

HP Network Node Manager iSPI Performance for Metrics Software Datapipe for Interface Reporting Report Pack

for the Windows[®], HP-UX, Solaris, and Linux operating systems

Software Version: 2.00

User Guide

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The title page of this document contains the following identifying information:

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1 Overview

NNM iSPI Performance for Metrics exports device health and performance information to CSV files on an hourly basis. NNM iSPI Performance for Metrics Datapipe for Interface Reporting retrieves the data from the CSV files and imports them to the PI database. The CSV files are deleted once the datapipe completes importing the data into the PI database.

The datapipe does not require any polling policies or polling groups, as it imports the pre-summarized rate data from NNM iSPI Performance for Metrics.

NNM iSPI Performance for Metrics exports CSV data once every hour. By default, the datapipe checks the NNM iSPI Performance for Metrics server for exported CSV files every one hour. You can also configure the datapipe to customize the collection interval and enable the datapipe to check the NNM iSPI Performance for Metrics server for CSV dumps after the interval that you configure.

However, the datapipe can collect only hourly summarized data and not Near Real Time (NRT) data, as NNM iSPI Performance for Metrics dumps CSV data only once in an hour.

You must configure the collection interval for the datapipe to import NNM iSPI Performance for Metrics data. For information about configuring the datapipe, see [Configuring the Datapipe](#) on page 13.

Table 1 Abbreviated Product Names Used in the Document

Full Name	Abbreviated Name	Version
HP Network Node Manager iSPI Performance for Metrics Software Datapipe for Interface Reporting Report Pack	NNM iSPI Performance for Metrics Datapipe for Interface Reporting	2.00
HP Network Node Manager iSPI Performance for Metrics Software	NNM iSPI Performance for Metrics	9.00
HP Performance Insight	PI	5.41

Sources for Additional Information

The following documents are related to this manual:

- HP Network Node Manager iSPI Performance for Metrics Software Datapipe for Interface Reporting Report Pack 2.00 Release Notes
- HP Performance Insight Interface Reporting Report Pack 5.54 User Guide
- HP Performance Insight Common Property Table 3.92 User Guide
- PI Report Packs 14.10.001 Patch Release Notes

Manuals for the core product, PI, and manuals for the reporting solutions and shared packages that run on PI, can be downloaded from this site:

<http://h20230.www2.hp.com/selfsolve/manuals>

On the HP product manuals site, the user guides for the core product are listed under Performance Insight. The user guides for report packs and datapipes are listed under Performance Insight Report Packs. The entry for a manual indicates the month and year it was posted to the web. If a manual is revised and re-posted, the date will change. Since revised manuals are re-posted from time to time, be sure to compare your PDF to the web edition and download the web edition if it is newer.

2 Installing the Datapipe

PI Report Pack 14.10.001 Patch contains the latest report packs and datapipes. The patch extracts the report packs and datapipes in the Packages directory on the PI system. Once the extract completes, the Package Manager is launched automatically.

To install these packages, follow the on-screen instructions.

Using the Package Manager to Install the Datapipe

Software Prerequisites

Install the following products before installing the datapipe:

Products Related to HP Performance Insight

- PI 5.41
- Interface Reporting report pack 5.54
- Common Property Tables 3.92

Service packs are available at the following website:

<http://www.hp.com/go/hpsoftwaresupport>

Products Related to HP Network Node Manager iSPI Performance for Metrics Software

- HP Network Node Manager iSPI Performance for Metrics Software 9.00
- FTP service installed and started
- FTP service configured to provide access to files in the remote directory, where NNM iSPI Performance for Metrics stores the CSV files to export. You must configure NNM iSPI Performance for Metrics to export the CSV files every hour. For more information on configuring this utility, see [Configure the CSV Export Utility](#).

Installing the Datapipe in Distributed PI Environments

To install the datapipe in distributed PI environment, you must install it in the satellite servers. However, you cannot install the datapipe in the remote pollers.

Installing the Datapipe

After the extract finishes, the install script launches the Package Manager. If you just extracted the packages and the Package Manager install wizard is running, start this procedure at step 4. Otherwise, begin at step 1.

- 1 Log in to the PI system. On Windows systems, log in as administrator. On UNIX systems, log in as root.
- 2 Stop OVPI Timer and wait for processes to terminate.
Windows: Select **Settings > Control Panel > Administrative Tools > Services > OVPI Timer > Stop**.
UNIX: As root, type one of the following:
HP-UX: `sh /sbin/init.d/ovpi_timer stop`
Solaris and Linux: `sh /etc/init.d/ovpi_timer stop`
- 3 From the Management Console, select **Tools > Package Manager**. The Package Manager welcome window opens.
Optionally, you can use the `packagemgr` command to start the Package Manager.
- 4 Click **Next**. The Package Location window opens.
- 5 Click **Install**. Approve the default destination directory or browse to a different directory if necessary.
- 6 Click **Next**. The Report Deployment window opens. Type your PI username and password.
- 7 Click **Next**. The Package Selection window opens.
- 8 Click the check box for **IntRepNNMPerfSPI_Datapipe** to install NNM Performance SPI Datapipe for Interface Reporting report pack.
- 9 Click **Next**. The Type Discovery window opens. Clear the default.
- 10 Click **Next**. The Selection Summary window opens.
- 11 Click **Install**. The Installation Progress window opens and the install begins. When the install finishes, a package installation complete message appears.
- 12 Click **Done** to return to the Management Console
- 13 The NNM iSPI Performance for Metrics Datapipe for Interface Reporting report pack is now installed on your system.



Do not start OVPI Timer before you complete configuring the datapipe. If you start the OVPI Timer before configuring the CSV export utility on the NNM iSPI Performance for Metrics server, the datapipe fails to import the device performance data from the NNM iSPI Performance for Metrics server. You can check the error message in the `{DPIPE_HOME}/log/trend.log` file.

Uninstalling the Datapipe

Follow these steps to uninstall the HP Network Node Manager iSPI Performance for Metrics Software Datapipe for Interface Reporting report pack.

- 1 Disable the CSV export utility on the NNM iSPI Performance for Metrics server using the following command:

Windows: %OvInstallDir%\bin\configureCsvExport.ovpl -p
Interface_Health -e SUMMARY, <Remote Directory Path>

UNIX: /opt/OV/NNMPerformanceSPI/bin/configureCsvExport.ovpl -p
Interface_Health -e SUMMARY, <Remote Directory Path>

For more information about the utility, see the manpages for the command.

- 2 Log in to the PI system as administrator. On UNIX systems, log in as **root**.
- 3 Stop OVPI Timer and wait for processes to terminate.

Windows: Select **Settings > Control Panel > Administrative Tools > Services > OVPI Timer > Stop**.

UNIX: As root, type one of the following:

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

Solaris and Linux: **sh /etc/init.d/ovpi_timer stop**

- 4 Start **Package Manager**. The Package Manager install wizard opens.
Optionally, you can use the `packagemgr` command to start the Package Manager.
- 5 Follow the on-screen directions for package removal; when prompted to select a package, select the datapipe. When the uninstall finishes, a package removal complete message appears.
- 6 Click **Done** to return to the Management Console.
- 7 Start OVPI Timer.

Windows: Select **Settings > Control Panel > Administrative Tools > Services > OVPI Timer > Start**.

UNIX: As root, type one of the following:

HP-UX: **sh /sbin/init.d/ovpi_timer start**

Solaris and Linux: **sh /etc/init.d/ovpi_timer start**

3 Configuring the Datapipe

Configuration Tasks on PI Server

Log in to the PI system to add the FTP server details to the `IntRepNNMPerfSPI.pro` file in the scripts directory on the PI server and configure the datapipe to collect data from the NNM iSPI Performance for Metrics:

On Windows systems, log in as administrator. On UNIX systems, log in as root.

Configure the process file immediately after installing the datapipe and before starting the OVPI Timer.

Follow these steps to configure the process file:

- 1 Open the following file:

Windows: `%DPIPE_HOME%/scripts/IntRepNNMPerfSPI_Collection.pro`

UNIX: `$DPIPE_HOME/scripts/IntRepNNMPerfSPI_Collection.pro`

- 2 Locate the Perl execution script: `IntRepNNMPerfSPI_Preprocessor.pl`

- 3 Enter the following values for the corresponding FTP server details:

— `-f <PerfSPI server hostname>`: NNM iSPI Performance for Metrics server IP address or name

— `-u <FTP username>`: FTP username

You must use active FTP (that is, the FTP username must have read and write permission). If you are using passive FTP, configure the `/opt/OV/nonOV/perl/a/lib/5.8.8/Net/libnet.cfg` file to change the value of the following parameter from 0 to 1.

`'ftp_int_passive' => 1` (default is 0)

— `-p <ftp user password>`: FTP password

— `-r <Remote Directory>`: Remote FTP directory path to retrieve the CSV files.

NNM iSPI Performance for Metrics Datapipe for Interface Reporting exports pre-summarized CSV files to PI server. NNM iSPI Performance for Metrics stores these files to the remote directory. You can maintain a directory that is accessible by FTP. The datapipe imports the CSV files into PI database from the location you specify in the process file.

To configure the datapipe to collect data from multiple NNM Performance SPI Servers add the FTP server details for every NNM iSPI Performance for Metrics in the following file:

Windows: `%DPIPE_HOME%/scripts/IntRepNNMPerfSPI_Collection.pro`

UNIX: `$DPIPE_HOME/scripts/IntRepNNMPerfSPI_Collection.pro`

Example

In the following example we configure two `IntRepNNMPerfSPI_Preprocessor.pl` scripts to collect data from two HP Network Node Manager iSPI Performance for Metrics Softwares. In this example, we update `$(DPIPE_HOME)/scripts/IntRepNNMPerfSPI.pro` file.

```
{DPIPE_HOME}/bin/perl -I{DPIPE_HOME}/lib/Perl {DPIPE_HOME}/bin/IntRepNNMPerfSPI_Preprocessor.pl -f FTP_SERVER_1 -u FTP_SERVER_1_user -p FTP_SERVER_1_passwd -r FTP_SERVER_1_path -b backup

{DPIPE_HOME}/bin/perl -I{DPIPE_HOME}/lib/Perl {DPIPE_HOME}/bin/IntRepNNMPerfSPI_Preprocessor.pl -f FTP_SERVER_2 -u FTP_SERVER_2_user -p FTP_SERVER_2_passwd -r FTP_SERVER_2_path -b backup
```

The parameter `-b backup` is optional. If you do not use this parameter, NNM iSPI Performance for Metrics deletes the CSV files after the datapipe completes importing the data into PI database.



All the HP Network Node Manager iSPI Performance for Metrics Softwares that supply data to the PI server, must be of version 9.00.

4 Start OVPI Timer.

Windows: Select **Settings > Control Panel > Administrative Tools > Services > OVPI Timer > Start**.

UNIX: As root, type one of the following:

```
HP-UX: sh /sbin/init.d/ovpi_timer start
```

```
Solaris and Linux: sh /etc/init.d/ovpi_timer start
```

Customizing the Collection Interval for NNM iSPI Performance for Metrics Datapipe for Interface Reporting Datapipe

The default collection interval for the datapipe is set to one hour. You can customize the collection interval for the datapipe as required. For example, based on your requirement, you can customize the collection interval for the datapipe to be ten, 15, or five minutes.

You can also install both NNM iSPI Performance for Metrics Datapipe for Interface Reporting and IR ifEntry datapipe for Interface Reporting report pack together if required. They share and populate the same base table `SRIRDEVPORTS`.

This scenario may present a problem when both datapipes try to populate the table at the same time. One of the datapipe may fail to process the data, if the base table is locked by the other datapipe. You can locate the error message indicating that the process failed to acquire the lock for the table `SRIRDEVPORTS` in the `$(DPIPE_HOME)/log/trend.log` file.

Avoid installing and configuring both NNM iSPI Performance for Metrics Datapipe for Interface Reporting and IR ifEntry datapipe. However, if you need both datapipes, follow these steps to customize collection intervals for both datapipes:

Serialize the Collection for the Datapipes

- 1 Update the `mw_collect -i 15` entry in the `trendtimer.sched` file as follows;

```
<Customized collection interval> - - {DPIPE_HOME}/bin/mw_collect -n
-i <Customized collection interval> -K 1 -X
```



The default collection interval is one hour.

- 2 Create Collection.pro file in {DPIPE_HOME}/scripts folder.
- 3 Add the following lines to the Collection.pro file;

```
##### Collection.pro #####
begin: IR_1 wait
{DPIPE_HOME}/bin/trend_proc -f {DPIPE_HOME}/scripts/IntRepNNMPerfSPI_Collection.pro
{DPIPE_HOME}/bin/-s <OVPI SERVER NAME> -t XV_IFENTRY_DISC_IFINDEX,,,R -e -pe
debug_level=0,bVerbose=0,bSuppress_spike=1,bCheck_index=0,bArchive=0,zerror=10
,line_suppress_value=-1,bDelta_time=0,hwm_data=90,hwm_log=90
end: IR_1
##### End of collection.pro #####
```

- 4 Add an entry for the Collection.pro file in the trendtimer.sched file as follows to customize the data collection interval;

```
<Customized collection interval> - - {DPIPE_HOME}/bin/trend_proc -f
{DPIPE_HOME}/scripts/Collection.pro
```

Configuration Tasks on HP Network Node Manager iSPI Performance for Metrics Software

Configure the CSV Export Utility

Use the following command to configure the CSV export utility (configureCsvExport.ovpl) on the NNM iSPI Performance for Metrics:

```
$configureCsvExport.ovpl -p Interface_Health -a "SUMMARY,<Remote Directory Path>"
```

The extension pack name for HP Network Node Manager iSPI Performance for Metrics Software Datapipe for Interface Reporting report pack is **Interface_Health**. For example, `$configureCsvExport.ovpl -p Interface_Health -a "SUMMARY,/var/opt/OV/Export_IR"` You can find the utility in the following location on the system where NNM iSPI Performance for Metrics is installed:

Windows: %NNMPerformanceSPI_InstallDir%\bin\configureCsvExport.ovpl

UNIX: /opt/OV/NNMPerformanceSPI/bin/configureCsvExport.ovpl

Verify the Configuration

Use the following command to verify that the CSV export utility is configured properly:

```
$configureCsvExport.ovpl -p Interface_Health -l
```

The CSV files to be exported are stored in the remote directory that you have specified while configuring the CSV export configuration utility.

Example

Run the following command to configure the CSV export utility:

```
$ configureCsvExport.ovpl -p Interface_Health -a "SUMMARY,/var/opt/OV/Export_IR"
```

Run the following command to verify the configuration:

```
$ configureCsvExport.ovpl -p Interface_Health -l
```

The following output is displayed:

```
No LIVE exports defined
SUMMARY,/var/opt/OV/Export_IR
```

Once configured, the CSV export utility exports the pre-summarized rate data from HP Network Node Manager iSPI Performance for Metrics Software.

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