HP OpenView Performance Insight

OPNET Export Datapipe

Software Version: 2.0

Reporting and Network Solutions

March 2004

Legal Notices

Warranty

Hewlett-Packard makes no warranty of any kind with regard to this document, 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.

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

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 in DFARS 252.227-7013.

Hewlett-Packard Company
United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Copyright Notices

© Copyright 2003-2004 Hewlett-Packard Development Company, L.P., all rights reserved.

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

Trademark Notices

OpenView is a U.S. registered trademark of Hewlett-Packard Development Company, L.P.

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

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

UNIX® is a registered trademark of The Open Group.

Windows® and Windows NT® are U.S. registered trademarks of Microsoft® Corp.

Support

Please visit the HP OpenView web site at:

http://openview.hp.com/

There you will find contact information and details about the products, services, and support that HP OpenView offers. You can go directly to the HP OpenView support web site at:

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

The support web site provides access to:

- Product manuals
- Troubleshooting information
- Patches and updates
- Training information
- Support program information

contents

Overview

The OPNET Export Datapipe functions as a data feed to OPNET products. The OPNET Export Datapipe performs the following tasks:

* Reads data stored in Interface Reporting rate tables

* Produces an ASCII flat file containing all of yesterday's data

* Exports this file to the local file system

OPNET applications will read and remove this file when required. The Interface Reporting Report Pack is a prerequisite for the OPNET Export Datapipe.

Configurable Options

The operation of the OPNET Export Datapipe is governed by the following options:

* Run interval (hourly or daily)

* File naming

* Logging level

* Export file name

* Export directory

These options can be modified. See Chapter 3 for details.

Sources for Additional Information

The following documents are related to this manual:

* *Interface Reporting Report Pack 4.0 User Guide*

* *Interface Reporting Report Pack 4.0 Release Statement*

* *Common Property Tables 3.0 User Guide*

User guides for the core product, OVPI, as well as user guides for the reporting solutions that run on OVPI, are posted to the following web site:

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

Select **Technical Support** > **Product Manuals** to reach the **Product Manuals Search** page. The user guides for OVPI are listed under **Performance Insight**. The user guides for report packs, datapipes, preprocessors, and the NNM components are listed under **Reporting and Network Solutions**.

Every manual listed under **Reporting and Network Solutions 5.0** indicates a date of publication. Because updated user guides are posted to this site on a regular basis, always check for updates before using an older PDF that may no longer be current.

2

Datapipe Installation

This chapter covers the following topics:

- Guidelines for a smooth installation
- Using Package Manager to install the OPNET Export Datapipe
- Removing the OPNET Export Datapipe

Guidelines for a Smooth Installation

The OPNET Export Datapipe is part of RNS 5.0. The RNS 5.0 product distribution CD includes an install script. When you select OVPI components for installation, the install script on the CD extracts every OVPI package to the Packages directory on your system. When extraction is complete, the install script prompts you to start Performance Insight and launch Package Manager. Before you get to that step, review the following guidelines.

Prerequisites — For Customers Running OVPI 5.0

The following software must be in place before installing the OPNET Export Datapipe:

- Any available Service Pack for OVPI 5.0
- Common Property Tables 3.0
- Interface Reporting Report Pack 4.0

Distributed Environments

The OPNET Export Datapipe reads collected data stored in rate tables maintained by the Interface Reporting package. If you are running Interface Reporting in a distributed environment, install the OPNET Export Datapipe on every server that polls. If the central server is polling, install the OPNET Export Datapipe on the central server; otherwise do not install the OPNET Export Datapipe on the central server.

Installing the OPNET Export Datapipe 2.0

Perform the following tasks to install the OPNET Export Datapipe.

- Task 1: Extract packages from the RNS product distribution CD
- Task 2: If necessary, remove OPNET Export Datapipe 1.0
- Task 3: Install the OPNET Export Datapipe 2.0.

Task 1:   Extract Packages From the RNS distribution CD

Follow these steps to copy OVPI packages from the RNS distribution CD to the Packages directory on your system:

1   Log in to the system. On UNIX systems, log in as root.

2   Stop OVPI Timer and wait for processes to terminate.

Windows: Select **Control Panel** > **Services**

UNIX: As root, do one of the following:

HP-UX: `sh /sbin/ovpi_timer stop`

Sun: `sh /etc/init.d/ovpi_timer stop`

3   Insert the RNS product distribution CD. On Windows, a Main Menu displays automatically; on UNIX, mount the CD if it does not mount automatically, then navigate to the top level directory on the CD and run the **./setup** command.

4   Type **1** in the choice field and press **Enter**. The install script displays a percentage complete bar. When the copy is complete, the install script starts the Package Manager install wizard. The install wizard welcome window opens.

Once the copy to the Package directory is complete, you can navigate to the Packages directory to see the following results:

- A folder for Interface Reporting
- A folder for the OPNET Export Datapipe

Task 2:   If necessary, remove OPNET Export Datapipe 1.0

If you were running OVPI 4.6, and you upgraded to OVPI 5.0, you may be running the previous release of the OPNET Export Datapipe, namely, version 1.0. There is no upgrade package for the OPNET Export Datapipe. Therefore, before installing the current version, you must remove the previous version from your system. Launch the Package Manager install wizard and follow the on-screen instructions for package removal.

Task 3:   Install OPNET Export Datapipe 2.0

Follow these steps to install the OPNET Export Datapipe:

1   Log in to the system. On UNIX systems log in as root.

2   If your system is distributed, disable trendcopy.

3   Select **HP OpenView > Performance Insight > Package Manager**. The Package Manager welcome window opens.

4   Click **Next**. The Package Location window opens.

5   Click the **Install** radio button.

6   Approve the default installation directory or select a different directory if necessary.

7   Click **Next**. The Report Deployment window opens.

8   Disable the default for Deploy Reports; accept the defaults for application server name and port.

9   Type your user name and password for the OVPI Application Server.

10   Click **Next**. The Package Selection window opens.

11   Click the check box next to the following package:

       IR_OPNET_Export_Datapipe 2.0

12   Click **Next**. The Type Discovery window opens. Disable the default and click **Next**. The Selection Summary window opens.

13   Click **Install**. The Installation Progress window opens. When the install finishes, a package installation complete message appears.

14   Click **Done** to return to the Management Console.

15   Restart OVPI Timer.

The OPNET Export Datapipe will create its first export files at 1:00 a.m. tomorrow. If you want to modify this default, see Chapter 3, Setting Export Options.

Package Removal

If you remove a package, the associated tables will be deleted but not the directory structure of the package itself. Removing this datapipe will cause exports to stop. However, files that have already been exported will not be removed.

Follow these steps to remove the OPNET Export Datapipe:

1   Log in to the system. On UNIX systems log in as root.

2   Stop OVPI Timer and wait for processes to terminate.

    Windows: Select **Control Panel > Services**

    UNIX: As root, do one of the following:

        HP-UX: `sh /sbin/ovpi_timer stop`

        Sun: `sh /etc/init.d/ovpi_timer stop`

3   Start Package Manager. The Package Manager welcome window opens.

4   Click **Next**. The Package Location window opens.

5   Click **Uninstall** and then click Next. The Report Undeployment window opens.

6   If the forms or reports were deployed from this server, accept the defaults for Undeploy Reports, Application Server Name, and Port. Otherwise skip this step.

7   Type the username and password for the OVPI Application Server.

8   Click **Next**. The Package Selection window opens.

9   Click the check box next to this package:

IR_OPNET_Export_Datapipe 2.0

10 Click **Uninstall**. The Progress window opens and the removal process begins. When the removal finishes, a package removal complete message appears.

11 Click **Done** to return to the Management Console.

12 Restart OVPI Timer.

Windows: Select **Control Panel > Services**

UNIX: As root, do one of the following:

HP-UX: `sh /sbin/ovpi_timer start`

Sun: `sh /etc/init.d/ovpi_timer start`

Setting Export Options

The OPNET Export Datapipe exports yesterday's MIB-II data to a predefined directory beneath the directory for the datapipe in the Packages directory. The name of the exported file adheres to the following convention:

    OPNET_file_*yyyymmddhhmm*.gbu2

where *yyyymmddhhmm* is a timestamp. The export takes place at 1:00 a.m. each day.

There are five export options. If you are running OVPI 4.5, you will set these options using a perl script supplied with the package. If you are running OVPI 4.6 or OVPI 5.0, you have access to the OPNET Export Admin form.

Using a Perl Script to Set Options

The perl script is run from the command line and can be found in the Scripts directory under the home directory for OVPI. To start the script, type this command:

    perl $DPIPE_HOME/scripts/IR_OPNET_Export.pl -m

This is the same script that performs the export routine. However, starting the script with the **-m** parameter invokes the command line interface menu. From the command line interface menu you will be able to configure the following options:

- Run interval
- File naming
- Logging level
- Export file name
- Export directory

To invoke the help window, use the **-h** parameter, as follows:

    perl $DPIPE_HOME/scripts/IR_OPNET_Export.pl -h

Using the Admin Form to Set Options

Follow these steps to open the OPNET Export Admin form.

1   Launch the Management Console (piadmin).

2   Click **Objects.** The admin form is listed under **General Tasks**.

3   Double-click the form. The form opens.

Run Interval

The run interval determines how frequently the export takes place. The options are hourly or daily and the default is daily. If the run interval is daily, then each morning at 1.00 a.m. the routine will generate an export file containing all the MIB-II data that was collected between 12.00 a.m. and midnight yesterday.

Setting the run interval to hourly will cause the export to take place every hour at 10 minutes after the hour. The exported data will relate to the previous hour. If an export is missed, the data for that hour will be lost and the next export will create one file only.

File Naming

The file naming option allows you to configure how the file is exported from the system. There are three options, as follows:

- Append — the system will add exported rows to the existing file, or create a new one if none exists.

- Overwrite — the system will overwrite the existing file with the newly exported data.

- Timestamp — the default; the system creates a new file for each export, with a name consisting of the Export File Name and a time stamp in the form *yyyymmddhhmm*.

Here's a sample file name:

```
OPNET_file_200311031310.gbu2
```

This file was exported on 3 November 2003 at 1:10 p.m.

Logging Level

The logging level determines how much output is sent to the screen when the export routine is run from the command line. The options are low, medium, and high. This package does not create a log file, nor will logging information be visible in any report. The only sign that the routine is functioning will be the appearance of new export files in the export directory and a timestamped message on the form.

Export File Name

This name is used by the routine when creating new files in the export directory. If Append or Overwrite options are used, then the file will be named exactly as it is displayed on the form (assuming the OS allows the name provided). If the Timestamp option is used, the filename will have a timestamp added to it, separated by an underscore.

Export Directory

The directory where the routine will attempt to place exported files. If the directory does not exist, the system will attempt to create it. If the system fails to create the directory, messages will display, in the script as well as in the form. Given the advanced permissions settings available on UNIX and Windows machines, make sure that your target directories meet your security requirements by creating these directories manually.

4

Format of the Export File

Each file exported by the OPNET Export Datapipe has the following characteristics:

- Flat ASCII tabular
- Columns separated by tabs
- A single first row containing the word *Links*
- No footer rows
- File extension: .gbu2

An interface with zero throughput will not be represented in the file. See the table below for a description of each column.

Column	Description
Device Name.InterfaceName	Device name and Interface name separated by a ".". The InterfaceName is the unique identifier of the interface. The options are ifIndex, ifDescr, ifName or ifAlias, depending on which re-indexing policy is in use for the device.
Collection Time	The time stamp from OVPI for the beginning of the collection in Sybase time format. Example: February 7 2004 3:00PM
Throughput	The throughput for this time period in bits per second.
Average Packet Size	The average packet size for this interface during the time period.
In/Out	Indicates whether the data in the row refers to ingress or egress traffic. Allowed values are **In** or **Out**.