modifications to XML files, you may want to validate your XML syntax.

Provided with SIP is the command `xmlvalidate`, which checks whether the XML file is both well-formed and valid. This command uses the same XML parser as SIP, so if the file passes `xmlvalidate`, it will work with SIP.

For the command to work from outside the `bin` directory, add the following to your `PATH` variable:

Windows 2000: `%SIP_HOME\bin`
UNIX: `/opt/OV/SIP/bin`

The correct usage of the `xmlvalidate` command is:

```
xmlvalidate -v <xml filename>
```

An XML file is “well-formed” if it conforms to a minimal set of rules defined for all XML documents. It is “valid” if it conforms to the DTD listed at the beginning of the XML file.

Sometimes an error reported by `xmlvalidate` may not clearly indicate how to fix the problem. For example, a message like “Attribute ‘name’ must be declared for element type ‘XYZ’”, is an indication that the attribute ‘name’ may have been misspelled.

As an alternative to `xmlvalidate`, you can find an XML validation tool for Windows NT at www.xmlspy.com.

Avoiding Loss of Changes

If you are using the portal interface to change a configuration and directly editing the XML configuration file at the same time, be careful not to lose the changes made through the interface by writing out the file over the interface changes.

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