HP OpenView Reporter Integration with Service Information Portal

Windows® 2000, HP-UX, and Solaris

Legal Notices

Hewlett-Packard makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Warranty. A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

Restricted Rights Legend. All rights are reserved. No part of this document may be copied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 for DOD agencies, and subparagraphs (c) (1) and (c) (2) of the Commercial Computer Software Restricted Rights clause at FAR 52.227-19 for other agencies.

HEWLETT-PACKARD COMPANY

3404 E. Harmony Road

Fort Collins, CO 80528 U.S.A.

Use of this manual and flexible disk(s), tape cartridge(s), or CD-ROM(s) supplied for this pack is restricted to this product only. Additional copies of the programs may be made for security and back-up purposes only. Resale of the programs in their present form or with alterations, is expressly prohibited.

Copyright Notices. ©Copyright 1983-2002 Hewlett-Packard Company, all rights reserved.

Reproduction, adaptation, or translation of this material without prior written permission is prohibited, except as allowed under the copyright laws.

Trademark Notices.

Adobe® is a trademark of Adobe Systems Incorporated.

HP-UX Release 10.20 and later and 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.

Intel486 is a U.S. trademark of Intel Corporation.

Java™ is a U.S. trademark of Sun Microsystems, Inc.

Microsoft® is a U.S. registered trademark of Microsoft Corporation.

Netscape™ and Netscape Navigator™ are U.S. trademarks of Netscape Communications Corporation.

OpenView® is a registered U.S. trademark of Hewlett-Packard Company.

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

Oracle Reports™, Oracle7™, and Oracle7 Server™ are trademarks of Oracle Corporation, Redwood City, California.

OSF/Motif® and Open Software Foundation® are trademarks of Open Software Foundation in the U.S. and other countries.

Pentium® is a U.S. registered trademark of Intel Corporation.

SQL*Net® and SQL*Plus® are registered U.S. trademarks of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of the Open Group.

Windows NT® is a U.S. registered trademark of Microsoft Corporation.

Windows® 2000 is a U.S. registered trademark of Microsoft Corporation.

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

All other product names are the property of their respective trademark or service mark holders and are hereby acknowledged.

Contents

Contents

Contents

Contents

Conventions

The following typographical conventions are used in this manual.

Font	What the Font Represents	Example
Italic	For book or manual titles, and for manpage names.	Refer to the *OVW Developer's Guide.*
	To provide emphasis.	You *must* follow these steps.
	To specify a variable that you must supply when entering a command.	At the prompt type: **rlogin** *your_name* where you supply your login name.
Bold	For glossary terms.	The **distinguishing attribute** of this class...
Computer	Text and items on the computer screen.	The Root map window ... The system replies: Press Enter
	Command names	Use the grep command ...
	File and directory names.	/usr/bin/X11
	Process names.	Check to see if pmd is running.
	Window/dialog box names	In the IP Internet map window...
Computer Bold	Text that you must enter.	At the prompt, type: **ovstatus**.
Keycap	Keyboard keys.	Press **Return**.
[Button]	Buttons on the user interface.	Click [NET]. Click on the [Apply] button.
Menu Items	A menu name followed by a colon (:) means that you select the menu, then the item. When the item is followed by an arrow (->), a cascading menu follows.	Select Edit:Find->Objects by Comment

Contact Information

Technical Support and Training

Technical support and training information can be found on the HP OpenView World Wide Web site at:

```
http://openview.hp.com/
```

_____

Documentation Feedback

Your comments on and suggestions for the documentation help us understand your needs and better meet them.

You can provide feedback about documentation:

- via e-mail to: `ovdoc@fc.hp.com`, or

- via the HP documentation site at: `http://www.docs.hp.com`

If you encounter *serious errors* in the documentation that impair your ability to use the product, please contact the HP Response Center or your support representative so that your feedback can be entered into CHARTS (the HP Change Request Tracking System).

_____

1 How OVR Works with SIP

The Report Modules for SIP

HP OpenView Reporter (OVR) provides up-to-date reports from multiple OpenView products. You can display these reports to your customers through HP OpenView Service Information Portal (SIP).

For more information about configuring OpenView Reporter, itself, see see the *OpenView Reporter Concepts Guide* (provided with OVR software). Or access the OVR manuals online at the web site:
`http://ovweb.external.hp.com/lpe/doc_serv`

You can integrate any combination of the three report modules into SIP portal views. Each report module provides a variety of reports.

The OVR:NNM Reports Module

The NNM reports display information gathered from one NNM management station. Display one or more of the following in this report module:

- **NNM Event Category Trend (past seven days) report**
  This report illustrates the number of alarms in each alarm category on your NNM Management Station over a period of seven days. This report analyzes the last seven days of alarms in the NNM data warehouse.

- **NNM Event Severity Trend (past seven days) report**
  This report illustrates the number of alarms of each alarm severity for the last seven days of alarms in the data warehouse.

- **NNM Event Trend report**
  This report illustrates the number of alarms of each alarm severity subdivided by the date of the alarm.

- **NNM Events by Nodename report**
  This report illustrates the devices on your network (identified by nodename) that are generating the most alarms. The first graph shows the 10 nodes that have generated the most alarms. The scale is number of alarms. The remaining graphs show the most recent history of alarms for each of the top 10 nodes.

- **NNM Events By Severity report**
  This report provides a summary of the alarms on your network,

grouped by severity. The graph illustrates the percentage of alarms with a given severity. The table specifies the number of alarms of each severity type.

The OVR:OVO Reports Module

OpenView Service Navigator (OVSN) is an add-on program for OpenView Operations (OVO) that allows administrators to map network resources, systems, and application resources to services. For example, you can keep track of the email service status by mapping all components that contribute to the successful delivery of email to one `service` definition, or you can keep track of your e-business order processing service by mapping all components that contribute to the successful delivery of your shopping website to one `service` definition. Each report in this module displays information gathered about the configured `services` on your OVO server. Display one or more of the following in this report module:

- **OVO Top Active Messages by Service report**
  This report shows the five services that posted the highest number of OVO messages. The total count represents all messages specifically related to those five services that currently reside within the OVO messages database.

- **Service Status All Data report**
  This report shows the proportion of messages having each health status (severity), compared to the total number of service messages. The total count represents all messages specifically related to your services, that currently reside within the OVO messages database.

- **Service Status Last Full Week report**
  For the time frame of the past week, this report shows the proportion of messages having each health status (severity), compared to the total number of service messages. The total count represents all messages specifically related to your services, received within the past week by OVO.

- **Service Status Last Full Month report**
  For the time frame of the past month, this report shows the proportion of messages having each health status (severity), compared to the total number of service messages. The total count represents all messages specifically related to your services, received within the past month by OVO.

- **Service Status Yesterday report**
  For the time frame of the past day, this report shows the proportion of messages having each health status (severity), compared to the total number of service messages. The total count represents all messages specifically related to your services, received within the past day by OVO.

The OVR:OV Performance Reports Module

The Performance Reports show specialized data collected from specific devices. HP OpenView Performance Agents on each device gather comprehensive and continuous information about system activity. The agent collects, summarizes, time stamps, and detects alarm conditions on current and historical resource data. The agent provides performance, resource, and end-to-end transaction response time measurements, and supports network and database measurement information. Display one or more of the following in this report module:

- **Top Busy CPU Systems report**
  This report shows which systems consumed the most CPU cycles during the reporting interval. The bar graph shows the average CPU busy percentage for each system. Individual system graphs show more detailed information about each system's consumed CPU cycles over time.

- **Top Busy Disk Systems report**
  This report shows which systems performed the most disk transfers during the reporting interval. The bar graph shows the total number of disk transfers for each system. Individual system graphs show more detailed information about each system's disk transfer rates over time.

- **Top Busy Memory Systems report**
  This report shows which systems had the highest rate of disk-swapping activity during the reporting interval. High disk-swapping activity indicates that more RAM is desirable on the system. The bar graph shows the average number of page-outs per second for each system. Individual system graphs show more detailed information about each system's memory page-out rates over time.

- **Top Busy Network Systems report**
  This report shows which systems had the highest network packet transfer rate during the reporting interval. The bar graph shows the average number of network packet transfers per second for each

system. Individual system graphs show more detailed information about each system's network packet transfer rate over time.

- **Top File System Utilizing Systems report**
  This report shows which systems consumed the highest percent of their file space during the reporting interval. The bar graph shows the average file space utilization for each system. Individual system graphs show more detailed information about each system's average file space utilization rate over time.

Communication Paths Between OVR and SIP

The diagrams on the following pages illustrate how the communication path works between these OpenView products in order to display the requested information in a SIP portal view:

- OpenView Service Information Portal (SIP)

- OpenView Reporter (OVR)

- OpenView Network Node Manager (NNM)

- OpenView Operations (OVO)
  and OpenView Service Navigator (OVSN)

- OpenView Performance Agents (MeasureWare)

The following diagram illustrates the communication path between SIP and OVR for the report modules for NNM:

Figure 1-1   **Communication Process for the OVR:NNM Reports Module**
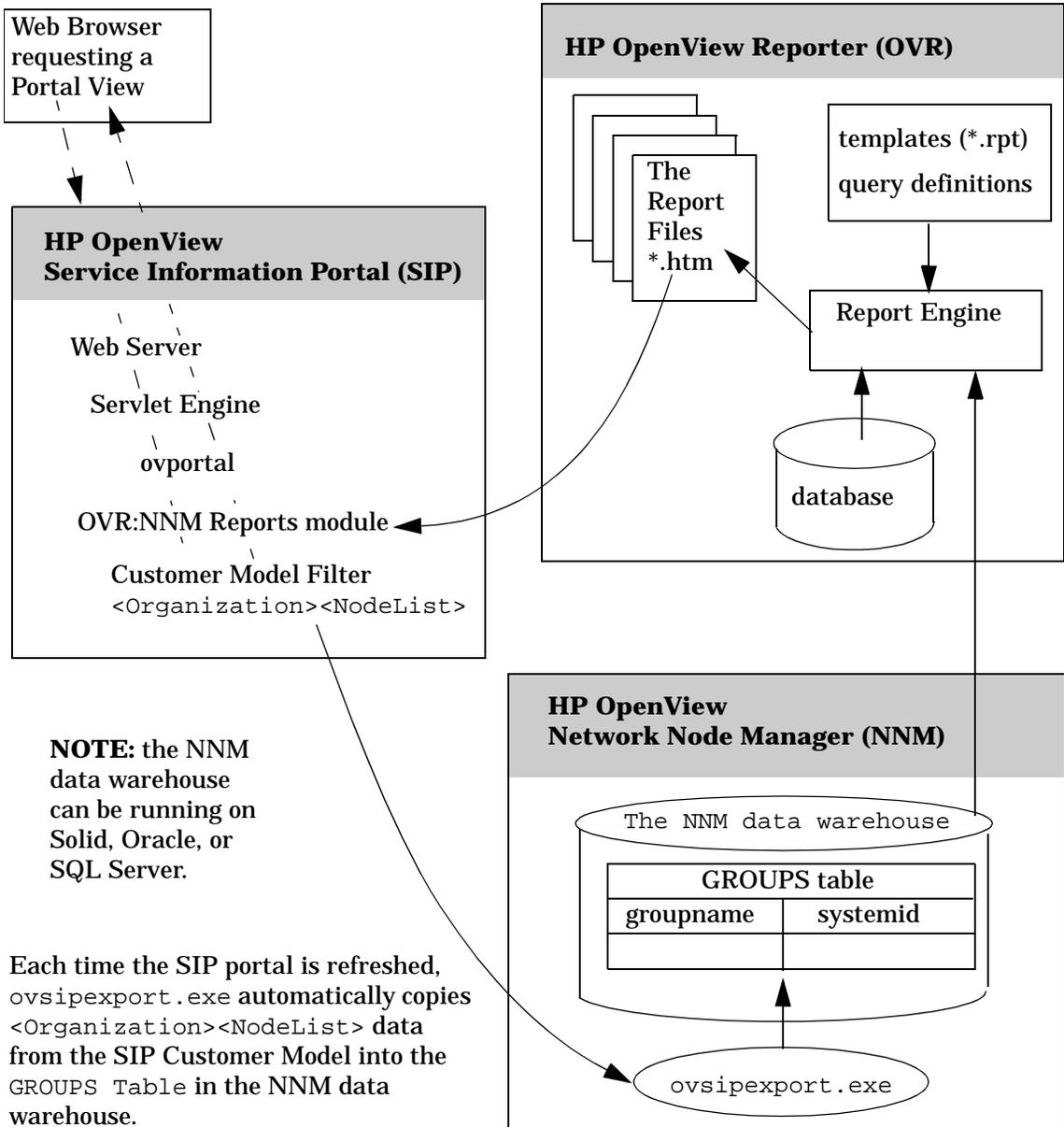
The following diagram illustrates the communication path between SIP and OVR for the report modules for OVO/OVSN:

Figure 1-2   **Communication Process for the OVR:OVO Reports Module**
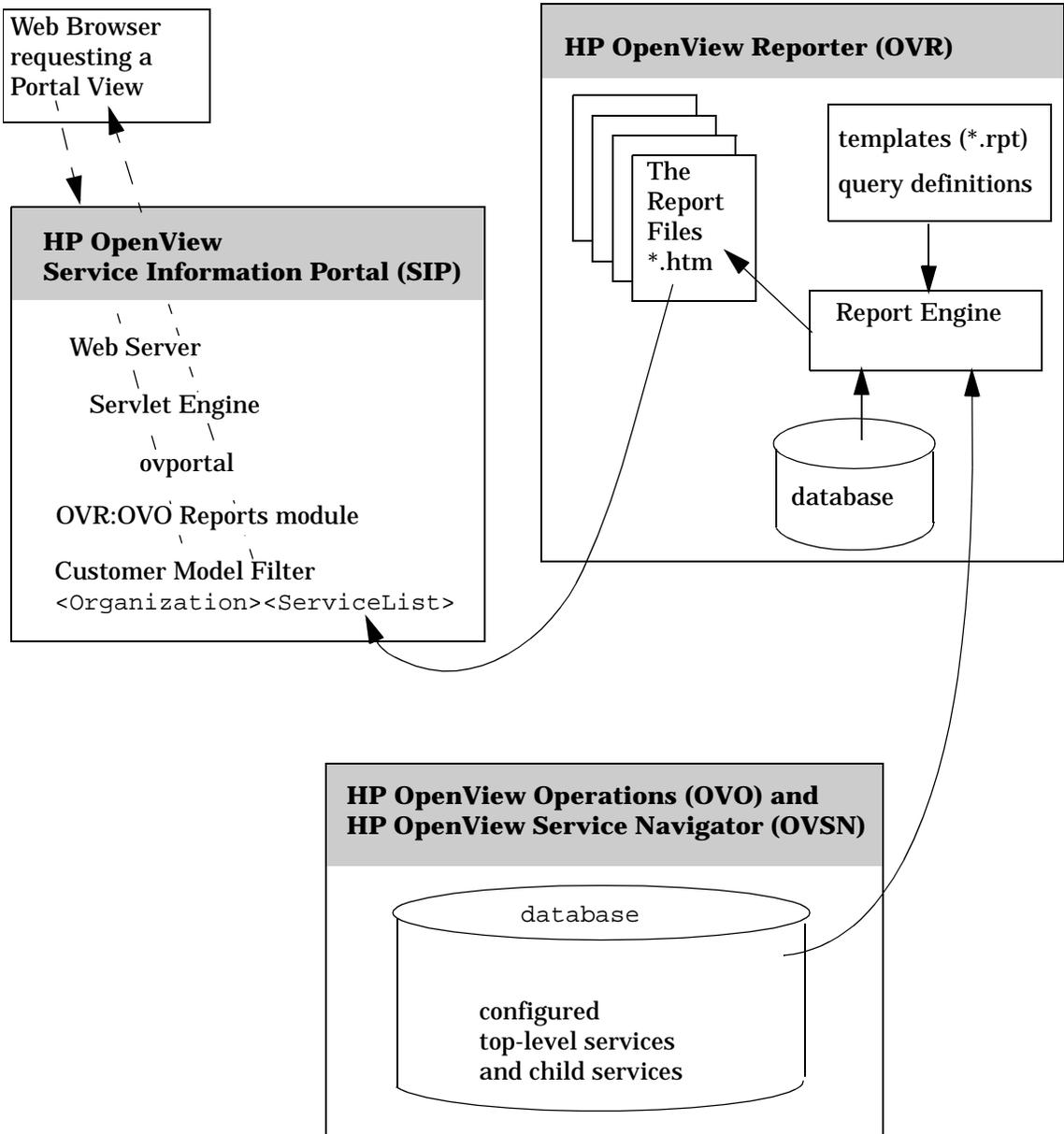
The following diagram illustrates the communication path between SIP and OVR for the reports showing data from OpenView Performance Agent (MeasureWare) and OpenView Operations Agent version 7 (Coda):

Figure 1-3   **Communication Process for the OVR:OV Performance Reports Module**
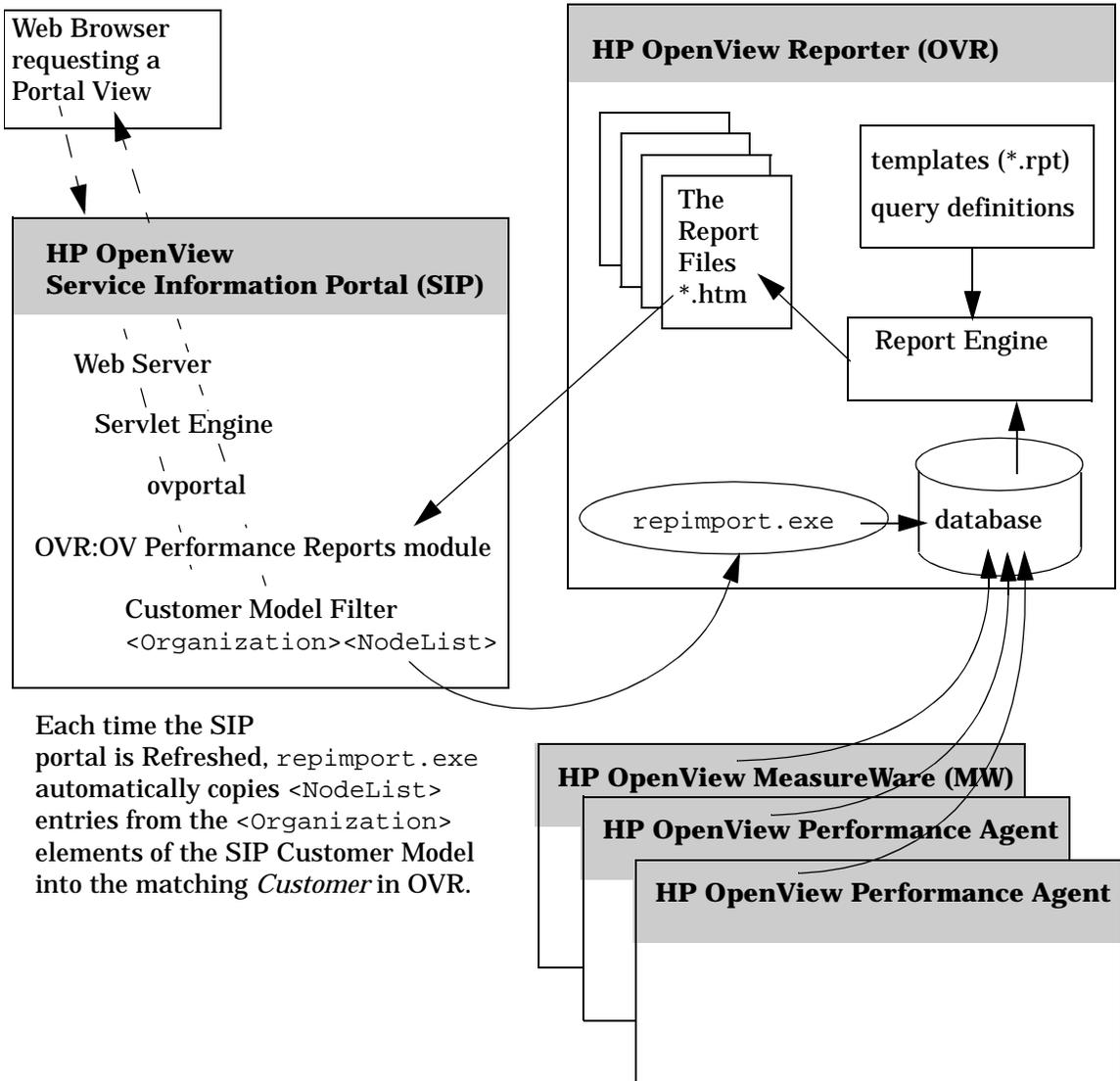
Installation of the Modules

SIP can run on Windows 2000, HP-UX, or Solaris and can communicate with multiple OVR systems running on any combination of Windows NT or Windows 2000.

The report modules are 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 OVR version and patch requirements.

Before using the modules, you must configure SIP, OVO/OVSN, NNM, the OV Performance agents, and OVR to communicate with each other. See Chapter 2, "Establishing Communication Among OpenView Products for the Reporter Modules" on page 24.

2 Configuration Steps

Establishing Communication Among OpenView Products for the Reporter Modules

The SIP reports modules display reports received from OpenView Reporter (OVR). In order to provide these reports, OVR gathers data from multiple other OpenView products. Communication between OVR and each of these products must be configured and working in order for SIP to display the reports in your portal views.

Keep in mind that you are coordinating data transfer between databases within multiple OpenView products. In order for this process to work, the values of the following fields ("x", "y", and "z" in this example) *must* match. The rest of this chapter walks you through this configuration:

- On the SIP server, in your SIP Customer Model:
  ```
  <Organization name="x">
    <NodeList>
          <Node name="z">
    </NodeList>
    <ServiceList>
          <Service name="y">
    </ServiceList>
  </Organization>
  ```

- On the NNM management station, in the GROUPS table within your data warehouse:
  ```
  GROUPS Table
    groupname="x"
    systemid="z"
  ```

- On the OVO/OVSN management server, the defined service="y".

- On the OVR system, in your OVR database:
  ```
  Discovered Systems
      Group - "x" (OVR:NNM Reports module only)

  Customers
      Customer-"x"(OVR:OV Perf Reports module only)
       "z" (system)
  ```

Follow the directions in this chapter to configure communication settings on each of the following:

- "On the SIP Server" on page 26.
- "On Each NNM Management Station" on page 32.
- "On Each OVO/OVSN Management Server" on page 38.
- "On Each OVR System" on page 40.
    - "Providing data for SIP's OVR: NNM Reports module" on page 40.
    - "Providing data for SIP's OVR: OVO Reports module" on page 44.
    - "Providing data for SIP's OVR: OV Performance Reports module" on page 46.

On the SIP Server

Four configuration steps must be completed on the SIP server:

- "Management Station Configuration" on page 26.
- "SIP Customer Model Definitions" on page 27.
- "Enabling Transfer of the SIP Customer Model Definitions" on page 28.
- "Role Configuration Settings" on page 30

Management Station Configuration

To enable communication between the SIP server and the OVR system:

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. To add a new management station, right-click `Management Stations` and click `New`. In the `New Management Station` window, enter the name of the OVR system in the `Fully Qualified Hostname` list box.

   Or to update the configuration settings of a configured management station to indicate that OVR is installed, right-click the name of the OVR system and select `Properties`.

3. Navigate to the `Reporting Station` tab.

4. Check `Use as a Reporting Station`.

5. Verify that the correct port is specified.

6. Verify that the `Virtual Directory` value matches the location where generated reports are stored on your OVR system. (If you don't know, you can always change this later.)

7. Click `[Save]` to save your changes and exit the SIP Configuration Editor.

TIP   If you are configuring SIP to communicate with multiple OpenView Reporter systems, the system name appearing closest to the top of the

`Management Stations` list in the SIP Configuration Editor window becomes the *default* OpenView Reporter system.

SIP Customer Model Definitions

You *must* populate the SIP Customer Model with `<Organization>` elements to contain one or more `<NodeList>` and `<ServiceList>` elements before the report modules work. Reports display information about one `<Organization>` at a time.

Viewing the Current SIP Customer Model. To view your current SIP Customer Model configuration:

1. Go to the `SIP Administration Pages` by logging into the SIP portal as a user who can access the special `SIP Administrator` role. Switch to the `SIP Administrator` role.

2. Click the `Customer Model` tab.

3. In the `Customer Model Summary Report` segment.

4. Click `[View]` to see a list of all nodes and services currently configured in your SIP Customer Model.

   Review the Organizations, Nodes, and Services to ensure that the data sources you need for your reports are listed:

   • `<NodeList>` elements must contain:

     — Every node whose alarms you wish to include in the OVR:NNM Reports module, and

     — Every node that has the OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) installed whose data you wish to display in the OVR:OV Performance Reports module.

   • `<ServiceList>` elements must contain every top-level OVSN service that you wish to include in the OVR:OVO Reports module. (The `<ServiceList>` element is required for all reports modules.)

   You *must* create a `<ServiceList>` element within each SIP `<Organization>` in order to enable the reports modules. This is true even if you are not using OpenView Service Navigator program (OVSN) on your OVO/OVSN management server and not planning to use the OVR:OVO Reports module.

NOTE Unlike the OVSN modules, you cannot depend upon child service depth settings to expand your <ServiceList>. If you have a specific need to show a report on a child service, that child service must be specifically listed in your SIP Customer Model <ServiceList>.

5. Click [Help] if you need more information.

Creating NodeList and ServiceList Elements. If you need to add nodes or services, do so now:

- For detailed instructions about developing the required <NodeList> and <ServiceList> elements for the OVR reports modules, turn to Chapter 6, "Segmenting the OVR Data for Your Customers," on page 91.

- For background information about setting up the SIP Customer Model, see the *SIP Deployment and Integration Guide*, (SIP_Deployment_Integration.pdf), "Segmenting Data by Customer Organization."

DO NOT CONTINUE until your SIP Customer Model <Organization> elements contain the required <NodeList> and <ServiceList> elements.

Enabling Transfer of the SIP Customer Model Definitions

If you plan to use the OVR:NNM Reports module or the OVR:OV Performance Reports module, complete the steps in this section (if you do not wish to use these modules, you can skip this section):

1. After creating <NodeList> elements within your SIP Customer Model (see page 95), go to the SIP Administration Pages by logging in as a user who can access the special SIP Administrator role. Switch to the SIP Administrator role.

2. Click the Customer Model tab.

3. In the Customer Model Configuration segment, go to Customer Model Export.

4. Complete this step only if you plan to use the OVR:NNM Reports module.

   To automatically export the SIP Customer Model <Organization>

and `<NodeList>` data to the NNM data warehouse's GROUPS table:

a. In the `New customer model export destination URL` field, type
    the following:

    • *Contacting NNM on Windows systems:*

      `http://NNMHostname:80/OvCgi/ovsipexport.exe`

      The default value for the web server port is 80. If your
      environment is configured to use any other port, change these
      port numbers.

    • *Contacting NNM on UNIX systems:*

      `http://NNMHostname:8880/OvCgi/ovsipexport.exe`

      The default value for the web server port is 8880. If your
      environment is configured to use any other port, change these
      port numbers.

b. Click `[Add]` to configure automatic export of the SIP Customer
    Model information to your NNM management station's data
    warehouse.

    This launches the `ovsipexport` program on the NNM
    management station each time the SIP Customer Model is loaded
    into memory (refreshed) on the SIP server. The `ovsipexport.exe`
    program resides on your NNM management station and populates
    the GROUPS table in the NNM data warehouse with the
    `<Organization>` names and the assigned `<NodeList>` data
    specified in your current SIP Customer Model definitions. Each
    time the `ovsipexport` program runs, the data in the GROUPS table
    is deleted and new data populates the table, in other words the
    data is not appended. Therefore, if more than one SIP server is
    exporting the SIP Customer Model to a single NNM management
    station, make sure that the SIP servers are sharing the same
    Customer Model.

    You will install the `ovsipexport.exe` program on your NNM
    management station and set up the required GROUPS table when
    you get to "On Each NNM Management Station" on page 32.

    The `ovsipexport.exe` script may insert (into your NNM data
    warehouse) data for nodes that are not managed by NNM (for
    example the OV Performance nodes required by the OVR:OV
    Performance Reports module or nodes being managed exclusively
    by OVO. This data is only placed into the GROUPS table. It will not

cause errors or inconsistencies in the NNM data warehouse or to the NNM reports.

5. Complete this step only if you plan to use the OVR:OV Performance Reports module.

   To automatically export the SIP Customer Model `<NodeList>` data to each OVR database *Customer* (that matches a SIP `<Organization>`):

   a. In the `New customer model export destination URL` field, type the following:

      `http://OVRHostname:80/HPOV_IOPS/cgi-bin/repimport.exe`

      The default value for the web server port is 80. If your environment is configured to use any other port, change these port numbers.

   b. Click `[Add]` to configure automatic export of the SIP Customer Model information to your OVR system's database.

      This launches the `repimport.exe` program on the OVR system each time the SIP Customer Model is loaded into memory (refreshed) on the SIP server. The `repimport.exe` program imports the SIP Customer Model `<NodeList>` entries under each defined *Customer* (matching a SIP `<Organization>`) in the OVR database. Before this script works successfully, you must complete the configuration steps in "On Each OVR System" on page 40.

6. *Optional:* To periodically update the customer model according to a schedule (in addition to each time that SIP's `tomcat` service is restarted), set the `Refresh Rates`.

7. Click `[Help]` if you need more information.

Role Configuration Settings

To enable SIP roles to display data in the OVO/OVSN modules, you need to establish the Management Data filter settings for each role:

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. Navigate to your Role definitions (other than `SIP Administrator`).

3. For each role that needs access to the OVO Messages module or OVSN modules, right-click the role name and select `Properties`.

4. Navigate to the `Management Data` tab and make the appropriate selection. The Management Data filter controls the flow of data from your OVO management servers into the OVO/OVSN modules. See Chapter 9, "Segmenting the OVO/OVSN Data by Customer," on page 109 if you need more information.

5. Repeat from step 3 for each role that needs access to OVO Messages module and/or OVSN modules.

6. Save your changes and exit the SIP Configuration Editor.

7. Continue with the required configuration steps for the other OpenView products you are using:

   • To use the OVR:NNM Reports module:

     — "On Each NNM Management Station" on page 32.

     — "Providing data for SIP's OVR: NNM Reports module" on page 40.

   • To use the OVR:OVO Reports module:

     — "On Each OVO/OVSN Management Server" on page 38.

     — "Providing data for SIP's OVR: OVO Reports module" on page 44.

   • To use the OVR:NNM Reports module:
     "Providing data for SIP's OVR: OV Performance Reports module" on page 46.

On Each NNM Management Station

To use any of the reports in the OVR:NNM Reports module, complete the steps in this section. If you do not wish to use these reports, skip this section.

TIP	The reports in the OVR:NNM Reports module are:

- NNM Event Category Trend (past seven days) report
- NNM Event Severity Trend (past seven days) report
- NNM Event Trend report
- NNM Events by Nodename report
- NNM Events by Severity report

Figure 2-1   **SIP Customer Model Requirements for the OVR:NNM Reports**
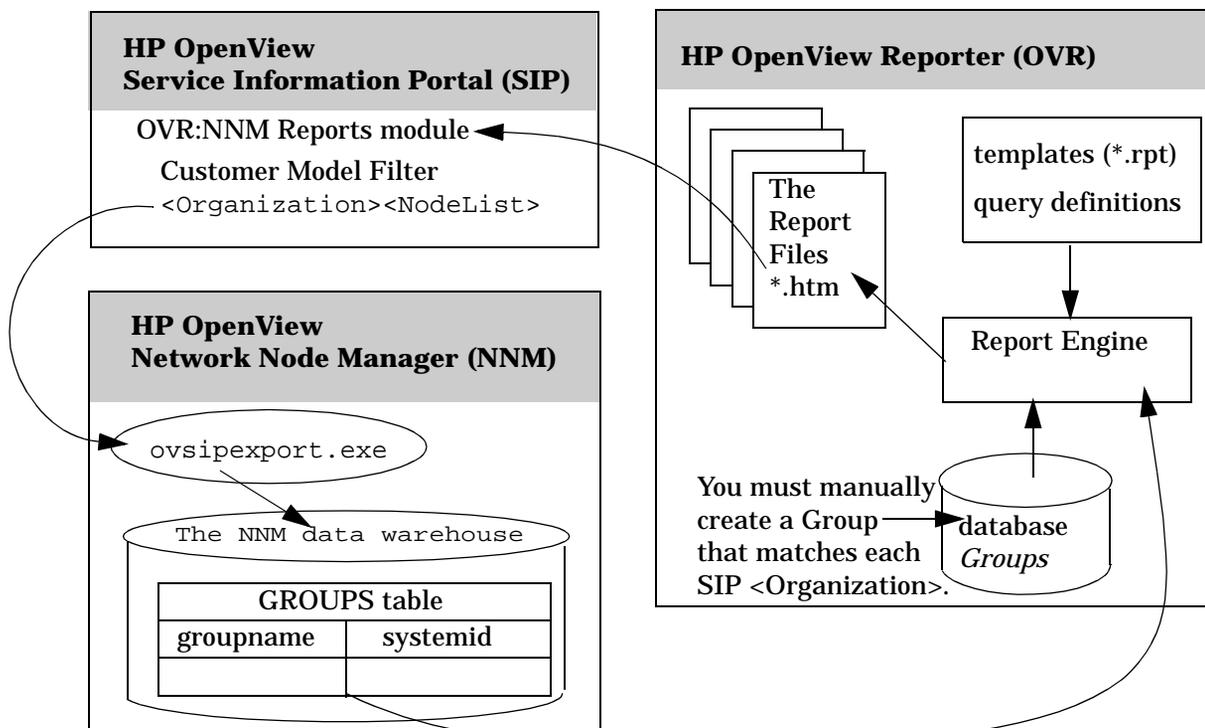
NOTE   Verify that you are using a version of HP OpenView Network Node
Manager that is supported by SIP, see the SIP *Installation Guide*
(SIP_Install_Guide.pdf) for the list of supported product versions.

To create the GROUPS Table in your NNM data warehouse

The NNM reports present information about the volume of NNM alarms
in particular categories for particular nodes.

1. For Network Node Manager 6.2, first install the latest consolidated
   patch, then install the following patch specifically for the
   SIP-OVR-NNM configuration:

   • *Windows NT/2000:* NNM_00852
   • *HP-UX 10.20:* PHSS_26178
   • *HP-UX 11.x:* PHSS_26179
   • *Solaris 2.x:* PSOV_03095

2. Determine which database NNM is using for the data warehouse. At
   the command prompt, type:

   ovstatus -c

   Look for the message about the process called ovdbcheck. If the
   message refers to the "embedded" database, NNM is using SOLID. If
   NNM is using Oracle or SQLServer, the message includes reference to
   one of them.

3. Print the *Integrating HP OpenView Reporter with Network Node
   Manager* (integration.pdf) file. You need these instructions when
   configuring your OpenView Reporter server (see "On Each OVR
   System" on page 40). Print the integration.pdf file located in the
   directory whose name matches the database in use on your NNM
   Management station:

   • *Windows NT/2000:*
     <NNM_inst_dir>\share\conf\analysis\reportTemplates\
     Solid
              or . . . \Oracle
               or . . . \SQLServer

- *UNIX:*

  ```
  /etc/opt/OV/share/conf/analysis/reportTemplates/Solid
           or . . . /Oracle
            or . . . /SQLServer
  ```

4. **Verify that the patch installed the scripts listed below into the following directory (if not, reinstall the patch):**

   Windows NT/2000:

   `<NNM_install_dir>\newconfig\OVDB-RUN\conf\analysis\sqlScripts`

   UNIX:
   `/opt/OV/newconfig/OVDB-RUN/conf/analysis/sqlScripts`

   You should see the following files:

   ```
   tables_groups.solid
   tables_groups.oracle
   tables_groups.msSqlSrvr
   ```
   (NNM on Windows only)
   ```
   drop_groups.solid
   drop_groups.oracle
   drop_groups.msSqlSrvr
   ```
   (NNM on Windows only)

5. **Copy the SQL scripts to the following directory:**

   Windows NT/2000: `<NNM_inst_dir>\conf\analysis\sqlScripts`

   UNIX: `/etc/opt/OV/share/conf/analysis/sqlScripts`

6. **The** GROUPS **table needs to be added to the NNM data warehouse to receive the SIP Customer Model** `<Organization>` **and** `<NodeList>` **data. To create the required** GROUPS **table in the NNM data warehouse, at the command prompt, navigate into the following directory:**

   Windows NT/2000: `<NNM_inst_dir>\conf\analysis\sqlScripts`

   UNIX: `/etc/opt/OV/share/conf/analysis/sqlScripts`

   The `tables_groups` **scripts, when run, create the required** GROUPS **table in the NNM data warehouse:**

   ```
   tables_groups.solid
   tables_groups.oracle
   tables_groups.msSqlSrvr
   ```
   (NNM on Windows only)

7. At the command line, type one of the following:

   • *If NNM is using the Solid database:*
   ovdwquery -file tables_groups.solid

   • *If NNM is using the Oracle database:*
   ovdwquery -file tables_groups.oracle

   • *If NNM is using the Microsoft SQLServer database:*
   ovdwquery -file tables_groups.msSqlSrvr

8. Verify that the patch installed the ovsipexport.exe file into the
   following directory (if not, reinstall the patch):

   • *Windows NT/2000:* <NNM_inst_dir>\www\cgi-bin\

   • *UNIX:* /opt/OV/www/cgi-bin/

   This is the same file that you registered in the SIP Customer Model
   Export field. This CGI script imports the SIP Customer Model into
   the GROUPS table of NNM data warehouse each time the SIP
   Customer Model is loaded into memory (refreshed) on the SIP server.
   The SIP server notifies ovsipexport on the NNM management
   station to update the GROUPS table in the NNM data warehouse with
   the latest <Organization> names and assigned <NodeList> specified
   in your SIP Customer Model. Each time the ovsipexport program
   runs, the data in the GROUPS table is deleted and new data populates
   the table, in other words the data is not appended. Therefore, if more
   than one SIP server is exporting the SIP Customer Model to a single
   NNM management station, make sure that the SIP servers are
   sharing the same Customer Model.

NOTE   To force SIP to refresh the Customer Model:

   a. Go to the SIP Administration Pages by logging into the SIP
      portal as a user who can access the special SIP Administrator
      role. Switch to the SIP Administrator role.

   b. Click the Customer Model tab.

   c. In the Customer Model Summary Configuration segment,
      click [Refresh].

   d. Click [Help] if you need more information.

SIP may insert data for nodes into your NNM data warehouse that are not managed by NNM (for example the OV Performance nodes required by the OVR:OV Performance Reports module or nodes being managed exclusively by OVO. This data is only placed into the GROUPS table. It will not cause errors or inconsistencies in the NNM data warehouse or to the NNM reports.

9. Verify that the NNM data warehouse is configured and running.

   See the *Reporting and Data Analysis with HP OpenView Network Node Manager* manual that comes with the OpenView Network Node Manager product for information about populating the NNM data warehouse with the appropriate data.

   The NNM documentation set is available on this web site:
   `http://ovweb.external.hp.com/lpe/doc_serv`

   The following commands can be run manually or scheduled to keep the data current: **ovdwtrend -export**

   Alternately, the NNM menu item `Tools:Data Warehouse->Export Trend Data` forces an export of alarms into the data warehouse.

10. Verify that the SIP Customer Model information was successfully imported into the GROUPS table in the NNM data warehouse. At the command line, type the following commands:

    Windows NT/2000:
    <NNM_inst_dir>\bin\ovdwquery.exe
    select * from groups;

    UNIX:
    /opt/OV/bin/ovdwquery
    select * from groups;

    You will see the current `groupname:systemid` pairs in the GROUPS table:

    • `groupname` = SIP Customer Model `<Organization>` name

    • `systemid` = a node from the relevant `<NodeList>` in the SIP Customer Model

11. Follow the directions in the remaining sections of this chapter to complete the required configuration steps:

    • To use the OVR:NNM Reports module:
      "Providing data for SIP's OVR: NNM Reports module" on page 40.

- To use the OVR:OVO Reports module:

  — "On Each OVO/OVSN Management Server" on page 38.

  — "Providing data for SIP's OVR: OVO Reports module" on page 44.

- To use the OVR:NNM Reports module:"Providing data for SIP's OVR: OV Performance Reports module" on page 46.

To remove the GROUPS Table from your NNM data warehouse

If you decide not to use the OVR:NNM Reports module, you can remove the GROUPS table from the NNM data warehouse. The drop_groups scripts, when run, uninstall GROUPS table from the NNM data warehouse:

```
drop_groups.solid
drop_groups.oracle
drop_groups.msSqlSrvr
```

Navigate to the following directory:

Windows NT/2000: `<NNM_inst_dir>\conf\analysis\sqlScripts`

UNIX: `/etc/opt/OV/share/conf/analysis/sqlScripts`

At the command line, type one of the following:

- *If NNM is using the Solid database:*
  ovdwquery -file drop_groups.solid

- *If NNM is using the Oracle database:*
  ovdwquery -file drop_groups.oracle

- *If NNM is using the Microsoft SQLServer database:*
  ovdwquery -file drop_groups.msSqlSrvr

On Each OVO/OVSN Management Server

To use any of the reports in the OVR:OVO Reports module, complete the steps in this section. If you do not wish to use these reports, skip this section.

TIP   The reports in the OVR:OVO Reports module are:

- Service Status All Data report

- Service Status Last Full Week report

- Service Status Last Full Month report

- Service Status Yesterday report

- OVO Top Active Messages by Service report

These reports display data about `services` currently defined within HP OpenView Service Navigator (OVSN) that runs on top of HP OpenView Operations (OVO). You must be using OVSN before these reports work.

Figure 2-2   **SIP Customer Model Requirements for OVR:OVO Reports**
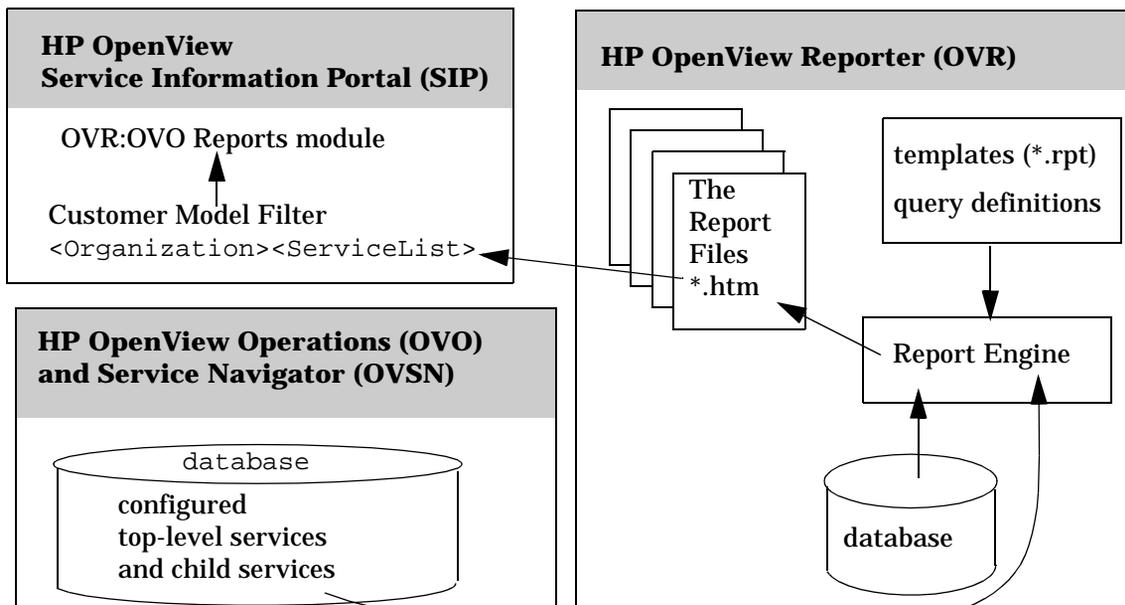
NOTE   Verify that you are using a version of HP OpenView Operations and HP
                    OpenView Service Navigator that are supported by SIP, see the SIP
                    Installation Guide (`SIP_Install_Guide.pdf`) for the list of supported
                    product versions.

                    Verify that you are using a version of HP OpenView Operations and HP
                    OpenView Service Navigator that are supported by OVR, see the
                    documentation that came with OVR for the list of supported product
                    versions.

1. If you have not already done so, using OpenView Service Navigator
   (OVSN), you must now configure the service definitions for your
   management environment.

   For more information about configuring services within HP
   OpenView Service Navigator, see the *HP OpenView VantagePoint
   Navigator Concepts and Configuration Guide* (or access the Service
   Navigator documentation set on this web site. The OVSN
   documentation set is available on this web site:
   `http://ovweb.external.hp.com/lpe/doc_serv`

   OVO/OVSN monitors your defined services and collects data. This
   data is accessed by your OpenView Reporter system to populate the
   SIP reports.

2. Follow the directions in the remaining sections of this chapter to
   complete the required configuration steps:

   • To use the OVR:NNM Reports module:
     "Providing data for SIP's OVR: NNM Reports module" on page 40.

   • To use the OVR:OVO Reports module:
     "Providing data for SIP's OVR: OVO Reports module" on page 44.

   • To use the OVR:OV Performance Reports module:"Providing data
     for SIP's OVR: OV Performance Reports module" on page 46.

On Each OVR System

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

Providing data for SIP's OVR: NNM Reports module

To use any of the reports in the OVR:NNM Reports module, complete the
steps in this section. If you do not wish to use the NNM reports, skip this
section.

TIP   The reports in the OVR:NNM Reports module are:

• NNM Event Category Trend (past seven days) report

• NNM Event Severity Trend (past seven days) report

• NNM Event Trend report

• NNM Events by Nodename report

• NNM Events by Severity report

1. To install the reports for SIP's OVR:NNM Reports module, you *must*
   first follow the directions in the *Integrating HP OpenView Reporter
   with Network Node Manager* (integration.pdf) that you printed
   out in step 3 of "On Each NNM Management Station" on page 32. By
   following the directions in integration.pdf, you are installing the
   required report templates into OpenView Reporter.

   Access the documentation that comes with the OpenView Reporter
   program if you need help completing these steps.

   NOTE: The 5 report templates that begin with g_* are used by the
   SIP OVR:NNM Reports module. The other 8 report templates that
   begin with a_* are for use in the NNM reporting feature, but not
   displayed through the SIP module.

   DO NOT PROCEED UNTIL YOU COMPLETE ALL OF THE STEPS
   IN THE INTEGRATION.PDF FILE.

2. You are now ready to enable the group reports that are used by the OVR:NNM Reports module.

   In the OVR main window, right click `Reports` and select `Configure Report Packages`.

   Move the report pack that is appropriate for the database in use on your NNM management station to the right-hand column, if you have not already done so:
   `NNM Solid`
   `NNM Oracle`
   `NNM SQL`

   Click [`OK`] to return to the main Reporter window.

3. **KEY CONCEPT:** To enable the OVR:NNM Reports module, each `<Organization name="x">` in your SIP Customer Model *must* have a corresponding *Group* in OpenView Reporter. (Not a corresponding *Customer* as required by the OVR:OV Performance Reports module.)

   Create a *Group* in OVR that has the same name as each `<Organization>` defined within your SIP Customer Model:

   a. Right click `Discovered Systems`.

   b. Select `Add Group`. Create a `Group` that corresponds to the name of an `<Organization>` that is currently defined within your SIP Customer Model (on the SIP server).

      Make sure that you type each name exactly as it appears in each `<Organization name="x">`.

   c. Repeat this group creation process until every `<Organization>` in your SIP Customer Model has a corresponding `Group` in OVR.

TIP   If you are not sure which names are currently defined within your SIP Customer Model, see "Viewing the Current SIP Customer Model." on page 27 for information about easily displaying a list of currently defined `<Organization>` elements within the SIP Customer Model.

4. Drag the five NNM reports (or only the ones you want) into each `Group` that you created as shown in Figure 2-3. This controls which NNM reports are generated for each `Group`.

Figure 2-3 **Installing the OVR:NNM Reports**
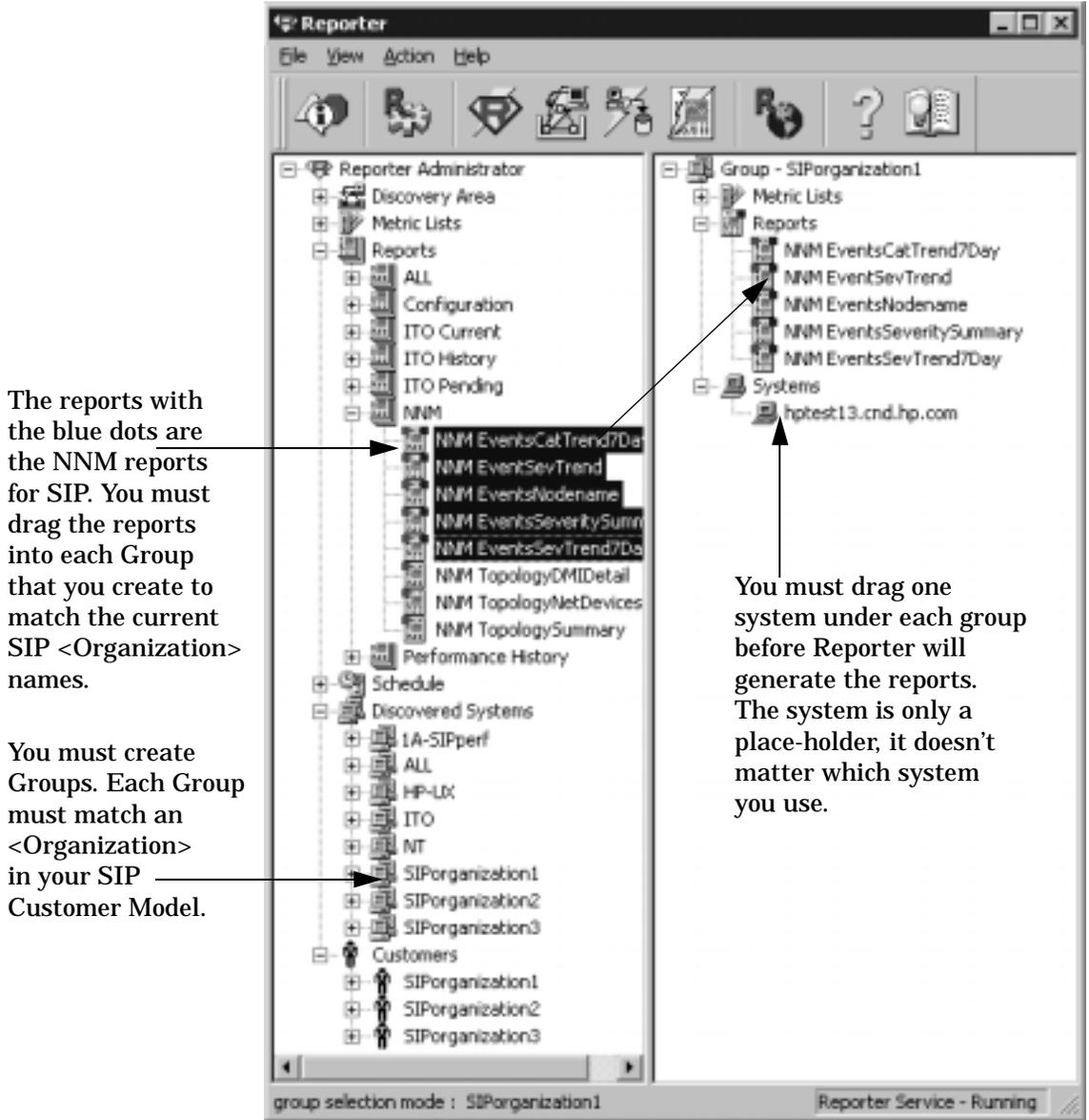
The reports with the blue dots are the NNM reports for SIP. You must drag the reports into each Group that you create to match the current SIP <Organization> names.

You must create Groups. Each Group must match an <Organization> in your SIP Customer Model.

You must drag one system under each group before Reporter will generate the reports. The system is only a place-holder, it doesn't matter which system you use.

5. OVR will not generate reports for a group unless at least one system is assigned to the group. In the case of the OVR:NNM Reports module, the nodes are actually gathered from the NNM data warehouse entries and the assigned node within the OVR group is

ignored, so it doesn't matter which system you assign to any given group.

Expand `Discovered Sytems:ALL`. Drag one system into each `Group` (any system will do, as this is just a place holder and is ignored during report generation).

6. Generate the reports so that they are ready for display in the SIP module. Select `Action:Run->Generate Reports`.

7. Verify that the reports generated successfully:

    •   Select `Action:Show Reports`.

    •   The reports you need are under:
        ```
        Reports for Groups of Systems
        <One Report Link for Each SIP Organization>
        ```

        You should see a list of links to each NNM report when you click on the link for any SIP `<Organization>` name. When viewing the OVR:NNM Reports module in the SIP portal, these are the reports that you will see (although they will formatted a little differently).

8. You are now ready to insert the OVR:NNM Reports module into your SIP portal views. See "Adding the OVR:NNM Reports module" on page 56.

NOTE   If you make any changes to your `<Organization>` settings in your SIP Customer Model on your SIP server, you must return to OpenView Reporter and configure all the changes in the OpenView Reporter `Groups`. The `Group` list is not maintained automatically.

Providing data for SIP's OVR: OVO Reports module

To use any of the reports in the OVR:OVO Reports module, complete the steps in this section. If you do not wish to use these reports, skip this section and continue with "Providing data for SIP's OVR: OV Performance Reports module" on page 46.

TIP

The reports in the OVR:OVO Reports module are:

- Service Status All Data report
- Service Status Last Full Week report
- Service Status Last Full Month report
- Service Status Yesterday report
- OVO Top Active Messages by Service report

1. Install the appropriate Oracle client on your OVR system so that data can be gathered from your OVO management server:

   a. In the main window of OVR, click
      `Help:Reporter Document Set`.

   b. Select `Installation and Special Configuration Guide`.

   c. Select `Part D: Oracle 8.1.6 or 8.1.7, OVO Database`.
      Complete all steps in Part D.

   DO NOT PROCEED UNTIL YOU COMPLETE ALL STEPS IN PART D.

2. Make sure that the report templates required by OVR:OVO Reports module are available. In the Reporter main window, right-click `Reports` and select `Configure Report Packages`.

   Move the following report pack to the right-hand column, if you have not already done so:
   `IT/Operations 6 & 7`

   Click `[OK]` to return to the main Reporter window.

3. **KEY CONCEPT:** No other configuration is necessary within Reporter in order to get the reports required by SIP's OVR:OVO Reports module. If you created *Groups* for the OVR:NNM Reports module, *Groups* are ignored when generating these reports. If you

created *Customers* for the OVR:NNM Reports module, *Customers* are ignored when generating these reports.

4. Generate the reports so that they are ready for display in the SIP module. Select `Action:Run->Generate Reports`.

5. Verify that the reports generated successfully:

   • Select `Action:Show Reports`.

   • Under the `Families of Reports` heading:

     — Select `ITO Current`, then select `ITO Services` and look for the link to the following report:
       ITO Top Active Messages by Service

     — Select `ITO History`, then select `ITO Services` and look for links to the following four reports:
       ITO Service Status (Full Time Range)
       ITO Service Status (Last Month)
       ITO Service Status (Last Week)
       ITO Service Status (Yesterday)

   These are the five reports available for display through the OVR:OVO Reports module in SIP. Within Reporter, these reports display a graph for each top-level service and child service currently configured within your OVSN database on your OVO management server. When these same reports are displayed through SIP's OVR:OVO Reports module, only those `services` specifically configured in the `<ServiceList>` (within your SIP Customer Model) assigned to the current SIP role are displayed.

6. You are now ready to insert the OVR:OVO Reports module into your SIP portal views. See "Adding the OVR:OVO Reports module" on page 70.

Providing data for SIP's OVR: OV Performance Reports module

To use any of the reports in the OVR:OV Performance Reports module, complete the steps in this section. If you do not wish to use these reports, skip this section.

TIP The reports in the OVR:OV Performance Reports module are:

- Top Busy CPU Systems report
- Top Busy Disk Systems report
- Top Busy Memory Systems report
- Top Busy Network Systems report
- Top File System Utilizing Systems report

1. OpenView Reporter automatically discovers each OpenView Performance Agent (MeasureWare Agent) and OpenView Operations Agent version 7 (Coda) in your management domain. Look under `Discovered Systems:All` for a list of systems whose agents currently report information to OVR. Refer to the documentation that comes with the OpenView Reporter product for more information. The Reporter documentation set is also available on this web site: `http://ovweb.external.hp.com/lpe/doc_serv`

2. Make sure that the report templates required by OVR:OVO Reports module are available. In the Reporter main window, right-click `Reports` and select `Configure Report Packages`.

   Move the following report pack to the right-hand column, if you have not already done so:
   `OV Performance`

   Click `[OK]` to return to the Reporter main window.

3. **KEY CONCEPT:** To enable the OVR:OV Performance Reports module, each `<Organization name="x">` in your SIP Customer Model *must* have a corresponding *Customer* in OpenView Reporter. (Not a corresponding *Group* as required by the OVR:NNM Reports module.)

   Create a `Customer` in OVR that has the same name as each `<Organization>` defined within your SIP Customer Model:

a. Right click `Customers`.

b. Select `Add Customer`. Create a `Customer` that corresponds to the name of an `<Organization>` that is currently defined within your SIP Customer Model (on the SIP server).

   Make sure that you type each name exactly as it appears in each `<Organization name="x">`.

c. Repeat this customer creation process until every `<Organization>` in your SIP Customer Model has a corresponding `Customer` in Reporter.

TIP   If you are not sure which names are currently defined within your SIP Customer Model, see "Viewing the Current SIP Customer Model." on page 27 for information about easily displaying a list of currently defined `<Organization>` elements within the SIP Customer Model.

4. The next time that the SIP Customer Model is refreshed on your SIP server, each `<Organization>`'s `<NodeList>` (as defined within your SIP Customer Model) is imported under each corresponding Reporter `Customer` that you just defined. The `repimport.exe` script enables this process. Only those nodes that have the OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) show up under the Reporter `Customer`. Any node that does not have the required agent installed is discarded; you will see a Stop-sign error message in the Reporter status pane for each discarded node.

NOTE   To force SIP to refresh the Customer Model:

a. Go to the `SIP Administration Pages` by logging into the SIP portal as a user who can access the special `SIP Administrator` role. Switch to the `SIP Administrator` role.

b. Click the `Customer Model` tab.

c. In the `Customer Model Summary Configuration` segment, click `[Refresh]`.

d. Click `[Help]` for more information.

5. Verify that the import worked successfully. Check the *Systems* listed under each `Customer`. Only nodes that have the OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) installed show up under `Customer`.

6. **KEY CONCEPT:** Reporter requires that the Reports to be generated are associated with *Groups*, not *Customers*. You need to decide upon a strategy for associating a *Group* with each *Customer* in order to generate the OVR:OV Performance reports for SIP.

   The simplest way is to use a group whose name is always selected as the default group by SIP's OVO:OV Performance module. The rules that the OVO:OV Performance module uses to select a default group are as follows:

   a. Requests a list of all Group names from Reporter.

   b. Sorts the list alphabetically (A-Z followed by a-z).

   c. Discards the "ALL" group.

   d. Selects the first Group name from the remaining names in the list, as the default name. Therefore, a Group name such as `1A-SIPperf` is a good choice.

NOTE   You can develop a more complicated strategy, such as separate `Groups` for Routers, WebServers, and EmailServers. This would allow a second level of filtering on the `<NodeList>` provided from the SIP Customer Model. However, if you decide to use a strategy such as this, you must edit each *PortalView*.xml containing an OVR:OV Performance Reports module in order to specify the `group="x"` attribute in each module instance's XML code. If you really want to do this, see white paper called *OVR:OV Performance Reports Module: Configuring OVR Groups as Filters* (OVR_OV_Performance_Reports.pdf) before continuing.

---

7. Create a `Group` in Reporter that will be paired with `Customers` when generating the performance reports:

   a. Right click `Discovered Systems`.

   b. Select `Add Group`. The recommended name for your `Group` is `1A-SIPperf`.

---

8. Drag the five OV Performance reports into the new Group that you created as shown in Figure 2-4.

Figure 2-4   **Installing the OVR:OV Performance Reports**

9. Expand `Customers`. Drag all systems from each `Customer` to its corresponding `Group`.

10. OVR will not generate reports for a `Group` unless at least one system is assigned to the `Group`. In the case of the OVR:OV Performance Reports module, drag the nodes from each `Customer` into the `Group` with which it is paired for report generation. Only those systems listed under both the `Customer` and the paired `Group` are displayed in the OVR:OV Performance Reports module in the SIP portal.

    Expand `Customers`. Drag the relevant systems into the appropriate `Group`.

11. Generate the reports so that they are ready for display in the SIP module. Select `Action:Run->Generate Reports`.

12. Verify that the reports generated successfully:

    • Select `Action:Show Reports`.

    • The reports you need are under:
      ```
      Reports for Groups of Systems
      <One Report Link for Each Group You Created
      (1A-SIPperf)>
      ```

      You should see a list of links to each Performance report when you click on the link for the group. When viewing the OVR:OV Performance Reports module in the SIP portal, these are the reports that you will see (although they will be formatted a little differently).

13. You are now ready to insert the OVR:OV Performance Reports module into your SIP portal views. See "Adding the OVR:OV Performance Reports module" on page 80.

NOTE   If you add an `<Organization>`, on your SIP server, be sure to return to OpenView Reporter and configure the new SIP organization as a Reporter `Customer` and configure the paired Reporter `Group`. The `Customer` list is not maintained automatically.

Running OVR in Languages Other Than English

At the time that this manual was written, OpenView Reporter was not available in languages other than English. If reports are available, you may be able to display them through the SIP portal, provided that the data is UTF-8 compliant.

Secure Socket Layer (SSL) Support

The SIP server to OpenView Reporter system communication cannot be configured to use Secure Socket Layer (SSL) at this time.

Running the OVR Reports Modules in a Wireless Environment

The OVR reports module cannot be displayed on wireless devices at this time.

3 The OVR:NNM Reports Module

Using the OVR:NNM Reports module

The OVR:NNM Reports module shows data gathered from NNM for the specified SIP `<Organization>`.

Adding the OVR:NNM Reports module

To insert the OVR:NNM Reports 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 wide column, either:

   • Select `OVR:NNM Reports` from the `Select Module to Add` list box, and click `[Add]`, or

   • Click `[Edit]` to access the `Edit Column` page. Insert the OVR:NNM Reports 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 OVR:NNM Reports module is inserted into your `PortalView.xml` file.

• If you want to modify this module instance, turn to "Editing the OVR:NNM Reports module" on page 58.

• If you want to change the default module, see "Relevant Files" on page 63.

If you have more than one OVR system configured to communicate with SIP, the default OVR system is accessed. You can override the *default* OVR system selection, see "Editing the OVR:NNM Reports module" on page 58 for information about setting the *default* OVR system.

TIP   If you want to add a module to the list of available modules, see
                     "Relevant Files" on page 63. You can create and add another instance of
                     any module.

Editing the OVR:NNM Reports module

Using the OVR:NNM Reports - Edit Page

You can easily modify the OVR:NNM Reports 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 OVR:NNM Reports module, click the edit button:

   The OVR:NNM Reports - Edit page appears. Click [Help] for specific instructions.

4. To override the default OVR system, select an available server from the Reporting Station drop down list.

   By default, SIP contacts the first OVR system in the list of Management Stations in the SIP Configuration Editor (see "On the SIP Server" on page 26). SIP obtains the requested reports from the selected OVR system.

5. The reports display information about one defined SIP Organization at a time (see "Segmenting the OVR Data for Your Customers" on page 91 for information about defining Organizations). To change the default Organization, make a selection from the drop down list. You are selecting from all SIP Customer Model <Organization>s assigned to the current SIP Role.

   You can add the OVR:NNM Reports module multiple times to the same portal view. Each module can specify a different default organization.

6. To specify which reports you want, select Choose from List. Make any desired changes. Click the [Help] button for specific instructions:

- To add a report, select the report from the `Available Reports` list and click [`Add`]. Repeat until the `Displayed Reports` list contains all the reports you want to display.

- To remove a report, select the report in the `Available Reports` list and click [`Remove`]. Repeat until the `Displayed Reports` list contains only the reports you want to display.

- To rearrange the order of the reports, select a report in the `Displayed Reports` list, and click [`Up`] or [`Down`]. Repeat until reports are in the order you prefer.

7. To save the changes and return to the main portal page, click [`OK`].

8. Log off of the SIP portal.

9. 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 `OVR:NNM Reports - 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.

- Remove reports from the selection list.

- Change the title of a report.

To directly modify the XML code for an OVR:NNM Reports 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.reporter.NNMReports"`

   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.reporter.NNMReports"
   display="yes"
   help="/OvSipDocs/C/help/OVR/NNMRepView.html"
   id="module4"
   rollupState="down"
   title="OVR: NNM Reports">
</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 63):

```
<Reporter customer="yourOrganiztion"
        mgmtStationRef="yourOVRsystem.div.co.com">
   <Report custSegmented="no" display="yes"
      secondPartOfUrl="nnm/eventnode/{0}/default.htm"
      styleSheet="OVNNMRepEvtNode.xsl"
      title="NNM Events by Nodename"
       xPath="OVNNMRepEvtNode.xpath"/>

   <Report custSegmented="no" display="yes"
     secondPartOfUrl="nnm/eventsbyseverity/{0}/default.htm"
      styleSheet="OVNNMRepEvtsBySev.xsl"
      title="NNM Events by Severity"
       xPath="OVNNMRepEvtsBySev.xpath"/>
   <Report custSegmented="no" display="yes"
```

```
    secondPartOfUrl="nnm/eventssevtrend7day/{0}/default.htm"
        styleSheet="OVNNMRepEvtsSevTrend7Day.xsl"
        title="NNM Event Severity Trend (past seven days)"
        xPath="OVNNMRepEvtsSevTrend7Day.xpath"/>
    <Report custSegmented="no" display="no"
 secondPartOfUrl="nnm/eventscattrend7day/{0}/default.htm"
        styleSheet="OVNNMRepEvtsCatTrend7Day.xsl"
        title="NNM Event Category Trend (past seven days)"
        xPath="OVNNMRepEvtsCatTrend7Day.xpath"/>
    <Report custSegmented="no" display="no"
 secondPartOfUrl="nnm/eventtrend1/{0}/default.htm"
        styleSheet="OVNNMRepEvtTrend1.xsl"
        title="NNM Event Trend"
        xPath="OVNNMRepEvtTrend1.xpath"/>
</Reporter>
```

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

- *Windows 2000:*
  `%SIP_HOME%\conf\share\views\OVReporter.dtd`

- *UNIX:* `/opt/OV/SIP/conf/share/views/OVReporter.dtd`

5. To change the title of this OVR:NNM Reports module instance, change the `title` attribute:
   `<ModuleInstance title="new title">`

   To change the title of all OVR:NNM Reports modules, change the `title` attribute in the registration file, see "Relevant Files" on page 63.

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

   `help="/OVSipDocs/C/help/OVR/`*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 SIP customer model `<Organization>` filter, type in a currently defined SIP Organization name. (See Chapter 6, "Segmenting the OVR Data for Your Customers," on page 91 for

information about the SIP customer model). This setting affects all reports in this module instance:

```
<Reporter customer="yourSIPOrganiztion"
```

8. To contact an OVR system other than the default system, enter the OVR system's fully-qualified hostname into the mgmtStationRef attribute. You must configure this OVR system within the SIP Configuration Editor program (see "Establishing Communication Among OpenView Products for the Reporter Modules" on page 24).

```
<Reporter customer="yourOrganiztion"
         mgmtStationRef="yourOVRsystem.div.co.com">
```

9. For each report, a <Report> block is included. The attributes in this block control what is included in the report. The first attribute is custSegmented. This attribute is used only by the OVR:OV Performance Reports module. So ignore it for this module:

```
<Report custSegmented="no" display="no"
```

10. For each report that you want to display, set display="yes". For each report that you do not wish to display, set display="no":

```
<Report custSegmented="no" display="yes"
```

11. Place the <Report> blocks in the order in which they should be displayed in the module.

12. Save the XML file.

13. After you make modifications to XML files, validate the syntax. See "Validating XML Files" on page 117 for more information.

14. Log into the SIP portal as the appropriate user to ensure that you have the desired results.

Relevant Files

The OVR:NNM Reports 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` & `reportingConfig.dtd` & `mgmtStations.xml`

  This XML file configures communication between OVR system and Service Information Portal servers. Use the SIP Configuration Editor to make changes to this XML file. See the "Establishing Communication Among OpenView Products for the Reporter Modules" on page 24.

- `OVPortalConfig.dtd` & `OVPortalConfig.xml`

  This XML file stores the instructions for exporting the SIP Customer Model data into the NNM data warehouse. Use the `SIP Administration Pages` by logging in as a user who can access the special `SIP Administrator` role. Select the `Customer Model` tab to establish or modify these settings. See "Enabling Transfer of the SIP Customer Model Definitions" on page 28.

- `OVModuleRegistraton.dtd` & `OVRegNNMRep.xml`

  This XML file grants access to the OVR:NNM Reports module through the SIP framework so that it is available for your use. To add another instance of the OVR:NNM Reports module to the SIP module selection list, you copy and rename the `OVRegNNMRep.xml` and the `OVDefaultNNMRep.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 112.

- `OVReporter.dtd` & `OVDefaultNNMRep.xml`

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

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

— Directly edit the XML code in the `OVDefaultNNMRep.xml` file, or

— Insert a OVR:NNM Reports 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 `OVDefaultNNMRep.xml` file.

See "Directly Editing the PortalView.XML Files" on page 59 for more information

• `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/OVR/*.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 3-1   Reporter Module Files on the SIP Server

File Name	Windows NT/2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
mgmtStations.dtd	conf\share\stations\	conf/share/stations/
mgmtStations.xml	conf\share\stations\	conf/share/stations/
reportingConfig.dtd	conf\share\stations\	conf/share/stations/
OVPortalConfig.dtd	conf\framework\	conf/framework/
OVPortalConfig.xml	conf\framework\	conf/framework/
OVModuleRegistration.dtd	registration\	registration/
OVRegNNMRep.xml OVRegOVORep.xml OVRegMWRep.xml	registration\	registration/

Table 3-1   Reporter Module Files on the SIP Server

File Name	Windows NT/2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
OVReporter.dtd	conf\share\views\	conf/share/views/
OVDefaultNNMRep.xml OVDefaultOVORep.xml OVDefaultMWRep.xml	registration\defaults\	registration/defaults/
PortalView.dtd	conf\share\views	conf/share/views
PortalView.xml	conf\share\views	conf/share/views
*.html	htdocs\C\help\OVR\	htdocs/C/help/OVR/

The files in Table 3-2 reside on the OVR system:

- `*.rpt`

  These report templates contain the report queries.

- `repload_NNM.SRP`

  This file contains information about report templates. This file gives the `repload` command the information it needs to add the new NNM reports.

- `integration.pdf`

  The directions for installing the NNM patch that provides the required components for OVR NNM reports. These directions include steps to be taken on the NNM management station and steps to be taken on the OVR system.

Table 3-2   Reporter Module Files on the OpenView Reporter Server

File Name	Windows NT/2000 Location *OVR_install_dir*\...	UNIX Location.... N/A
*.rpt (13 files)	data\reports\nnm\	
repload_NNM.SRP	newconfig\ packages\	
integration.pdf	/help/	

The files in Table 3-3 reside on the NNM management station:

- tables_groups.*

  The tables_groups scripts, when run, create the required GROUPS table in the NNM data warehouse. One script is provided for each database supported on the NNM management station.

- drop_groups.*

  The drop_groups scripts, when run, uninstall GROUPS table from the NNM data warehouse. One script is provided for each database supported on the NNM management station.

- ovsipexport.exe

  This CGI script imports the SIP Customer Model into the GROUPS table of NNM data warehouse each time the SIP Customer Model is loaded into memory (refreshed) on the SIP server. The SIP server notifies ovsipexport on the NNM management station to update the GROUPS table in the NNM data warehouse with the latest <Organization> names and assigned <NodeList> specified in your SIP Customer Model.

- repload_NNM.SRP

  This file contains information about report templates. This file gives the repload command the information it needs to add the new NNM reports.

- *.rpt

  These are the reports templates that control the formatting of the XML data in the NNM reports.

- integration.pdf

  The directions for installing the NNM patch that provides the required components for OVR NNM reports. These directions include

steps to be taken on the NNM management station and steps to be taken on the OVR system.

Table 3-3   **Reporter Module Files on the NNM Management Station**

File Name	Windows NT/2000 Location *NNM_install_dir\...*	UNIX Location....
tables_groups.solid tables_groups.oracle tables_groups.msSqlSrvr drop_groups.solid drop_groups.oracle drop_groups.msSqlSrvr	\newconfig\OVDB-RUN\conf\ analysis\sqlScripts Moved to: conf\analysis\sqlScripts\	/opt/OV/newconfig/ OVDB-RUN/ conf/analysis/sqlScripts Moved to: $OV_CONF/ analysis/sqlScripts/
ovsipexport.exe	www/cgi-bin/	/opt/OV/www/cgi-bin/
repload_NNM.SRP	conf\analysis\ reportTemplates\<database>	$OV_CONF/analysis/ reportTemplates/<database>
*.rpt (13 files)	conf\analysis\ reportTemplates\<database>	$OV_CONF/analysis/ reportTemplates/<database>
integration.pdf	conf\analysis\ reportTemplates\<database>	$OV_CONF/analysis/ reportTemplates/<database>

4 The OVR:OVO Reports Module

Using the OVR:OVO Reports module

The OVR:OVO Reports module shows data gathered from OVO for the specified SIP `<Organization>`.

Adding the OVR:OVO Reports module

To insert the OVR:OVO Reports 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 wide column, either:

   • Select `OVR:OVO Reports` from the `Select Module to Add` list box, and click `[Add]`, or

   • Click `[Edit]` to access the `Edit Column` page. Insert the OVR:OVO Reports 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 OVR:OVO Reports module is inserted into your `PortalView`.xml file.

• If you want to modify this module instance, turn to "Editing the OVR:OVO Reports module" on page 72.

• If you want to change the default module, see "Relevant Files" on page 77.

If you have more than one OVR system configured to communicate with SIP, the default OVR system is accessed. You can override the default OVR system selection, see "Editing the OVR:OVO Reports module" on page 72 for information about setting the *default* OVR system.

TIP   If you want to add a module to the list of available modules, see
                 "Relevant Files" on page 77. You can create and add another instance of
                 any module.

Editing the OVR:OVO Reports module

Using the OVR:OVO Reports - Edit Page

You can easily modify the OVR:OVO Reports 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 OVR:OVO Reports module, click the edit button:

   The OVR:OVO Reports - Edit page appears. Click [Help] for specific instructions.

4. To override the default OVR system, select an available server from the Reporting Station drop down list.

   By default, SIP contacts the first OVR system in the list of Management Stations in the SIP Configuration Editor (see "On the SIP Server" on page 26). SIP obtains the requested reports from the selected OVR system.

5. The reports display information about one defined SIP Organization at time (see "Segmenting the OVR Data for Your Customers" on page 91 for information about defining Organizations). To change the default Organization, make a selection from the drop down list. You are selecting from all SIP Customer Model <Organization>s assigned to the current SIP Role.

   You can add the OVR:OVO Reports module multiple times to the same portal view. Each module can specify a different default organization.

6. To specify which reports you want, select Choose from List. Make any desired changes. Click the [Help] button for specific instructions:

- To add a report, select the report from the `Available Reports` list and click [Add]. Repeat until the `Displayed Reports` list contains all the reports you want to display.

- To remove a report, select the report in the `Available Reports` list and click [Remove]. Repeat until the `Displayed Reports` list contains only the reports you want to display.

- To rearrange the order of the reports, select a report in the `Displayed Reports` list, and click [Up] or [Down]. Repeat until reports are in the order you prefer.

7. To save the changes and return to the main portal page, click [OK].

8. Log off of the SIP portal.

9. 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 `OVR:OVO Reports - 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.

- Remove reports from the selection list.

- Change the title of a report.

To directly modify the XML code for an OVR:OVO Reports 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.reporter.OVOReports"`

   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.reporter.OVOReports"
    display="yes"
    help="/OvSipDocs/C/help/OVR/OVORepView.html"
    id="module4"
    rollupState="down"
    title="OVR: OVO Reports">
</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 77):

```
<Reporter customer="yourOrganiztion"
         mgmtStationRef="yourOVRsystem.div.co.com">
  <Report custSegmented="no" display="yes"
    secondPartOfUrl="ito/ServSeverityF/default.htm"
    styleSheet="OVOVORepServSeverity.xsl"
    title="Service Status All Data"
    xPath="OVOVORepServSeverity.xpath"/>
  <Report custSegmented="no" display="yes"
    secondPartOfUrl="ito/ServSeverityM/default.htm"
    styleSheet="OVOVORepServSeverity.xsl"
    title="Service Status Last Full Month"
    xPath="OVOVORepServSeverity.xpath"/>
  <Report custSegmented="no" display="yes"
    secondPartOfUrl="ito/ServMess/default.htm"
```

```
      styleSheet="OVOVORepServMess.xsl"
      title="OVO Top Active Messages by Service"
      xPath="OVOVORepServMess.xpath"/>
   <Report custSegmented="no" display="no"
      secondPartOfUrl="ito/ServSeverityD/default.htm"
      styleSheet="OVOVORepServSeverity.xsl"
      title="Service Status Yesterday"
      xPath="OVOVORepServSeverity.xpath"/>
   <Report custSegmented="no" display="no"
      secondPartOfUrl="ito/ServSeverityW/default.htm"
      styleSheet="OVOVORepServSeverity.xsl"
      title="Service Status Last Full Week"
      xPath="OVOVORepServSeverity.xpath"/>
</Reporter>
```

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

- *Windows 2000:*
  `%SIP_HOME%\conf\share\views\OVReporter.dtd`

- *UNIX:* `/opt/OV/SIP/conf/share/views/OVReporter.dtd`

5. To change the title of this OVR:OVO Reports module instance, change the `title` attribute: `<ModuleInstance title="new title">`

   To change the title of all OVR:OVO Reports modules, change the `title` attribute in the registration file, see "Relevant Files" on page 77.

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

   `help="/OVSipDocs/C/help/OVR/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 SIP customer model `<Organization>` filter, type in a currently defined SIP Organization name. (See Chapter 6, "Segmenting the OVR Data for Your Customers," on page 91 for information about the SIP customer model). This setting affects all reports in this module instance:

```
<Reporter customer="yourSIPOrganiztion"
```

NOTE   If you see a `group` attribute in the `Reporter` element, delete it. The
               `group` attribute is used only by the OVR:OV Performance module.

8. To contact an OVR system other than the default system, enter the
   OVR system's fully-qualified hostname into the `mgmtStationRef`
   attribute. You must configure this OVR system within the SIP
   Configuration Editor program (see "Establishing Communication
   Among OpenView Products for the Reporter Modules" on page 24).

   ```
   <Reporter customer="yourOrganiztion"
            mgmtStationRef="yourOVRsystem.div.co.com">
   ```

9. For each report, a `<Report>` block is included. The attributes in this
   block control what is included in the report. The first attribute is
   `custSegmented`. This attribute is used only by the OVR:OV
   Performance Reports module. So ignore it for this module:

   ```
   <Report custSegmented="no" display="no"
   ```

10. For each report that you want to display, set `display="yes"`. For
    each report that you do not wish to display, set `display="no"`:

    ```
    <Report custSegmented="no" display="yes"
    ```

11. Place the `<Report>` blocks in the order in which they should be
    displayed in the module.

12. Save the XML file.

13. After you make modifications to XML files, validate the syntax. See
    "Validating XML Files" on page 117 for more information.

14. Log into the SIP portal as the appropriate user to ensure that you
    have the desired results.

Relevant Files

The OVR:OVO Reports 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` & `reportingConfig.dtd` & `mgmtStations.xml`

  This XML file configures communication between OVR system and Service Information Portal servers. Use the SIP Configuration Editor to make changes to this XML file. See the "Establishing Communication Among OpenView Products for the Reporter Modules" on page 24.

- `OVModuleRegistraton.dtd` & `OVRegOVORep.xml`

  This XML file grants access to the OVR:OVO Reports module through the SIP framework so that it is available for your use. To add another instance of the OVR:OVO Reports module to the SIP module selection list, you copy and rename the `OVRegOVORep.xml` and the `OVDefaultOVORep.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 112.

- `OVReporter.dtd` & `OVDefaultOVORep.xml`

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

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

  — Directly edit the XML code in the `OVDefaultOVORep.xml` file, or

  — Insert a OVR:OVO Reports 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 `OVDefaultOVORep.xml` file.

See "Directly Editing the PortalView.XML Files" on page 73 for more information

- `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/OVR/*.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 4-1   Reporter Module Files on the SIP Server

File Name	Windows NT/2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
mgmtStations.dtd	conf\share\stations\	conf/share/stations/
mgmtStations.xml	conf\share\stations\	conf/share/stations/
reportingConfig.dtd	conf\share\stations\	conf/share/stations/
OVModuleRegistration.dtd	registration\	registration/
OVRegOVORep.xml	registration\	registration/
OVReporter.dtd	conf\share\views\	conf/share/views/
OVDefaultOVORep.xml	registration\defaults\	registration/defaults/
PortalView.dtd	conf\share\views	conf/share/views
PortalView.xml	conf\share\views	conf/share/views
*.html	htdocs\C\help\OVR\	htdocs/C/help/OVR/

5 The OVR:OV Performance Reports Module

Using the OVR:OV Performance Reports module

The OVR:OV Performance Reports module shows data gathered from each OpenView Performance Agent (MeasureWare Agent) and OpenView Operations Agent version 7 (Coda) in the specified SIP <Organization>.

Adding the OVR:OV Performance Reports module

To insert the OVR:OV Performance Reports 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 wide column, either:

   • Select OVR:OV Performance Reports from the Select Module to Add list box, and click [Add], or

   • Click [Edit] to access the Edit Column page. Insert the OVR:OV Performance Reports 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 OVR:OV Performance Reports module is inserted into your PortalView.xml file.

• If you want to modify this module instance, turn to "Editing the OVR:OV Performance Reports module" on page 82.

• If you want to change the default module, see "Relevant Files" on page 88.

If you have more than one OVR system configured to communicate with SIP, the default OVR system is accessed. You can override the default OVR system selection, see "Editing the OVR:OV Performance Reports module" on page 82 for information about setting the *default* OVR system.

TIP   If you want to add a module to the list of available modules, see
"Relevant Files" on page 88. You can create and add another instance of
any module.

Editing the OVR:OV Performance Reports module

Using the OVR:OV Performance Reports - Edit Page

You can easily modify the OVR:OV Performance Reports 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 OVR:OV Performance Reports module, click the edit button:

   The `OVR:OV Performance Reports - Edit` page appears. Click `[Help]` for specific instructions.

4. To override the default OVR system, select an available server from the `Reporting Station` drop down list.

   By default, SIP contacts the first OVR system in the list of `Management Stations` in the SIP Configuration Editor (see "On the SIP Server" on page 26). SIP obtains the requested reports from the selected OVR system.

5. The reports display information about one defined SIP Organization (see "Segmenting the OVR Data for Your Customers" on page 91 for information about defining Organizations). To change the default `Organization`, make a selection from the drop down list. You are selecting from all SIP Customer Model `<Organization>`s assigned to the current SIP Role.

   You can add the OVR:OV Performance Reports module multiple times to the same portal view. Each module can specify a different default organization.

6. To specify which reports you want, select `Choose from List`. Make any desired changes. Click the `[Help]` button for specific instructions:

    • To add a report, select the report from the `Available Reports` list and click `[Add]`. Repeat until the `Displayed Reports` list contains all the reports you want to display.

    • To remove a report, select the report in the `Available Reports` list and click `[Remove]`. Repeat until the `Displayed Reports` list contains only the reports you want to display.

    • To rearrange the order of the reports, select a report in the `Displayed Reports` list, and click `[Up]` or `[Down]`. Repeat until reports are in the order you prefer.

7. To save the changes and return to the main portal page, click `[OK]`.

8. Log off of the SIP portal.

9. Log into the SIP portal as the appropriate user to ensure that you have the desired results.

10. If you configured OpenView Reporter to use a Group *other than 1A-SIPperf* for the Performance Reports, you must now edit the `PortalView.XML` file to specify the `group="OVRgroup"` attribute.

Directly Editing the PortalView.XML Files

TIP   For the following adjustments, you must edit the XML file. It is recommended that you use the `OVR:OV Performance - 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.

• Remove reports from the selection list.

• Change the title of a report.

• Specify the `group` attribute.

To directly modify the XML code for an OVR:OV Performance Reports 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.reporter.MWReports"`

   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.reporter.MWReports"
    display="yes"
    help="/OvSipDocs/C/help/OVR/OVPRepView.html"
    id="module4"
    rollupState="down"
    title="OVR: OV Performance Reports">
</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 88):

```
<Reporter customer="yourOrganiztion"
         mgmtStationRef="yourOVRsystem.div.co.com"
         group="yourGroup" >
 <Report custSegmented="yes" display="yes"
    secondPartOfUrl="Customers/{0}/Topcpu/{1}/default.htm"
```

```
       styleSheet="OVMWRepPerformance.xsl"
       title="Top Busy CPU Systems"
       xPath="OVMWRepPerformance.xpath"/>
  <Report custSegmented="yes" display="no"
       secondPartOfUrl="Customers/{0}/topnet/{1}/default.htm"
       styleSheet="OVMWRepPerformance.xsl"
       title="Top Busy Network Systems"
       xPath="OVMWRepPerformance.xpath"/>
  <Report custSegmented="yes" display="no"
       secondPartOfUrl="Customers/{0}/topmem/{1}/default.htm"
       styleSheet="OVMWRepPerformance.xsl"
       title="Top Busy Memory Systems"
       xPath="OVMWRepPerformance.xpath"/>
  <Report custSegmented="yes" display="no"
      secondPartOfUrl="Customers/{0}/topfile/{1}/default.htm"
       styleSheet="OVMWRepPerformance.xsl"
       title="Top File   System Utilizing Systems"
       xPath="OVMWRepPerformance.xpath"/>
  <Report custSegmented="yes" display="no"
      secondPartOfUrl="Customers/{0}/topdisk/{1}/default.htm"
       styleSheet="OVMWRepPerformance.xsl"
       title="Top Busy Disk Systems"
       xPath="OVMWRepPerformance.xpath"/>
</Reporter>
```

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

- *Windows 2000:*
  %SIP_HOME%\conf\share\views\OVReporter.dtd

- *UNIX:* /opt/OV/SIP/conf/share/views/OVReporter.dtd

5. To change the title of this OVR:OV Performance Reports module instance, change the title attribute:
   <ModuleInstance title="new title">

   To change the title of all OVR:OV Performance Reports modules, change the title attribute in the registration file, see "Relevant Files" on page 88.

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

   help="/OVSipDocs/C/help/OVR/*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. Specify the default OVR customer (that you configured to correspond to a SIP customer model <Organization>), type in a currently defined OVR customer name. (See "Providing data for SIP's OVR: OV Performance Reports module" on page 46 for information about the SIP customer model). This setting affects all reports in this module instance:

   <Reporter **customer="yourSIPOrganiztion"**

8. *Optional:* Type the name of the *Group* you configured in OpenView Reporter for use with the OV Performance Reports module.

NOTE   If you used a Group name that is automatically selected as the default Group, you do not need to include the group="x" attribute. SIP determines the default group as follows:

   a. Requests a list of all Group names from OpenView Reporter.

   b. Sorts the list alphabetically (0-9, A-Z followed by a-z).

   c. Discards any Group name that includes the string "all" (case-insensitive) anywhere in the name.

   d. Selects the first Group name from the remaining names in the list, as the default name.

   The suggested name is "1A-SIPperf", SIP (see "Providing data for SIP's OVR: OV Performance Reports module" on page 46).

This setting affects all reports in this module instance:

   <Reporter customer="yourSIPOrganiztion"
   group="yourGropName" >

9. To contact an OVR system other than the default system, enter the OVR system's fully-qualified hostname into the mgmtStationRef attribute. You must configure this OVR system within the SIP

Configuration Editor program (see "Establishing Communication Among OpenView Products for the Reporter Modules" on page 24).

```
<Reporter customer="yourSIPOrganiztion"
group="yourSIPOrganization"
mgmtStationRef="yourOVRsystem.div.co.com">
```

10. For each report, a `<Report>` block is included. The attributes in this block control what is included in the report. The first attribute is `custSegmented`. This attribute is used only by the OVR:OV Performance Reports module. This attribute value must be set to *yes*:

```
<Report custSegmented="yes" display="no"
```

11. For each report that you want to display, set `display="yes"`. For each report that you do not wish to display, set `display="no"`:

```
<Report custSegmented="yes" display="yes"
```

12. Place the `<Report>` blocks in the order in which they should be displayed in the module.

13. Save the XML file.

14. After you make modifications to XML files, validate the syntax. See "Validating XML Files" on page 117 for more information.

15. Log into the SIP portal as the appropriate user to ensure that you have the desired results.

Relevant Files

The OVR:OV Performance Reports 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` & `reportingConfig.dtd` & `mgmtStations.xml`

  This XML file configures communication between OVR system and Service Information Portal servers. Use the SIP Configuration Editor to make changes to this XML file. See the "Establishing Communication Among OpenView Products for the Reporter Modules" on page 24.

- `OVPortalConfig.dtd` & `OVPortalConfig.xml`

  This XML file stores the instructions for exporting the SIP Customer Model data into the OpenView Reporter database. Use the `SIP Administration Pages` by logging in as a user who can access the special `SIP Administrator` role. Select the `Customer Model` tab to establish or modify these settings. See "Enabling Transfer of the SIP Customer Model Definitions" on page 28.

- `OVModuleRegistraton.dtd` & `OVRegMWRep.xml`

  This XML file grants access to the OVR:OV Performance Reports module through the SIP framework so that it is available for your use. To add another instance of the OVR:OV Performance Reports module to the SIP module selection list, you copy and rename the `OVRegMWRep.xml` and the `OVDefaultMWRep.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 112.

- `OVReporter.dtd` & `OVDefaultMWRep.xml`

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

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

— Directly edit the XML code in the OVDefaultMWRep.xml file, or

— Insert a OVR:OV Performance Reports 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 OVDefaultMWRep.xml file.

See "Directly Editing the PortalView.XML Files" on page 83 for more information

- 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/OVR/*.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 5-1   Reporter Module Files on the SIP Server

File Name	Windows NT/2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
mgmtStations.dtd	conf\share\stations\	conf/share/stations/
mgmtStations.xml	conf\share\stations\	conf/share/stations/
reportingConfig.dtd	conf\share\stations\	conf/share/stations/
OVPortalConfig.dtd	conf\framework\	conf/framework/
OVPortalConfig.xml	conf\framework\	conf/framework/
OVModuleRegistration.dtd	registration\	registration/
OVRegMWRep.xml	registration\	registration/
OVReporter.dtd	conf\share\views\	conf/share/views/

Table 5-1   **Reporter Module Files on the SIP Server**

File Name	Windows NT/2000 Location %SIP_HOME%\....	UNIX Location /opt/OV/SIP/....
OVDefaultMWRep.xml	registration\defaults\	registration/defaults/
PortalView.dtd	conf\share\views	conf/share/views
PortalView.xml	conf\share\views	conf/share/views
*.html	htdocs\C\help\OVR\	htdocs/C/help/OVR/

The files in Table 5-2 reside on the OVR system:

- repimport.exe

    This launches the repimport.exe program on the OVR system each time the SIP Customer Model is loaded into memory (refreshed) on the SIP server. The repimport.exe program imports the SIP Customer Model <NodeList> entries under each defined *Customer* (matching a SIP <Organization>) in the OVR database.

Table 5-2   **Reporter Module Files on the OVR System**

File Name	Windows NT/2000 Location *OVR_install_dir*\...
repimport.exe	HPOV_IOPS\cgi-bin

6 Segmenting the OVR Data for Your Customers

Integrating OVR Data into Your Customer Model

The SIP Customer Model allows you to associate resources (nodes and services) with *Organizations*. These *Organizations* are associated with SIP *Roles* so that data is automatically filtered appropriately when a user displays any of the OVR reports modules. Figure 6-1 illustrates how the SIP Customer Model works. This process is required to enable the OVR reports modules.

Before you proceed, decide for which Organizations you need to segment data. For example, you may need to provide portals for several divisions within your company: accounting, marketing, R&D, legal, support. You could create node and/or 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 OVR reports modules, yet see only the data appropriate for them.

Figure 6-1   **SIP Customer Model**
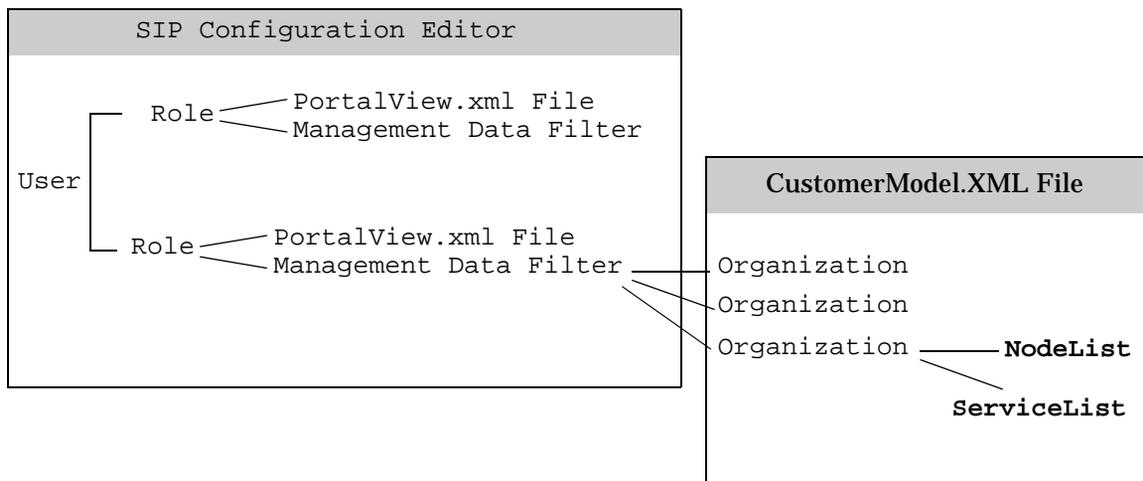
The remainder of this chapter explains how to create `<NodeList>` and `<ServiceList>` elements for use in your `<Organization>` definitions.

The effect of the SIP Customer Model depends upon the module:

- OVR:NNM Reports module

  — `<NodeList>` elements, only those alarms in the NNM data warehouse from nodes that pass through the Management Data Filter are included in the report's calculations.

  — `<ServiceList>` elements must be present, but are ignored.

- OVR:OVO Reports module

  — `<ServiceList>` elements, only those services specifically listed in the management data filter are included in the report's calculations.

  — `<NodeList>` elements are ignored.

- OVR:OV Performance Reports module

  — `<NodeList>` elements, only those nodes that pass through the Management Data Filter *and* have the OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) installed are included in the report's calculations.

  — `<ServiceList>` elements must be present, but are ignored.

You must create lists of nodes and services in XML that conform to the specifications in these DTD files:

Windows 2000:
`%SIP_HOME%\conf\share\organizations\SimpleCustomerModel.dtd`
`%SIP_HOME%\conf\share\roles\UserRole.dtd`

UNIX:
`/opt/OV/SIP/conf/share/organizations/SimpleCustomerModel.dtd`
`/opt/OV/SIP/conf/share/roles/UserRole.dtd`

This chapter explains how to manually create the required `<NodeList>` and `<ServiceList>` elements.

Your `<NodeList>` and `<ServiceList>` elements can be defined in one or more XML files or a mix of CGIs, servlets, URLs, and files. These approaches are not mutually exclusive and can be used in combination.

SIP provides several tools that simplify the process of defining `<NodeList>` elements by gathering the required data from the NNM object database. See the *NNM Integration with SIP* manual (`NNM_Integration.pdf`) for more information about the following methods:

- "Dynamically Gathering Customer Views Organization Data"

  This CGI program works only if the OpenView Customer Views program is configured on your NNM management station. If you are using Customer Views, you already defined a customer model and can export that information dynamically for use in the SIP customer model. Use the supplied CGI program to dynamically output the Customer Views customer model data as valid XML.

- "Exporting Customer Views Organization Data to an XML File"

  This CGI program works only if the OpenView Customer Views program is configured on your NNM management station. If you are using Customer Views, you already defined a customer model. Use the supplied CGI program to perform a one-time migration of your Customer Views customer model to an XML file. Essentially, this gives you a one-time snapshot of the Customer Views customer model to be used as a starting point for your SIP customer model. Use this approach if you want to leverage the NNM Customer Views customer model, but also want the flexibility to make changes.

- "Dynamically Gathering NNM Node and Interface Data"

  Use the supplied servlet to dynamically generate lists of nodes from the NNM object database. Use this approach if you want to retrieve information from the NNM object database (`ovwdb`) and automatically return XML content for the SIP customer model. The generated `<NodeList>` elements are formatted according to the `SimpleCustomerModel.dtd`.

- "Exporting NNM Node and Interface Data to an XML File"

  Use the supplied servlet to perform a one-time migration of your NNM object database information into XML files. Essentially, this gives you a one-time snapshot of the data from the NNM object database (`ovwdb`) to be used as a starting point for the SIP customer model definitions. The generated XML file is a partial SIP customer model of `<NodeList>` elements formatted according to the `SimpleCustomerModel.dtd`.

You an also create your own program (CGI or servlet) to generate your `<NodeList>` and/or `<ServiceList>` elements from an arbitrary data store or provisioning system, and express it in XML that conforms to the `SimpleCustomerModel.dtd`. See the "Developing a Custom Customer Model Source" section in the *SIP Deployment and Integration Guide*, (`SIP_Deployment_Integration.pdf`) for more information.

Manually Creating NodeList and ServiceList Elements

The SIP 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 reports modules. You can create one XML file that contains all the various `<NodeList>` elements and `<ServiceList>` elements, or you can create multiple XML files containing the various list elements. Your list elements can be directly inserted into your `<Organization>` definitions, or inserted by reference. For example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">

<SimpleCustomerModel>
    <Organization name="Marketing">

        <NodeList name="Your Choice 1">
            <Node name="host.acme.com"       />
            <Node name="server.acme.com"     />
        </NodeList>

        <ServiceList name="Your Choice 2" >
            <Service name="as-defined-in-OVSN-database" />
            <Service name="as-defined-in-OVSN-database" />
            <Service name="as-defined-in-OVSN-database" />
            <Service name="as-defined-in-OVSN-database" />
        </ServiceList>

    </Organization>

    <Organization name="Accounting">
        <NodeListRef href="Your Choice 1" />
        <ServiceListRef href="Your Choice 2" />
    </Organization>

</SimpleCustomerModel>
```

Customer-to-Node Mappings

To create `<NodeList>` elements that can later be associated with
`<Organization>` elements in your SIP Customer Model, do the
following.

NOTE

The SIP modules that communicate with OpenView Network Node
Manager (NNM) also respond to `<NodeList>` elements. See the *NNM
Integration with SIP* manual (`NNM_Integration.pdf`) for more
information:

- Alarms module

- Network Device Health module

- Topology module

The OVO Messages module that communicates with OpenView
Operations (OVO) also responds to `<NodeList>` elements. See the *OVO
and OVSN Integration with SIP* manual
(`OVO_and_OVSN_Integration.pdf`) for more information.

If sharing `<NodeLists>` causes a problem, you can assign multiple roles
to a particular user. Optimize one role's `<NodeList>` element for the
NNM modules, the second role's node `<NodeList>` element for the OVO
Messages module, and the third role's node `<NodeList>` element for the
OVR reports modules.

Determining Which Nodes to Add to the SIP Customer Model

Nodes for the OVR:NNM Reports module. You must know the
fully-qualified hostname of each node whose alarm information you wish
to display in the SIP OVR:NNM Reports module. If you do not already
know the fully-qualified hostname, do one of the following to gather that
information, on the NNM management station:

- Examine one or more NNM submaps.

- Use NNM's `Edit:Find->Object by Attribute` feature.

- NNM's Inventory Report (accessed through the NNM Report
  Presenter).

- Use the NNM `ovobjprint` command. See the *ovobjprint* reference

page in NNM's online help (or the UNIX manpage) for more information for more information.

• Use the `ovtopodump` command. See the *ovtopodump* reference page in NNM's online help (or the UNIX manpage) for more information.

Nodes for the OVR:OV Performance Reports module. You must know the fully-qualified hostname of each node where the OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) is installed in your environment. You must include each of these nodes in a `<NodeList>` element before their data displays in the OVR:OV Performance Reports module.

OpenView Reporter automatically discovers each OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) in your management domain. If you do not already know the fully-qualified hostname, on the OVR system, look under `Discovered Systems:All` for a list of systems whose agents currently report information to OVR.

• The `Discovered Systems:All` list shows the fully-qualified name for all UNIX-based systems.

• The `Discovered Systems:All` list shows the hostname for all Windows-based systems. Use the `nslookup` command to determine the fully-qualified hostname of each Windows-based system (`nslookup <hostname>`).

Refer to the documentation that comes with the OpenView Reporter product for more information. The Reporter documentation set is available on this web site:
`http://ovweb.external.hp.com/lpe/doc_serv`

Adding NodeLists to the SIP Customer Model

On the SIP server. You are now ready to create `<NodeList>` elements. For example:

```
<NodeList name="your choice" >
    <Node name="fully-qualified-hostname" />
    <Node name="fully-qualified-hostname" />
</NodeList>
```

1. Make a backup the *CustomerModel*.xml configuration files before making changes. If you edit the file and get incorrect XML syntax, you may want the ability to revert to the previous version of the file.

Using an ASCII or XML editor, either edit one of your existing
CustomerModel.xml files or create an XML file based upon the
SimpleCustomerModel.dtd. These files are located in the following
directory:

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

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

2. **Save your new XML file to the** /conf/share/organizations
   directory. If you place your XML file in any other location, update the
   path information when you get to step 6 and step 10.

3. **Create a** <NodeList> **element for each group of nodes:**

   ```
   <NodeList>
   </NodeList>
   ```

4. *Optional:* **Give each node list a name that you can reference later**
   when you are assigning node lists to specific <Organization>
   definitions:

   ```
   <NodeList name="yourChoice" >
   </NodeList>
   ```

5. *Required:* **for each** <Node> **in this** <NodeList> **element, enter a**
   fully-qualified hostname into the name **attribute:**

   ```
   <NodeList name="yourChoice" >
        <Node name="fully-qualified-hostname" />
        <Node name="fully-qualified-hostname" />
   </NodeList>
   ```

6. **Ensure that the following lines are at the top of each XML file that**
   you create:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">

<SimpleCustomerModel>
```

The path to the SimpleCustomerModel.dtd in the DOCTYPE
statement *must* correctly reference the location of the
SimpleCustomerModel.dtd file in the /conf/share/organizations
directory on the SIP server. If you place your XML file in any other
location, use the DOCTYPE statement in the second example below.

- **Example of DTD reference in XML file located in the**

organizations directory:

```
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">
```

- Example of DTD reference in XML file located other than the organizations directory (change *SIPserver.co.com* to your SIP server's fully-qualified hostname):

```
<!DOCTYPE SimpleCustomerModel PUBLIC "SimpleCustomerModel"
"http://SIPserver.co.com/ovportal/servlet/DTDServer/conf/share/organizations/
SimpleCustomerModel.dtd\">
```

7. Ensure that the following line is at the end of each XML file that you create:

```
</SimpleCustomerModel>
```

8. Save the XML file. For example, the following shows two node lists that contain all the desired NNM nodes and all the desired OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) nodes:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">

<SimpleCustomerModel>

        <NodeList name="Accounting">
            <Node name="host1.acme.com"   />
            <Node name="server1.acme.com" />
            <Node name="router1.acme.com" />
            <Node name="host2.acme.com"   />
            <Node name="server2.acme.com" />
            <Node name="router2.acme.com" />
        </NodeList>

        <NodeList name="Manufacturing">
            <Node name="host3.acme.com"     />
            <Node name="server3.acme.com"   />
            <Node name="router3.acme.com"   />
            <Node name="host4.acme.com"     />
            <Node name="server4.acme.com"   />
            <Node name="router4.acme.com"   />
        </NodeList>

</SimpleCustomerModel>
```

9. After you make modifications to XML files, validate the syntax. See "Validating XML Files" on page 117 for more information.

10. Register the source of the customer model data with SIP. For detailed instructions, see "Registering SIP Customer Model Sources" on page 106.

11. You are now ready to associate these `<NodeList>` elements with `<Organization>` elements in your Customer Model, as appropriate. See the "Mapping Organizations to Their Resources" section in the *SIP Deployment and Integration Guide*, (`SIP_Deployment_Integration.pdf`) for more information.

See example on page 95.

Customer-to-Service Mappings

You *must* create a `<ServiceList>` element within each SIP `<Organization>` in order to enable the reports modules. This is true even if you are not using OpenView Service Navigator program (OVSN) on your OVO/OVSN management server and not planning to use the OVR:OVO Reports module.

NOTE   If you are not using OpenView Service Navigator program (OVSN), simply insert the following (either literally or by reference) into each SIP `<Organization>` definition:

```
<ServiceList name="yourChoice" >
     <Service name="x" />
</ServiceList>
```

If the OpenView Service Navigator program (OVSN) is installed and configured on your OVO/OVSN management server, you can create `<ServiceList>` elements that control the service data displayed in your OVR:OVO Reports modules.

It is recommended that you include only top-level services in your service lists. Unlike the OVSN modules, you cannot depend upon child service `depth` settings to expand your `<ServiceList>`. If you have a specific need to show a report about a child service, that child service must be specifically listed in your SIP Customer Model `<ServiceList>`.

Figure 6-2   **Service Hierarchy**
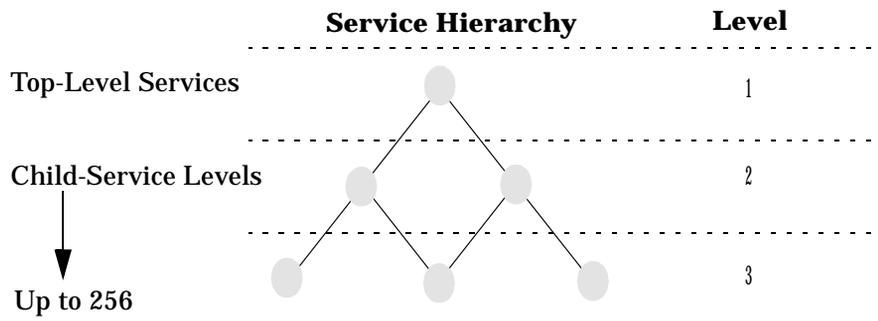
NOTE   The OVSN modules that communicate with OpenView Service Navigator
(OVSN) also respond to `<ServiceList>` elements. See the *OVO and
OVSN Integration with SIP* manual (`OVO_and_OVSN_Integration.pdf`)
for more information:

- Service Browser module

- Service Cards module

- Service Graph module

- Service Health module

- Any custom service modules that you create

If sharing `<ServiceList>` elements causes a problem, you can assign
multiple roles to a particular user. Optimize one role's `<ServiceList>`
element for the OVSN modules and the second role's node
`<ServiceList>` element for the OVR:OVO Reports module.

Determining Which Services to Add to the SIP Customer Model

On the OVO/OVSN Management Server. If you do not already know
the names of the services that you want to include in your
`<ServiceList>` elements, do the following to gather that information:

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

You use this information when creating the `<ServiceList>` elements on the SIP server.

Adding Services to the SIP Customer Model

On the SIP server. You are now ready to create `<ServiceList>` elements. For example:

```
<ServiceList name="your choice" >
     <Service name="as-defined-in-OVSN-database" />
     <Service name="as-defined-in-OVSN-database" />
</ServiceList>
```

1. Make a backup the *CustomerModel*.xml configuration files before making changes. If you edit the file and get incorrect XML syntax, you may want the ability to revert to the previous version of the file.

2. Using an ASCII or XML editor, either edit one of your existing *CustomerModel*.xml files or create an XML file based upon the SimpleCustomerModel.dtd. These files are located in the following directory:

   Windows 2000:
   `%SIP_HOME%\conf\share\organizations\`

   UNIX:
   `/opt/OV/SIP/conf/share/organizations/`

3. Save your new XML file in the `/conf/share/organizations` directory. If you place your XML file in any other location, update the path information when you get to step 7 and step 11.

---

4. Create a `<ServiceList>` element for each group of services:

   ```
   <ServiceList>
   </ServiceList>
   ```

5. *Optional:* Give each service list a name that you can reference later when you are assigning service lists to specific `<Organization>` definitions:

   ```
   <ServiceList name="yourChoice" >
   </ServiceList>
   ```

6. *Required:* enter the `name` value for each `Service` to be included in this list. It is recommended that you include only top-level services. This is the service name as defined within the OpenView Service Navigator database. For example:

   ```
   <ServiceList name="yourChoice" >
      <Service name="from OVSN database" />
      <Service name="cluster" />
      <Service name="email_exch" />
      <Service name="geo_orga" />
   </ServiceList>
   ```

NOTE   The following `<ServiceList>` attributes are not used by the OVR:OVO Reports module, and therefore, not required.

```
 <Service name="serviceName" type="name">
    <Depth>0-256</Depth>
    <DisplayString>optional</DisplayString>
 </Service>
```

See "Configuring the Managed Resources Module" in the *SIP Deployment and Integration Guide* (`SIP_Deployment_Integration.pdf`) or see "Segmenting the OVO/OVSN Data by Customer" in the *OVO and OVSN Integration with SIP* manual (`OVO_and_OVSN_Integration.pdf`) for information about the use of these attributes.

7. Ensure that the following lines are at the top of each XML file that you create:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">
<SimpleCustomerModel>
```

The path to the `SimpleCustomerModel.dtd` in the `DOCTYPE` statement *must* correctly reference the location of the `SimpleCustomerModel.dtd` file in the `/conf/share/organizations` directory on the SIP server. If you place your XML file in any other location, use the `DOCTYPE` statement in the second example below.

- Example of DTD reference in XML file located in the `organizations` directory:

```
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">
```

- Example of DTD reference in XML file located other than the `organizations` directory (change *SIPserver.co.com* to your SIP server's fully-qualified hostname):

```
<!DOCTYPE SimpleCustomerModel PUBLIC "SimpleCustomerModel"
"http://SIPserver.co.com/ovportal/servlet/DTDServer/conf/share/organizations/
SimpleCustomerModel.dtd\">
```

8. Ensure that the following line is at the end of each XML file that you create:

```
</SimpleCustomerModel>
```

9. Save the XML file. For example, the following shows two service lists that contain all the desired top-level services:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE SimpleCustomerModel SYSTEM "SimpleCustomerModel.dtd">

<SimpleCustomerModel>

        <ServiceList name="Marketing" >
            <Service name="email" />
            <Service name="webServers" />
            <Service name="databaseServers" />
            <Service name="eCommerse" />
        </ServiceList>

        <ServiceList name="Accounting" >
            <Service name="email" />
            <Service name="webServers" />
            <Service name="accountingSystems" />
            <Service name="auditingSystems" />
        </ServiceList>
</SimpleCustomerModel>
```

10. After you make modifications to XML files, validate the syntax. See "Validating XML Files" on page 117 for more information.

11. Register the new source of customer model data with SIP. For detailed instructions, see "Registering SIP Customer Model Sources" on page 106.

12. You are now ready to associate these `<ServiceList>` elements with `<Organization>` elements in your Customer Model, as appropriate. See the "Mapping Organizations to Their Resources" section in the *SIP Deployment and Integration Guide*, (`SIP_Deployment_Integration.pdf`) for more information.

See example on page 95.

Registering SIP Customer Model Sources

You need to register with SIP the name and location of the sources of the customer model data. This is done through the `SIP Administration Pages` that are accessed in the SIP portal through a special `SIP Administrator` role.

Registering a Customer Model Source

Customer model sources can be defined in one or more files on the SIP server or can be programmatically generated by CGI programs and servlets. Most likely, the sources to your fully-integrated customer model are a mix of files and programs.

1. Go to the `SIP Administration Pages` by logging in as a user who can access the special `SIP Administrator` role. Switch to the `SIP Administrator` role.

2. Click the `Customer Model` tab.

3. In the `Customer Model Configuration` segment, go to `Customer Model Sources`.

4. In the `New customer model source URL` field, type a relative file name (relative to the `conf/share/organizations` directory), an absolute file name, or a URL. See examples below:

   • Examples of a Relative File Name

   ```
   CustomerModel.xml
   ../uniqueFilename.xml
   ```

   If you specify a relative file path (e.g., "`../CustomerModel.xml`"), it is interpreted relative to the `conf/share/organizations` directory. If the `/organizations` directory is actually remote (that is, the `SIP_CONF_SHARE_DIR` in `SIPPath.properties` is remote), the same syntax is used to specify location relative to the `organizations` directory.

   • Example of an Absolute File Name

   ```
   c:/temp/CustomerModel.xml
   ```

- Examples of URLs

  ```
  http://othermachine/CustomerModel.xml
  http://SIPhostname/ovportal/NNMSimpleCustomerModel
  ```

5. Click [Add] to add the name of the customer model source to the
   Customer Model Sources list. The customer model is refreshed
   automatically, so you do not need to force a refresh by clicking
   [Refresh].

6. *Optional:* To periodically update the customer model according to a
   schedule (in addition to each time that SIP's tomcat service is
   restarted), set the Refresh Rates.

7. Click [Help] for more information.

NOTE   After registering your customer model sources, you can create
                management data filters that reference one or more <Organization>
                elements in the customer model. See the *SIP Deployment and
                Integration Guide* (SIP_Deployment_Integration.pdf)
                "Defining/Modifying Management Data Filters".

                After you have created the management data filters, you can associate a
                filter with each role. See the *SIP Deployment and Integration Guide*
                (SIP_Deployment_Integration.pdf), "Assigning a Management Data
                Filter to a Role." At that point you can display segmented management
                data through SIP modules.

Unregistering a Customer Model Source

1. Go to the SIP Administration Pages by logging in as a user who can access the special Administrator role. Switch to the Administrator role.

2. Click the Customer Model tab.

3. In the Customer Model Configuration segment, go to Customer Model Sources.

4. In the Customer Model Sources list, select a customer model source and click [Delete].

7 Display Filtering for the OVR Reports Modules

Introduction to Display Filtering

Whereas the Management Data filter determines what is *possible* to see in the SIP modules (explained in Chapter 6), display filters control what is actually visible in a particular module instance. Display filters provide a method of restricting the data one last time before the module is visible.

The OVR reports modules do not support any form of display filtering.

B   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" on page 81 of 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

C   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.

C   How Current Is the Report Data?

That Depends

The data that appears in the SIP reports module must pass through at least three OpenView programs. In order to determine how recent the data is, one must understand the process of data collection within each OpenView program.

OVR:NNM Reports Module

The Figure C-1 illustrates the data collection process that determines which data is ultimately displayed in the OVR:NNM Reports module. Data must pass through three OpenView programs:

1. OpenView Network Node Manager (NNM)

   Data is gathered in real-time as SNMP agents forward alarms to NNM.

   The alarm data is exported to the NNM data warehouse manually or according to a schedule established by the NNM administrator.

   Data in the data warehouse is trimmed manually or according to a schedule established by the NNM administrator.

   The data warehouse's GROUPS table is updated by SIP either manually or according to a schedule configured through the SIP Administrator pages.

2. OpenView Reporter (OVR)

   Data is passed from the NNM's data warehouse through the OVR report engine each time OVR generates the reports. This step is initiated either manually or according to a schedule established by the OVR administrator.

3. OpenView Service Information Portal (SIP)

   The schedule established for the `ovsipexport.exe` through the SIP Administrator pages determines how often the SIP Customer Model data is updated on the NNM management station for these reports.

   The NNM report that OVR most recently generated is displayed each time the SIP portal is refreshed, either manually or according to a schedule established by the SIP administrator.
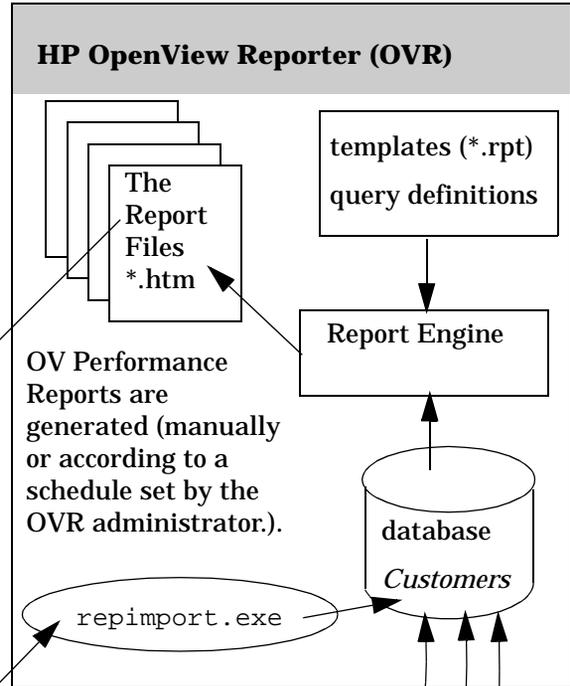
Figure C-1   Process for the Creation of the NNM Reports

NOTE: On the OVR system, you must create *Groups* whose names match each SIP <Organization>.

HP OpenView Reporter (OVR)

xx.htm files

templates (*.rpt)
query definitions

NNM Reports are generated (manually or according to a schedule set by the OVR administrator).
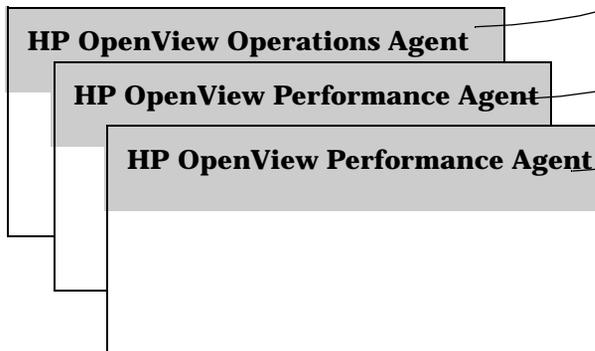
Report Engine

database *Groups*

**HP OpenView
Service Information Portal (SIP)**

Each time SIP is "Refreshed" (either manually or according to a schedule set by the SIP administrator):

(1) The NNM Reports module displays the most recently generated reports from the OVR system.

(2) ovsipexport.exe populates the NNM data warehouse's GROUPS table with the most recent SIP Customer Model Data.

**HP OpenView
Network Node Manager (NNM)**

Data is exported from the runtime NNM databases into the NNM data warehouse and trimmed (manually or according to a schedule set by the NNM administrator).

NOTE: the NNM data warehouse can be running on Solid, Oracle, or SQL Server.
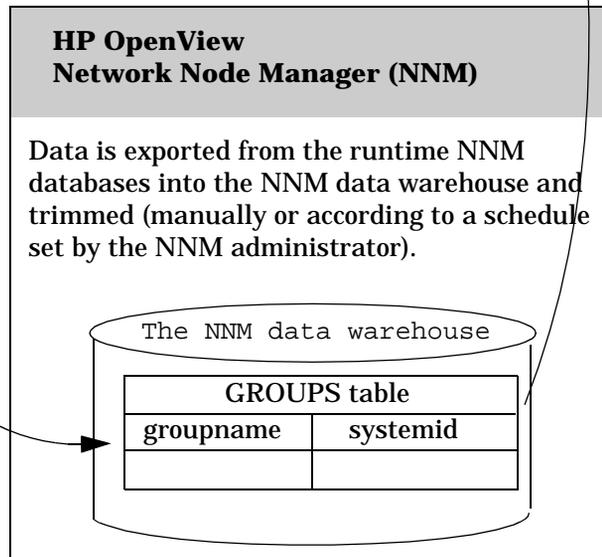
The NNM data warehouse

GROUPS table	
groupname	systemid

OVR:OVO Reports Module

The Figure C-2 illustrates the data collection process that determines which data is ultimately displayed in the OVR:OVO Reports module. Data must pass through three OpenView programs:

1. OpenView Operations (OVO)
   and OpenView Service Navigator (OVSN)

   Data is gathered in real-time as the OVO agents collect events and send messages to the OVO management server. The messages are stored in the OVO operational database (automatically, as soon as they arrive on the management server).

   The operational database also contains configuration data which is stored there by the OVO administrators and operators. It is stored whenever the configuration is modified and saved.

   Service Navigator calculates the status of a service based upon the messages it receives from the management server. The operational database does not contain any information about a service until *service status logging* is explicitly enabled by the OVO administrator. If service status logging is enabled, each status change is logged in the database. This is an automatic process: whenever the status of a service changes, the change event is logged in the database.

2. OpenView Reporter (OVR)

   OVR gathers systems and event data from the OVO database each time the reports are generated. This step is initiated either manually or according to a schedule established by the OVR administrator.

3. OpenView Service Information Portal (SIP)

   The most recently generated OVO report on the OVR system is displayed each time the SIP portal is refreshed, either manually or according to a schedule established by the SIP administrator.

Figure C-2   Process for the Creation of the OVO Reports
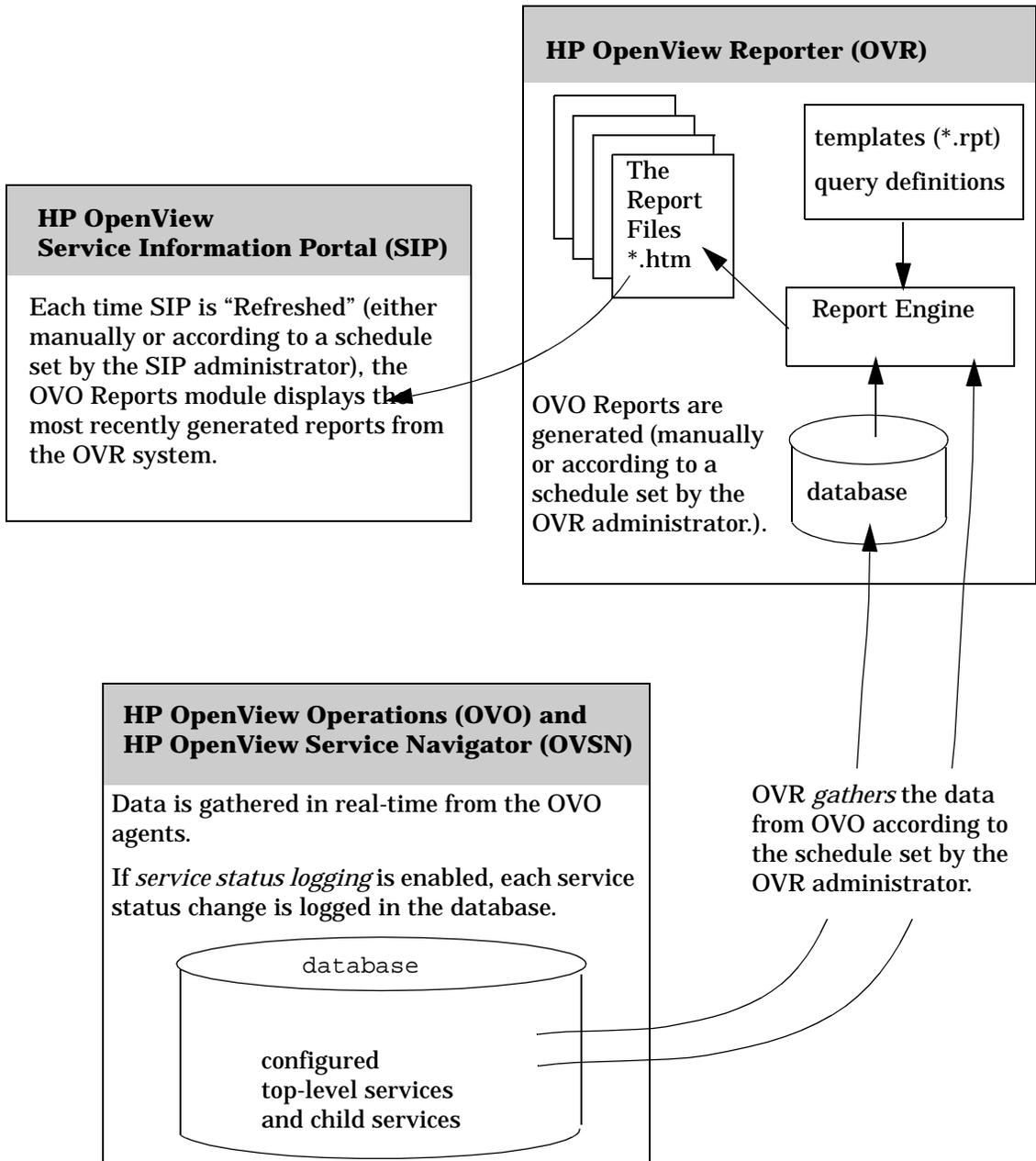
OVR:OV Performance Reports Module

The Figure C-3 illustrates the data collection process that determines which data is ultimately displayed in the OVR:OV Performance Reports module. Data must pass through four OpenView programs:

1. OpenView Performance Agent (MeasureWare) or OpenView Operations Agent version 7 (Coda)

   Performance data is collected and logged in near real-time.

2. OpenView Reporter (OVR)

   Data is gathered from each OpenView Performance Agent (MeasureWare Agent) or OpenView Operations Agent version 7 (Coda) each time the OVR reports are generated, either manually or according to a schedule established by the OVR administrator.

3. OpenView Service Information Portal (SIP)

   The most recently generated OV Performance report is displayed each time the SIP portal is refreshed, either manually or according to a schedule established by the SIP administrator.

Figure C-3   **Communication Process for the OV Performance Report Module**

How Current Is the Report Data?
That Depends

D   Troubleshooting

OVR:NNM Reports module

The module displays, but the only report content is the DataUnavailable error.

Cause: In the SIP Customer Model, for the current `<Organization>`, the `<ServiceList>` may not exist or be empty. This is a known defect.

Symptom: Check `sip.log` for the following message:

```
error Reporter Thread-21 Feb 19, 2002 8:47:14 AM No
services are specified for this organization
```

Solution: Create a `<ServiceList>` element within each SIP, `<Organization>` (either literally or by reference).

NOTE   This is true even if you are not using OpenView Service Navigator program (OVSN) on your OVO/OVSN management server and not planning to use the OVR:OVO Reports module. Just enter the following "dummy" service filter:

```
<ServiceList name="yourChoice" >
     <Service name="x" />
</ServiceList>
```

The report title displays, but no report content.

Cause: The data needed to populate this report is not available from the NNM data warehouse.

Symptom: On the OVR system, verify that the reports generated successfully:

- Select `Action:Show Reports`.

- The reports you need are under:
  ```
  Reports for Groups of Systems
  <One Report Link for Each SIP Organization>
  ```

  You should see a list of links to each NNM report when you click on the link for any SIP `<Organization>` name. When viewing the

OVR:NNM Reports module in the SIP portal, these are the reports that you will see (although they will formatted a little differently). Is any data displayed?

Solution: Data for the OVR:NNM Reports module is gathered from the NNM data warehouse. The NNM data warehouse is independent from the runtime NNM databases. The data warehouse stores historical data for use with analysis tools. Data must be exported from the NNM databases to the NNM data warehouse either manually or as a scheduled event. The data available for the OVR:NNM Reports module is only as current as the most recent export to the data warehouse.

Verify that the NNM data warehouse is configured and running. See the *Reporting and Data Analysis with HP OpenView Network Node Manager* manual that comes with the OpenView Network Node Manager product for information about populating the NNM data warehouse with the appropriate data.

The NNM documentation set is available on this web site: `http://ovweb.external.hp.com/lpe/doc_serv`

The following NNM command can be run manually or scheduled to keep the data current: **`ovdwtrend -export`**

Alternately, the NNM menu item `Tools:Data Warehouse->Export Trend Data` forces an export of alarms into the data warehouse.

While displaying a report, the browser hangs for about 2-3 minutes.

Cause: The OVR system with which the module is trying to communicate may not be configured for communication with SIP.

Symptom: Search the `sip.log` file for the "`Object Not Found`" string:

```
error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM Error connecting to
http://<OVRhostName>:80/HPOV_reports/Customers/Acme/Topcpu/A-WebServers/default.htm:
Object Not Found (404) error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM IO

. . . . . .

Check the url for the report
```

Solution: Note the `<OVRhostName>` value. Using the SIP Configuration Editor, ensure that a `ReportingStation` by this name is configured.

The module displays, but the only report content is the CurrentlyNotConfigured error.

Cause A: The report may not be generated on the OVR system.

Symptom A: On the OVR system, verify that the reports generated successfully:

- Select `Action:Show Reports`.

- The reports you need are under:
  ```
  Reports for Groups of Systems
  <One Report Link for Each SIP Organization>
  ```

  You should see a list of links to each NNM report when you click on the link for any SIP `<Organization>` name. When viewing the OVR:NNM Reports module in the SIP portal, these are the reports that you will see (although they will formatted a little differently).

Solution A: If the report does not exist, either generate the report manually on OVR or wait for the scheduler to run and generate the report. Review the steps in "Providing data for SIP's OVR: NNM Reports module" on page 40 to verify that the report is configured correctly.

Cause B: The path to a report may be incorrect.

Symptom B: Search the sip.log file for the "Object Not Found" string:

```
error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM Error connecting to
http://<OVRhostName>:80/HPOV_reports/Customers/Acme/Topcpu/A-WebServers/default.htm:
Object Not Found (404) error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM IO

. . . . . .

Check the url for the report
```

Solution B: Note the URL of the report. Verify that the report file actually exists on the OVR system at the specified location. If you need to make changes, see "Management Station Configuration" on page 26:

- `<OVRhostName>`, the hostname of the OVR system.

- `80`, the communication port for the OVR system.

- `HPOV_report`, the location of the generated reports on the OVR system.

NOTE   If you assign more than one SIP <Organization> to the Management
                 Data Filter for a particular Role, the end user might switch to an
                 Organization for which no reports are configured or generated on the
                 OpenView Reporter system.

The default organization in PortalView.xml is incorrect.

Cause: If you select a non-*default* Organization from the drop-down list
below the title of the report module, then make any edit change to the
PortalView.xml file, the *default* Organization is changed to the new
selection.

This is a known defect.

Symptom: The report module's Edit page shows the wrong default
organization.

Solution: Reset the Organization to the desired *default*. Bug fix to be
released.

OVR:OVO Reports module

Services are repeated in the *OVO Top Active Messages By Service* report.

Cause: This is a defect in the stylesheet. The services get repeated based upon the number of services in the report.

Symptom: In the *OVO Top Active Messages By Service* report, the services get repeated based upon the number of services in the report. As an example, if the services in the final report are e-mail, cluster, and geo_orga, then the user sees *three* duplicates of the report.

Solution: No solution.

The report title displays, but no report content.

Cause A: The data needed to populate this report is not available from the OVO database.

Symptom A: Verify that the reports generated successfully:

- Select `Action:Show Reports`.

- Under the `Families of Reports` heading:

  — Select `ITO Current`, then select `ITO Services` and look for the link to the following report:
    ITO Top Active Messages by Service

  — Select `ITO History`, then select `ITO Services` and look for links to the following four reports:
    ITO Service Status (Full Time Range)
    ITO Service Status (Last Month)
    ITO Service Status (Last Week)
    ITO Service Status (Yesterday)

These are the five reports available for display through the OVR:OVO Reports module in SIP. Within Reporter, these reports display a graph for each top-level service and child service currently configured within your OVSN database on your OVO management server. When these same reports are displayed through SIP's OVR:OVO Reports module, only those `services` specifically configured in the `<ServiceList>`

(within your SIP Customer Model) assigned to the current SIP role are displayed. Is any data displayed?

Solution A: Data for the OVR:OVO Reports module is gathered from the OVO database. If no data is available for a particular report, that report is empty in the OVR:OVO Reports module.

On the OVO management server, data is gathered in real-time as the OVO agents collect events and send messages to the OVO management server. The messages are stored in the OVO operational database (automatically, as soon as they arrive on the management server).

The operational database also contains configuration data which is stored there by the OVO administrators and operators. It is stored whenever the configuration is modified and saved.

Service Navigator calculates the status of a service based upon the messages it receives from the management server. The operational database does not contain any information about a service until *service status logging* is explicitly enabled by the OVO administrator. If service status logging is enabled, each status change is logged in the database. This is an automatic process: whenever the status of a service changes, the change event is logged in the database.

See the documentation that comes with the OpenView Operations and OpenView Service Navigator products for information about populating the OVO database with the appropriate data.

The OVO and OVSN documentation set is available on this web site:
`http://ovweb.external.hp.com/lpe/doc_serv`

Cause B: The intersection of the `<ServiceList>` of the current `<Organization>` in the SIP Customer model and *services* in the report on the OVR system may be null.

Symptom B: Check the list of services in the SIP customer model and the list of services in the report on OVR.

Solution B: Depending on what the user wants do any of the following:

• On the SIP server, using the OVR:OVO Reports - Edit page, delete this report.

• On the SIP server, using an ASCII editor, modify `<ServiceList>` of the current `<Organization>` in the SIP Customer Model to include the desired services.

While displaying a report, the browser hangs for about 2-3 minutes.

Cause: The OVR system with which the module is trying to communicate may not be configured for communication with SIP.

Symptom: Search the `sip.log` file for the "`Object Not Found`" string:

```
error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM Error connecting to
http://<OVRhostName>:80/HPOV_reports/Customers/Acme/Topcpu/A-WebServers/default.htm:
Object Not Found (404) error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM IO

. . . . . .

Check the url for the report
```

Solution: Note the `<OVRhostName>` value. Using the SIP Configuration Editor, ensure that a `ReportingStation` by this name is configured.

The module displays, but the only report content is the CurrentlyNotConfigured error.

Cause A: The report may not be generated on the OVR system.

Symptom A: Verify that the reports generated successfully:

- Select `Action:Show Reports`.

- Under the `Families of Reports` heading:

  — Select `ITO Current`, then select `ITO Services` and look for the link to the following report:
  ITO Top Active Messages by Service

  — Select `ITO History`, then select `ITO Services` and look for links to the following four reports:
  ITO Service Status (Full Time Range)
  ITO Service Status (Last Month)
  ITO Service Status (Last Week)
  ITO Service Status (Yesterday)

These are the five reports available for display through the OVR:OVO Reports module in SIP. Within Reporter, these reports display a graph for each top-level service and child service currently configured within your OVSN database on your OVO management server. When these same reports are displayed through SIP's OVR:OVO Reports module, only those `services` specifically configured in the `<ServiceList>`

(within your SIP Customer Model) assigned to the current SIP role are displayed.

Solution A: If the report does not exist, either generate the report manually on OVR or wait for the scheduler to run and generate the report. Review the steps in "Providing data for SIP's OVR: OVO Reports module" on page 44 to verify that the report is configured correctly.

Cause B: The path to a report may be incorrect.

Symptom B: Search the sip.log file for the "Object Not Found" string:

```
error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM Error connecting to
http://<OVRhostName>:80/HPOV_reports/Customers/Acme/Topcpu/A-WebServers/default.htm:
Object Not Found (404) error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM IO

. . . . . .

Check the url for the report
```

Solution B: Note the URL of the report. Verify that the report file actually exists on the OVR system at the specified location. If you need to make changes, see "Management Station Configuration" on page 26:

- <OVRhostName>, the hostname of the OVR system.

- 80, the communication port for the OVR system.

- HPOV_report, the location of the generated reports on the OVR system.

NOTE   If you assign more than one SIP <Organization> to the Management Data Filter for a particular Role, the end user might switch to an Organization for which no reports are configured or generated on the OpenView Reporter system.

The default organization in PortalView.xml is incorrect.

Cause: If you select a non-*default* Organization from the drop-down list below the title of the report module, then make any edit change to the *PortalView*.xml file, the *default* Organization is changed to the new selection.

This is a known defect.

Symptom: The report module's Edit page shows the wrong default organization.

Solution: Reset the `Organization` to the desired *default*. Bug fix to be released.

OVR:OV Performance Reports module

The module displays, but the only report content is the DataUnavailable error.

Cause: In the SIP Customer Model, for the current `<Organization>`, the `<ServiceList>` may not exist or be empty. This is a known defect.

Symptom: Check `sip.log` for the following message:

```
error Reporter Thread-21 Feb 19, 2002 8:47:14 AM No
services are specified for this organization
```

Solution: Create a `<ServiceList>` element within each SIP, `<Organization>` (either literally or by reference).

NOTE   This is true even if you are not using OpenView Service Navigator program (OVSN) on your OVO/OVSN management server and not planning to use the OVR:OVO Reports module. Just enter the following "dummy" service filter:

```
<ServiceList name="yourChoice" >
     <Service name="x" />
</ServiceList>
```

The reports are showing the wrong data.

Cause: If no group attribute is specified in the OVR:OV Performance Reports module instance's XML code, the *default* group is used.

The recommended default group name is 1A-SIPperf. Check the group names configured in OpenView Reporter and see if another group name has become the default, by virtue of the selection process.

A *Group* other than 1A-SIPperf has been selected as the *default* group.

Symptom: The default group is determined by:

1. Dropping the "ALL" group.

2. Compiling a list of the remaining groups.

3. Sorting the remaining list numerically, then alphabetically.

Solution: To fix the problem do *one* of the following:

- On the OVR system, choose a name other than `1A-SIPperf` for the OVR:OV Performance Reports module's default group so that the new name is the first to be automatically selected.

- On the SIP server, using an ASCII or XML editor, open the default module file (`OVDefaultMWRep.xml`) and add the attribute `group="name"`. See Chapter 5, "The OVR:OV Performance Reports Module," on page 79 for directions. Then reinsert the OVO:OV Performance Reports module into each portal view. This overrides the default group selection process.

While displaying a report, the browser hangs for about 2-3 minutes.

Cause: The OVR system with which the module is trying to communicate may not be configured for communication with SIP.

Symptom: Search the `sip.log` file for the "`Object Not Found`" string:

```
error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM Error connecting to
http://<OVRhostName>:80/HPOV_reports/Customers/Acme/Topcpu/A-WebServers/default.htm:
Object Not Found (404) error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM IO

. . . . . .

Check the url for the report
```

Solution: Note the `<OVRhostName>` value. Using the SIP Configuration Editor, ensure that a `ReportingStation` by this name is configured.

The module displays, but the only report content is the CurrentlyNotConfigured error.

Cause A: The report may not be generated on the OVR system.

Symptom: On the OVR system, Verify that the reports generated successfully:

- Select `Action:Show Reports`.

- The reports you need are under:
  ```
  Reports for Groups of Systems
  <One Report Link for Each Group You Created
  ```

```
(1A-SIPperf)>
```

You should see a list of links to each Performance report when you click on the link for the group. When viewing the OVR:OV Performance Reports module in the SIP portal, these are the reports that you will see (although they will be formatted a little differently).

Solution A: If the report does not exist, either generate the report manually on OVR or wait for the scheduler to run and generate the report. Review the steps in "Providing data for SIP's OVR: OV Performance Reports module" on page 46 to verify that the report is configured correctly.

Cause B: The path to a report may be incorrect.

Symptom B: Search the sip.log file for the "Object Not Found" string:

```
error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM Error connecting to
http://<OVRhostName>:80/HPOV_reports/Customers/Acme/Topcpu/A-WebServers/default.htm:
Object Not Found (404) error OVProxyParser Thread-21 Feb 19, 2002 8:47:07 AM IO

. . . . . .

Check the url for the report
```

Solution B: Note the URL of the report. Verify that the report file actually exists on the OVR system at the specified location. If you need to make changes, see "Management Station Configuration" on page 26:

- <OVRhostName>, the hostname of the OVR system.

- 80, the communication port for the OVR system.

- HPOV_report, the location of the generated reports on the OVR system.

NOTE   If you assign more than one SIP <Organization> to the Management Data Filter for a particular Role, the end user might switch to an Organization for which no reports are configured or generated on the OpenView Reporter system.

The default organization in PortalView.xml is incorrect.

Cause: If you select a non-*default* Organization from the drop-down list below the title of the report module, then make any edit change to the `PortalView`.xml file, the *default* Organization is changed to the new selection.

This is a known defect.

Symptom: The report module's Edit page shows the wrong default organization.

Solution: Reset the Organization to the desired *default*. Bug fix to be released.

Index

Index

Index