

Networks Performance Insight  
VMware Report Pack 5.0.  
for HP Operations Manager  
*vSphere ready*

Installation Guide  
July 2009

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# ABOUT THIS GUIDE

## Overview

This guide will walk you through the nworks Performance Insight VMware Report Pack installation process. It provides step-by-step procedures to follow at various installation stages as well as description of the factors you should consider before you install.

This guide assumes that you have a good understanding of HP Operations Manager for Windows or Unix, HP Performance Insight, and VMware vSphere.

## Conventions

In order to help you get the most out of this guide, we have used the following formatting conventions, terms and abbreviations in the document:

Convention	Description
<b>Emphasis</b>	This type of formatting is used to designate user interface elements (names of dialog windows, buttons and so on).
<i>Italics</i>	This type of formatting is used to designate names of files, file paths and commands.
Notes	This type of formatting is used for tips, notes and important information the user should pay attention to.

Term/Abbreviation	Description
VIC	Virtual Infrastructure Collector
VEM	Virtual Enterprise Monitor
VC	vCenter
VM	Virtual Machine
OMW	HP Operations Manager for Windows
OMU	HP Operations Manager for Unix
PI	HP Performance Insight

## About Veeam Software

### Contacting Veeam Software

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At Veeam Software we pay close attention to comments from our customers. It is important to us not only to quickly help you with your technical support issues — we make it our mission to listen to your input, and to build our products with your suggestions in mind.

Should you have a Customer Support issue or question, please feel free to contact us. We have qualified English speaking technical and customer support staff in the USA and Europe who will help you with any inquiry that you may have.

<b>Office</b>	U.S. Headquarters	EMEA Headquarters
<b>Address:</b>	6479 Reflections Drive, Suite 200 Columbus, Ohio 43017	Quatro House Lyon Way, Frimley Road Camberley, UK, GU16 7ER
<b>Phone:</b>	+1-614-339-8200	+44 (0) 1276-804-501
<b>Fax:</b>	+1-614-675-9494	+44-208-181-7555

### Contacting Veeam Support

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We offer e-mail technical support during business days. Your inquiry will be answered within twenty-four hours of receipt. To submit your support ticket, please email [support@veeam.com](mailto:support@veeam.com).

nworks support may ask you to enable logging as described in the *Troubleshooting* section of the Operations Guide.

### Online Support

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Before contacting technical support, you may be able to find a resolution to your issue either at Veeam nworks Forum or in our Frequently Asked Questions database.

#### Veeam Forums

Visit the Veeam Forums at [www.veeam.com/forum](http://www.veeam.com/forum) to raise questions and find information on all Veeam products.

#### Frequently Asked Questions

Veeam maintains a Frequently Asked Questions (FAQ) database that is available for browsing and searching. It is the best place to start if you have a problem with any nworks product. The FAQ database can be found at [nworks.com/faq.php](http://nworks.com/faq.php). There are several ways to find necessary information:

- Select the product hyperlink to view all of the FAQs for a particular nworks product.
- To search the FAQs for entries related to a specific topic, enter the search string in the **Search For** field, select the product from the dropdown list box, and click **Find FAQ**. If any of the search results look interesting, click on the hyperlink to open the specific FAQ.

# OVERVIEW

The Performance Insight VMware Report Pack provides information on the health of the virtual environment within the VMware Infrastructure.

The collection of data is centered on the nworks Virtual Infrastructure Collector which stores its data within the HP Performance Agent or HP Operations Agent. The following components make up the VMware Report Pack solution:

- nworks\_VIC\_Datapipe
- nworks\_VIC\_Forecasting
- nworks\_VIC\_ReportPack

The datapipe can collect data from multiple VICs. The amount of data collected, and the data load, is based on the number of ESX servers and the number of virtual machines each ESX contains. The amount of data collected can be filtered within the VIC configuration.

**Note:**

Starting with version 5.0 of the Performance Insight VMware Report Pack, the versions of the Performance Insight VMware Report Pack are no longer tied to the nworks Smart Plug-in releases. The reason for this change is to allow for new reports to become available to customers prior to the Smart Plug-in release updates. For example, version 5.0 or later of the Performance Insight VMware Report Pack is compatible and will work with any release of the nworks Smart Plug-in 4.5 or later.

## Performance Considerations

The amount of load that this report pack places on an HP Performance Insight server is based on the number of nodes. Each ESX host or virtual machine is considered a node that has network and system information collected for aggregation purposes. This would be equivalent to collecting both System Resources and Interface Reporting information for each node, whether it is an ESX host or a virtual machine. The sizing of the PI system should be determined by not only counting each VIC system but also by counting each node for which the VIC collects information. If other collections are occurring, enough resources must be made available to ensure the proper functionality of the report pack.

## Management Platforms Supported

- HP Operations Manager 7.5 and 8.x for Windows
- HP Operations Manager for Unix

## Performance Insight Version Supported

- HP Performance Insight 5.3 or later

## VMware Products Supported

- ESX 3.0.x, 3.5, ESXi, and ESX 4.0
- VirtualCenter 2.0.x, 2.5 and vCenter
- ESX 2.0.x through vCenter connection

# Installation

## Planning and Preparation

This chapter describes the planning and preparation steps that you should take before the nworks Performance Insight Pack for VMware installation.

### System Requirements

**Table 1 - OS and RDBMS Support**

Operating Systems	Database Management Systems
Windows 2003 Standard R2, Windows 2003 Standard x86 and Windows 2003 Server x86 (Enterprise/Data-center)	Oracle Database Server 10g (10.2.0.3.0)
Windows 2003 Standard x86 and Windows 2003 Server x86 (Enterprise/Data-center)	Sybase Adaptive Server Enterprise 15
HP-UX 11-11 (PA-RISC), HP-UX 11- 23 (PA-RISC, Itanium) and HP-UX 11-31 (Itanium)	Sybase Adaptive Server Enterprise 15 and Oracle Database Server 10g (10.2.0.3.0)
Solaris 9 and 10	Oracle Database Server 10g (10.2.0.3.0) and Sybase Adaptive Server Enterprise 15
Red Hat Enterprise Linux AS 4.0 x86	Oracle Database Server 10g (10.2.0.3.0) and Sybase Adaptive Server Enterprise 15

### Installation Overview

Install the PI VMware Report Pack using these steps:

- Install the PI Report Pack
- Add the VEM system to *nworks\_VIC* polling group
- Update *trendtimer.sched*
- Perform the first data collection
- Verify that installation is complete

# PI VMware Report Pack Installation

## Unzip the Report Pack Files

- Unzip the *VIC PI Report Pack Setup* zip file.
  - For Windows - a target directory must be *C:\OVPI\Packages*.
  - For Unix - a target directory must be */opt/OVPI/packages*
- Then double click the following file to start the installation: *VIC\_OVPIVMwareReportPack.exe*

## Install the PI Report Pack

In order for Performance Insight to gather performance information from the Virtual Infrastructure Collector, you must complete the following steps:

- Stop the PI timer using one of the following methods:

Windows	Unix
Open a command window and type the following: <i>net stop trendtimer</i>	As root, type the following: <i>/etc/init.d/ovpi_timer stop</i> Or, as trendadm, kill the trendtimer process.

- On the PI server, start the **Package Manager** wizard using one of the following methods:

Windows	Unix
This can be done from the PI Management Console or from <b>Start &gt; Programs &gt; HP Operations Manager &gt; Performance Insight &gt; Package Manager</b>	As trendadm, type the following command: <i>packagemgr</i>

- Click **Next** on the first wizard screen. On the second **PI Packages Location** screen select **Install**, verify the **Destination Folder**, and then click **Next**

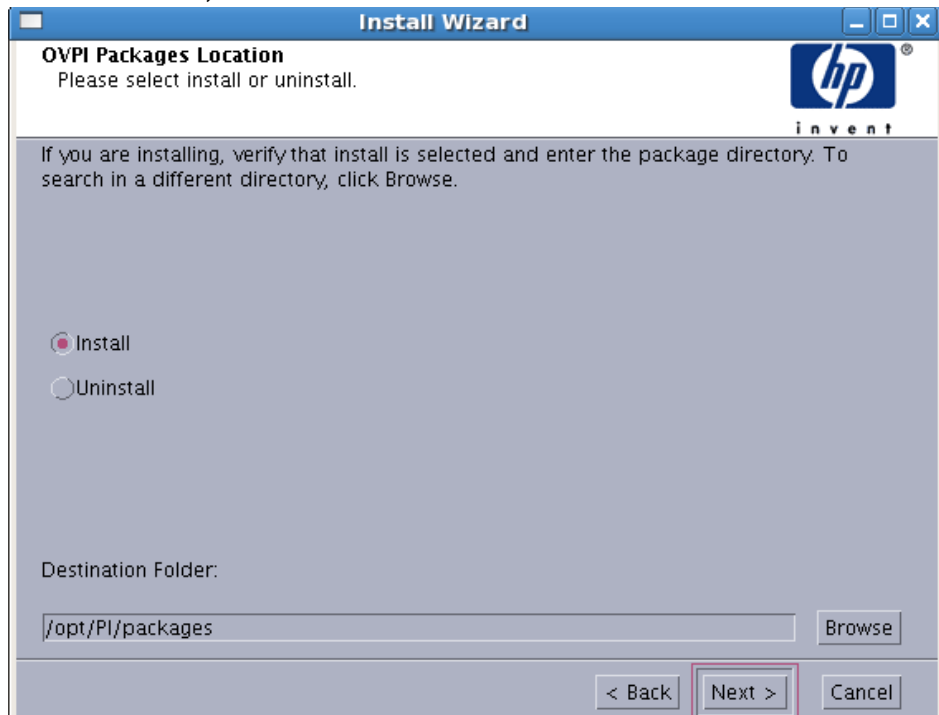
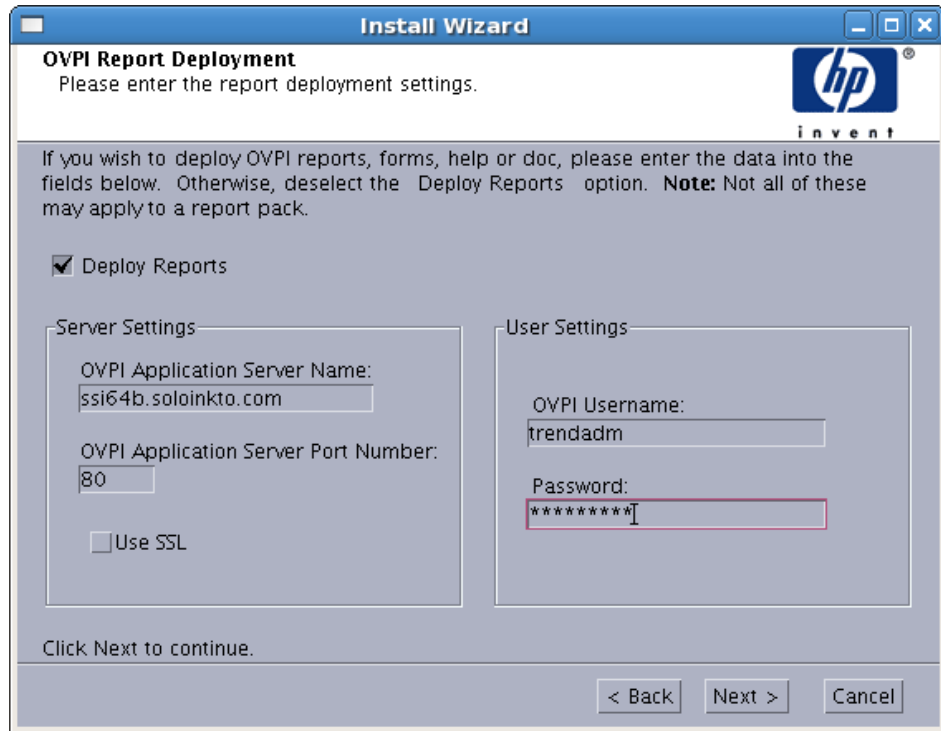


Figure 1 - Package Manager Wizard - Packages Location Screen.

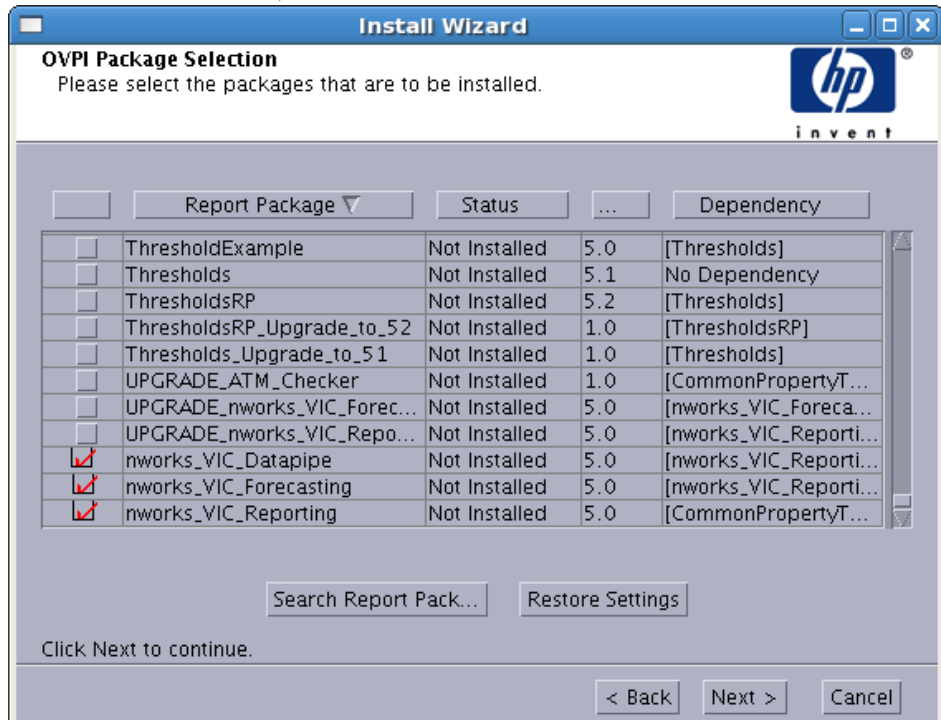
- Windows: by default, the destination folder is *C:\OVPI\packages*.
- Unix: by default, the destination folder is */opt/OVPI/packages*.
- On the **PI Report Deployment** screen, enter the **PI User Name** and **Password**, and then click **Next**



**Figure 2 - Package Manager Wizard - Report Deployment Screen.**

If the **Unsupported report packs** pop-up window appears, click OK to close it

- On the **PI Package Selection** screen, scroll down the page, locate *nworks\_VIC\_Datapipe*, *nworks\_VIC\_Forecasting* (not required), and *nworks\_VIC\_Reporting*, select all three for installation, and then click **Next**



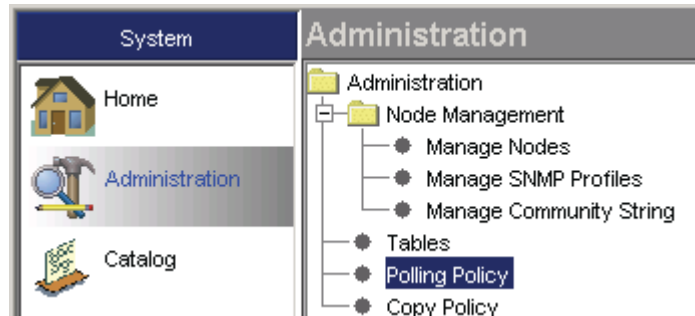
**Figure 3 - Package Manager Wizard - -Package Selection Screen**

- On the **PI Type Discover** screen, uncheck **Run OVPI Type Discover**, and then click **Next**.
- On the **Summary** screen click **Install** button.
- When the *Package Manager has successfully completed* information appears on the **Installation Progress** screen, click **Done** button.

## Add the VEM System to nworks Polling Group

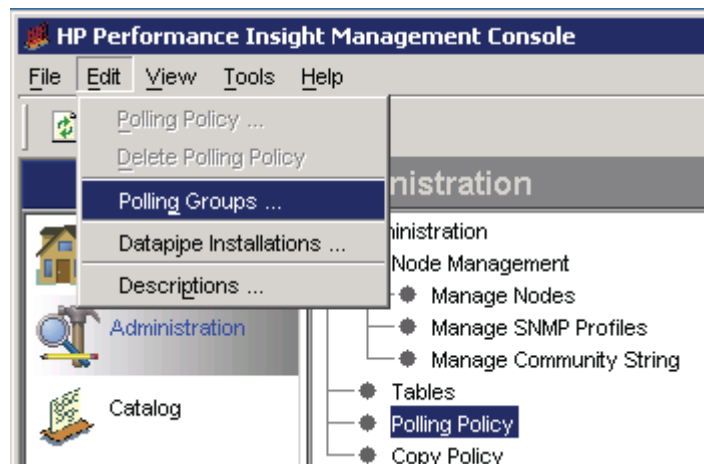
In order to gather performance data from the Collector component, the VEM must be added to the *nworks\_VIC polling* group. For each VEM in your environment, do the following:

- In the Performance Insight Management Console, select **Polling Policy**.



**Figure 4 - PI Management Console - Polling Policy**

- In the Management Console select **Edit > Polling Groups** from the main menu.



**Figure 5- PI Management Console - Polling Groups Menu Item**

- In the **Edit Polling Groups** dialog box:
  - In the **Select Kind of Group** list, select **All Nodes of the Same Type**.

- In the **Select Group to Poll From** list, locate and select *nworks\_VIC*, and then click **Edit**.

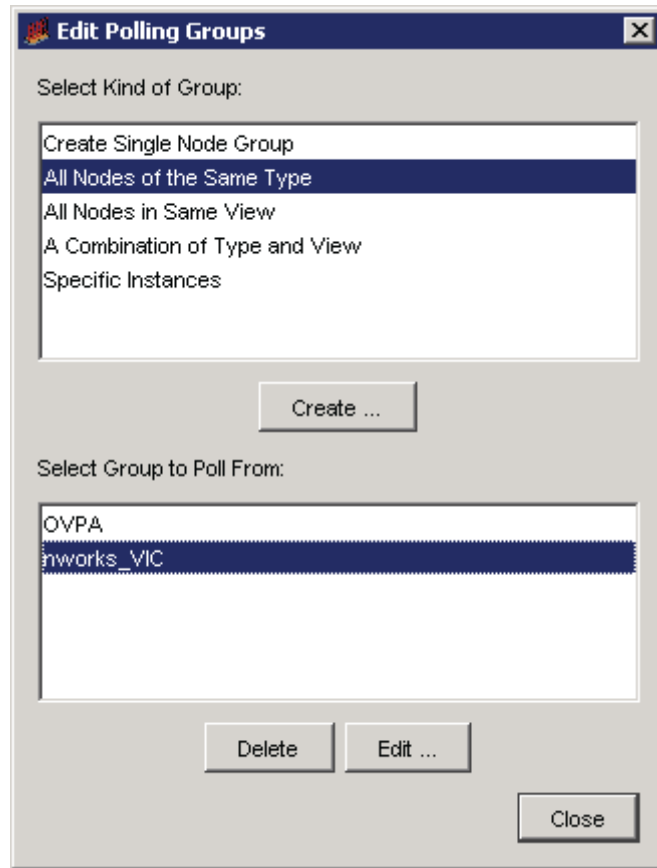


Figure 6 - PI Management Console - Edit Polling Groups

- In the **Edit Type Group** dialog box, locate and select all VEMs, and then add them to **Nodes in Group**. Once all VEMs have been placed in **Nodes in Group**, click OK to return to the **Edit Polling Groups** dialog box.

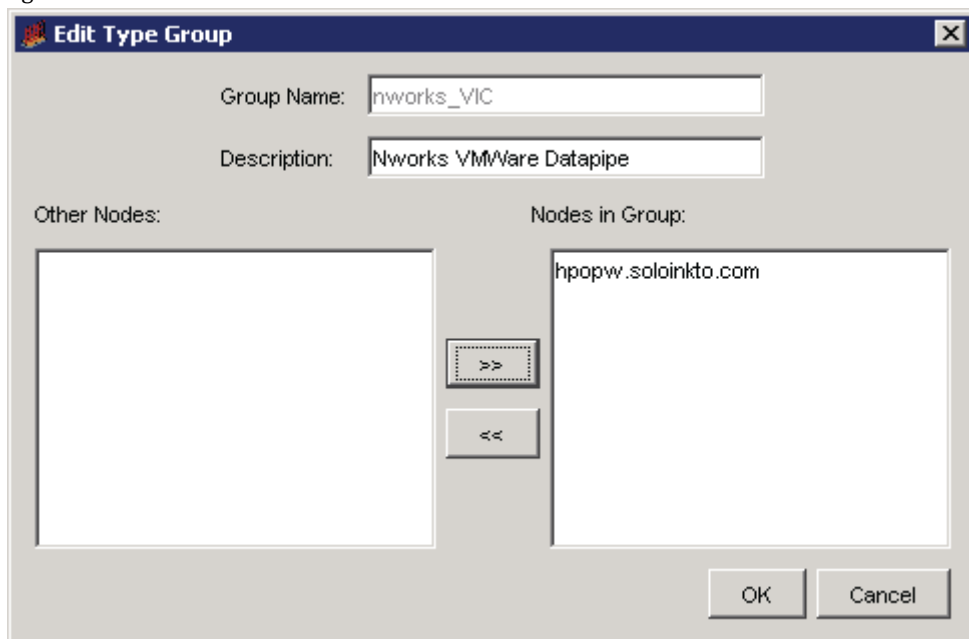


Figure 7 - PI Management Console - Edit Polling Groups, Edit Type Group

- In the **Edit Polling Groups** dialog box, click **Close** to complete the configuration.

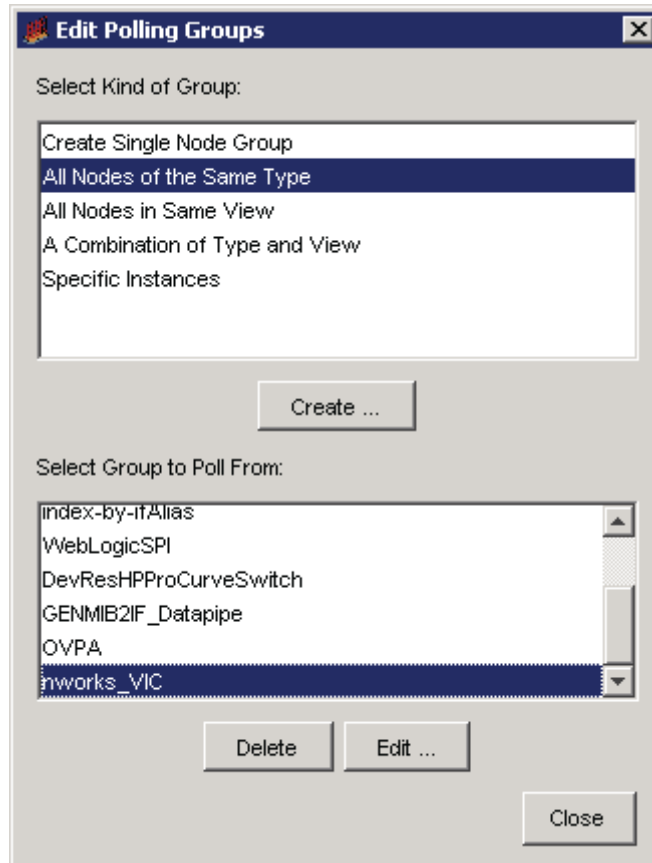


Figure 8 - PI Management Console - Edit Polling Groups, Editing Finished

## Update Trendtimer.sched

The trendtimer service gathers performance data and maintains the Performance Insight databases. The *trendtimer.sched* file is used to control the operation of trendtimer and must be configured in a specific manner in order for the PI Report Pack for VMware to gather 5-minute interval data.

Verify that the 60-minute job is configured to gather 5-minute interval data by performing the following:

- On the PI server, open the *trendtimer.sched* file.
  - On Windows server the file is located in the *C:/OVPI/lib* directory
  - On Unix server the file is located in the *opt/OVPI/lib* directory
- In the file locate the 60-minute line for *pa\_collect*:

```
5 - - {DPIPE_HOME}/bin/pa_collect -n -i 5 -E 5
10 - - {DPIPE_HOME}/bin/pa_collect -n -i 10 -E 10
15 - - {DPIPE_HOME}/bin/pa_collect -n -i 15 -E 15
20 - - {DPIPE_HOME}/bin/pa_collect -n -i 20 -E 20
60 - - {DPIPE_HOME}/bin/pa_collect -n -i 60
24:00+1:00 - - {DPIPE_HOME}/bin/pa_collect -n -i 1440
```

Figure 9 - Trendtimer.sched file

- Add `-E 5` if it does not exist (The syntax of `pa_collect` is case-sensitive, so make sure you type a capital letter `E`). Save the updated file.

```
5 - - {DPIPE_HOME}/bin/pa_collect -n -i 5 -E 5
10 - - {DPIPE_HOME}/bin/pa_collect -n -i 10 -E 10
15 - - {DPIPE_HOME}/bin/pa_collect -n -i 15 -E 15
20 - - {DPIPE_HOME}/bin/pa_collect -n -i 20 -E 20
60 - - {DPIPE_HOME}/bin/pa_collect -n -i 60 -E 5
```

Figure 10 - Trendtimer.sched file after editing

## Perform the First Data Collection

To perform the first data collection from the Virtual Infrastructure Collector, do the following:

- Make sure the PI timer is not running. Type in the command window:

Windows	Unix
Open a command window and type the following: <code>net stop trendtimer</code>	As root, type the following: <code>/etc/init.d/ovpi_timer stop</code> Or, as <code>trendadm</code> , kill the <code>trendtimer</code> process.

- Type the following in the command window:

```
pa_collect -i 60 -E 5 -K 20070701 -c 1
```

The `-K` parameter tells `pa_collect` the start date of the data. Adjust this date based on the timing of your installation and your environment

- Once `pa_collect` completes successfully, change to the PI scripts directory

Windows	Unix
If PI is installed in <code>C:\OVPI</code> type the following: <code>cd C:\OVPI\scripts</code>	If PI is installed in <code>/opt/OVPI</code> type the following: <code>cd /opt/OVPI/scripts</code>

Figure 10 -Trendtimer. sched file after editing

- You can now process the raw data into the summary tables. To produce the hourly, daily, weekly, and monthly summary data in the command window, type the following:

```
trend_proc -f nworks_vmwarespi_hourly_forced.pro
trend_proc -f nworks_vmwareSPI_daily_forced.pro
trend_proc -f nworks_vmwarespi_weekly_forced.pro
trend_proc -f nworks_vmwarespi_monthly.pro
```

```
C:\OUPI\scripts>pa_collect -i 60 -E 5 -K 20071115
C:\OUPI\scripts>trend_proc -f nworks_vmwarespi_hourly_forced.pro
C:\OUPI\scripts>trend_proc -f nworks_vmwarespi_daily_forced.pro
C:\OUPI\scripts>trend_proc -f nworks_vmwarespi_weekly_forced.pro
C:\OUPI\scripts>trend_proc -f nworks_vmwarespi_monthly.pro
C:\OUPI\scripts>
```

Figure 11 - Load Daily Summary

- Start the PI timer via command window.

This completes the installation of the Performance Insight VMware Report Pack.

## Verify that Installation is Complete

To verify that the installation is complete, do the following:

- Start the PI Management Console. In the console tree, select **Administration > Tables**.
- Under **Category**, select **VMware\_Datapipe**. You should see a list of tables for the datapipe collection. If the collection completed successfully, you should not see any data for the tables.

**Table Manager**

Table Manager tool lets you view information about various types of tables in the system. Viewing functions that are supported are sort in ascending or descending order, filter through category to time type, refresh, find, view column details etc.

Object Type:  Category:  Retention Profiles:  Table Types:  Time Types:

Category	Alias Name	SQL Name	Size (rows)	Keep active data for (days)	Keep archive data for (days)	Archive O
VMware_Datapipe	VMResourcePool	XRESOURCE_POOL	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMResourcePool	RRESOURCE_POOL	0	2		<input type="checkbox"/>
VMware_Datapipe	HardwareStatus	XHARDWARE_STATUS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_HardwareStatus	RHARDWARE_STATUS	0	2		<input type="checkbox"/>
VMware_Datapipe	SensorStats	XSENSOR_STATS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_SensorStats	RSENSOR_STATS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMGuestProps	XVMGUEST_PROPS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMGuestProps	RVMGUEST_PROPS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMGuestDiskStats	XVMGUEST_DISKS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMGuestDiskStats	RVMGUEST_DISKS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMGuestDiskProperties	XVMGUEST_DISKS_PROPS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMGuestDiskProperties	RVMGUEST_DISKS_PROPS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMGuestNetStats	XVMGUEST_NETS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMGuestNetStats	RVMGUEST_NETS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMGuestStats	XVMGUEST_STATS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMGuestStats	RVMGUEST_STATS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostCluster	XVMHOST_CLUSTER	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostCluster	RVMHOST_CLUSTER	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostCPUStats	XVMHOST_CPUS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostCPUStats	RVMHOST_CPUS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostDiskStats	XVMHOST_DISKS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostDiskStats	RVMHOST_DISKS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostProperties	XVMHOST_PROPS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostProperties	RVMHOST_PROPS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostNetStats	XVMHOST_NETS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostNetStats	RVMHOST_NETS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostStats	XVMHOST_STATS	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostStats	RVMHOST_STATS	0	2		<input type="checkbox"/>
VMware_Datapipe	VMHostDataStoreStats	XVMHOST_DATASTORE	0	2		<input type="checkbox"/>
VMware_Datapipe	rate_VMHostDataStoreStats	RVMHOST_DATASTORE	0	2		<input type="checkbox"/>

Figure 12 - VMware\_Datapipe Table

- Under **Category**, select **VMware\_Reporting**. You should see data in the **Size (rows)** column.

**Table Manager**

Table Manager tool lets you view information about various types of tables in the system. Viewing functions that are supported are sort in ascending or descending order, filter through category to time type, refresh, find, view column details etc.

Object Type:  Category:  Retention Profiles:  Table Types:  Time Types:

Category	Alias Name	SQL Name	Size (rows)	Keep active data for (days)	Keep archive dat
VMware_Reporting	R_hardware_status	R_HARDWARE_STATUS	2563	2	
VMware_Reporting	R_resource_pool	R_RESOURCE_POOL	7909	2	
VMware_Reporting	R_sensor_stats	R_SENSOR_STATS	10019	2	
VMware_Reporting	R_vmquest_disks	R_VMGUEST_DISKS	8971	2	
VMware_Reporting	R_vmquest_disks_props	R_VMGUEST_DISKS_PROPS	8751	2	
VMware_Reporting	R_vmquest_nets	R_VMGUEST_NETS	9862	2	
VMware_Reporting	R_vmquest_stats	R_VMGUEST_STATS	8877	2	
VMware_Reporting	R_vmhost_cluster	R_VMHOST_CLUSTER	798	2	
VMware_Reporting	R_vmhost_cpus	R_VMHOST_CPUS	3728	2	
VMware_Reporting	R_vmhost_datastore	R_VMHOST_DATASTORE	2097	2	
VMware_Reporting	R_vmhost_disks	R_VMHOST_DISKS	4194	2	
VMware_Reporting	R_vmhost_nets	R_VMHOST_NETS	2866	2	
VMware_Reporting	R_vmhost_props	R_VMHOST_PROPS	1165	2	
VMware_Reporting	R_vmhost_stats	R_VMHOST_STATS	1264	2	
VMware_Reporting	R_VMPROCLOG	R_VMPROCLOG	15	7	
VMware_Reporting	SD_hardware_status	SD_HARDWARE_STATUS	121	2	
VMware_Reporting	Daily_Summary_Resource_Pool	SD_RESOURCE_POOL	374	90	
VMware_Reporting	SD_sensor_stats	SD_SENSOR_STATS	473	2	
VMware_Reporting	Daily_Summary_VMGUEST_Disks	SD_VMGUEST_DISKS	435	90	
VMware_Reporting	Daily_Summary_VMGUEST_Disk_Properties	SD_VMGUEST_DISKS_PROPS	423	90	
VMware_Reporting	Daily_Summary_VMGUEST_Nets	SD_VMGUEST_NETS	478	90	
VMware_Reporting	Daily_Summary_VMGUEST_Stats	SD_VMGUEST_STATS	426	90	
VMware_Reporting	Daily_Summary_Host_Cluster	SD_VMHOST_CLUSTER	38	90	
VMware_Reporting	Daily_Summary_VMHOST_CPUs	SD_VMHOST_CPUS	176	90	
VMware_Reporting	Daily_Summary_VMHOST_DataStore	SD_VMHOST_DATASTORE	99	90	
VMware_Reporting	Daily_Summary_VMHOST_Disks	SD_VMHOST_DISKS	198	90	
VMware_Reporting	Daily_Summary_VMHOST_Nets	SD_VMHOST_NETS	136	90	
VMware_Reporting	Daily_Summary_VMHOST_Properties	SD_VMHOST_PROPS	55	90	
VMware_Reporting	Daily_Summary_VMHOST_Stats	SD_VMHOST_STATS	60	90	
VMware_Reporting	SH_hardware_status	SH_HARDWARE_STATUS	2563	2	
VMware_Reporting	Hourly_Summary_Resource_Pool	SH_RESOURCE_POOL	7909	30	
VMware_Reporting	SH_sensor_stats	SH_SENSOR_STATS	10019	2	
VMware_Reporting	Hourly_Summary_VMGUEST_Disks	SH_VMGUEST_DISKS	8971	30	

Figure 13 - VMware\_Reporting Table

- Open the viewer. Expand the **nworks\_VIC\_Reporting** folder to see the available reports.

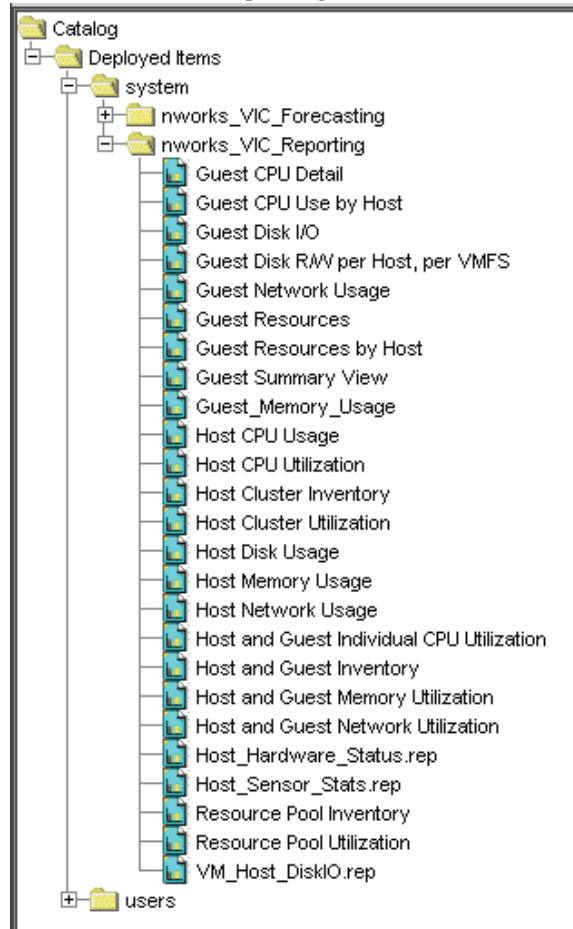


Figure 14 -nworks\_VIC\_Reporting Folder

## Forecasting

Perform the forecasting aggregation after the data has been aggregated within the nworks Report Pack. This will ensure that the forecasting tables are populated with the data collected in the prior commands. Use the following command:

```
trend_proc -fnworks_VMWareSPI_Daily_forecast.pro
```

To verify that the installation is complete, start the PI Management Console, in the console tree, select **Administration > Tables**. Under **Category**, select **VMWare\_Forecasting**. You should see data in the **Size (rows)** column.

Category	Alias Name	SQL Name	Size (rows)	Keep active data for (days)	Keep archive data for (days)
VMware_Forecasting	Forecast_VM_Resource_Pool	SD42SD_RESOURCE_POOL_FORE	35	150	150
VMware_Forecasting	Forecast_VMGuest_disks_props	SD42SD_VMGUEST_DISKS_PROPS_FOR	46	150	150
VMware_Forecasting	Forecast_VMGuest_stats	SD42SD_VMGUEST_STATS_FORE	43	150	150
VMware_Forecasting	Forecast_VMHost_cluster	SD42SD_VMHOST_CLUSTER_FORE	4	150	150
VMware_Forecasting	Forecast_VMHost_CPUs	SD42SD_VMHOST_CPUS_FORE	16	150	150
VMware_Forecasting	Forecast_VMHost_datastore	SD42SD_VMHOST_DATASTORE_FORE	9	150	150
VMware_Forecasting	Forecast_VMHost_stats	SD42SD_VMHOST_STATS_FORE	6	150	150

Figure 15 -VMware\_Forecasting Table

# Upgrading the PI VMware Report Pack From 4.x to 5.x

Follow the steps shown below to upgrade the Performance Insight VMware Report Pack from version 4.x to version 5.0 on a Windows-based PI server.

The upgrade makes changes to:

- The mapping procedures for the datapipe
- Summarizations
- Table alias names
- Additional metrics added

The majority of the changes involve the mapping procedures contained within the datapipe.

Prior to upgrading, you should perform a full backup and test the backup to ensure it works. This should consist of backing up both the `$DPIPE_HOME` directory and a full backup of the database.

## Uninstall the 4.x nworks Datapipe

- Open **Package Manager** wizard as described in the *Install the PI Report Pack* on page 6.
- On the **Packages Location** screen of the wizard, select **Uninstall**, and then click **Next**.
- On the **Report Undeployment** screen, deselect **Undeploy Reports** and then click **Next**.

**Note:** It is not necessary to remove reports in this step. However, if you want to remove reports, leave **Undeploy Reports** selected, and provide login information.

- On the **Package Selection** screen, select **nworks\_VIC\_Datapipe**, version 4.x, and then click **Next**.



Figure 16 - Package Manager Wizard - Package Selection

- On the **Summary** screen, in the **Package Selection** section, confirm that only *nworks\_VIC\_Datapipe* is selected, and then click **Uninstall**.

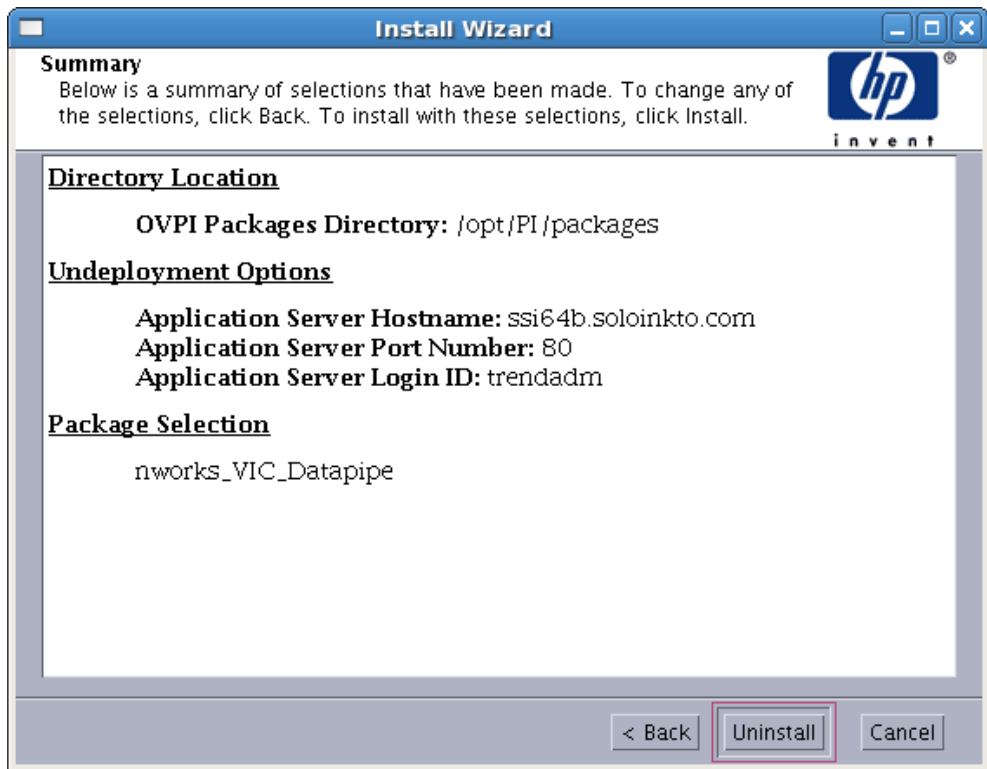


Figure 17- Package Manager Wizard - Summary

- When the message *Report Package: Completed* appears on the **Installation Progress** screen, click **Done**.

## Move the 4.x Report Pack

Once the 4.x datapipe has been removed, you can move the *\$DPIPE\_HOME/packages/nworks\_VIC* directory out of the *\$DPIPE\_HOME/packages* directory. This will prevent confusion when performing the subsequent installation.

For example, move the *nworks\_VIC* directory from here: *\$DPIPE\_HOME/packages/nworks\_VIC*. To here and rename it as: *\$DPIPE\_HOME/old<date>nworks\_VIC*.

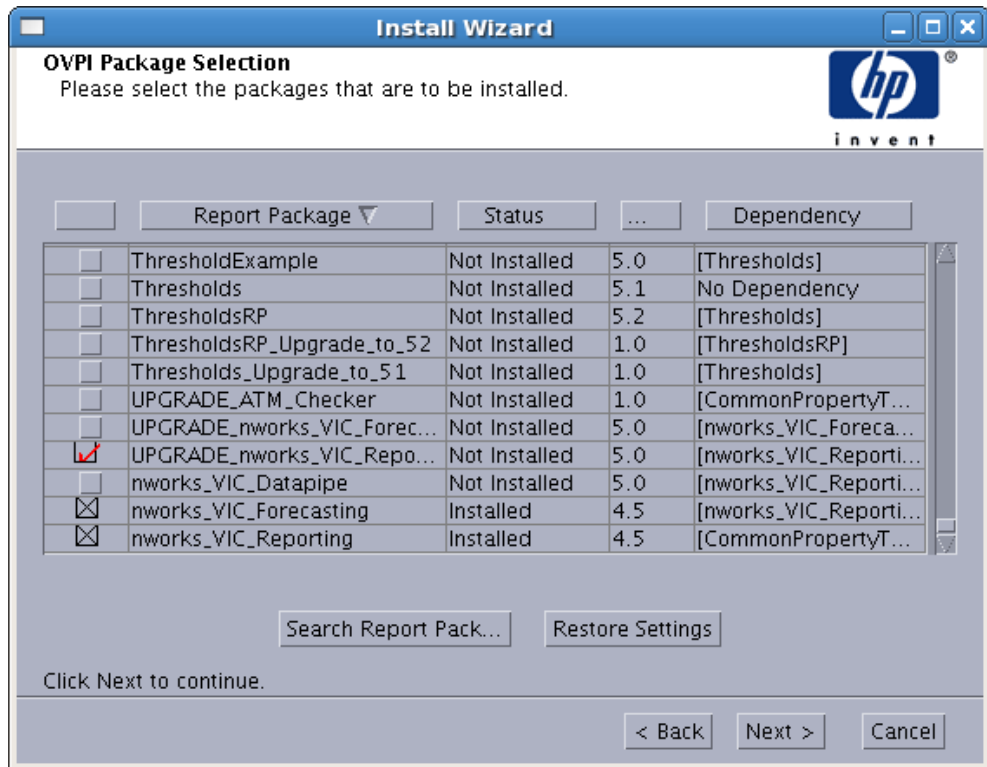
## Unpack the 5.x Report Pack

Unpack the *VMSPi* Report Pack into *\$DPIPE\_HOME/packages* or a temporary directory. You must ensure the *nworks\_VIC* directory's final destination is in *\$DPIPE\_HOME/packages*.

## Install the 4.x to 5.x Upgrade for Reporting

- **Package Manager** wizard as described in the *Install the PI Report Pack* on page 6.
- On the **Packages Location** screen of the wizard, select **Install**, and then click **Next**.
- On the **Report Deployment** screen of the wizard, uncheck **Deploy Reports** and then click **Next**.

- On the **Package Selection** screen, select **UPGRADE\_nworks\_VIC\_Reporting**, version 5.x, and then click **Next**.



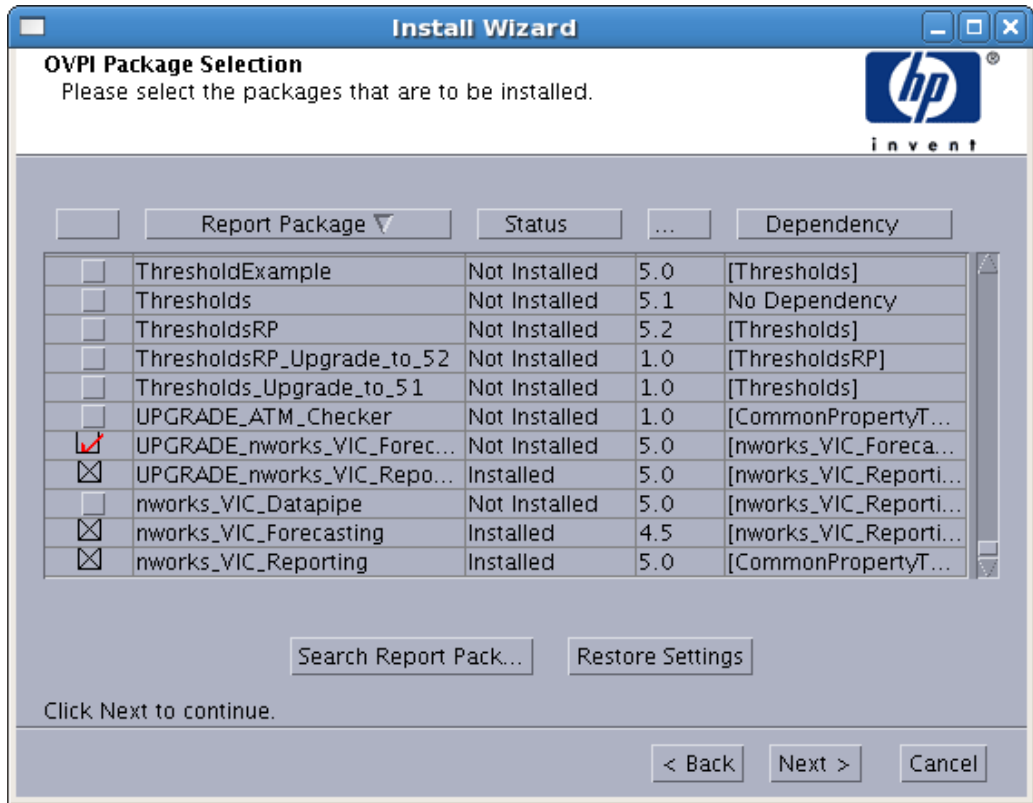
**Figure 18 - Package Manager Wizard - Package Selection Screen**

- On the **Type Discover** screen, uncheck **Run OVPI Type Discover** since no new types were added. Then click **Next**.
- On the **Summary** screen, in the **Package Selection** section, confirm that only **UPGRADE\_nworks\_VIC\_Reporting 4\_x\_To\_5\_x** is selected, and then click **Install**.
- On the **Installation Progress** screen, verify that the message *Report Package: Completed* appears and then click **Done**.

## Install the 4.x to 5.x Upgrade for Forecasting

- Repeat the first steps from the section above. On the **Report Deployment** screen, leave **Deploy Reports** selected, and then click **Next**.

- On the **Package Selection** screen, select **UPGRADE\_nworks\_VIC\_Forecasting**, version 5.x, and then click **Next**.



**Figure 19 - Package Manager Wizard - Package Selection Screen**

- On the **Summary** screen, in the **Package Selection** section, confirm that only **UPGRADE\_nworks\_VIC\_Forecasting\_4\_x\_To\_5\_x** is selected, and then click **Install**.
- On the **Installation Progress** screen, verify that the message *Report Package: Completed* appears and then click **Done**.
- Once you successfully upgraded the Forecasting report pack you must remove the *Guest VCPU Forecast by DTT* report to avoid errors, because the metrics used for the report are no longer collected.
  - Open a browser and go the HP Performance Insight log on screen and click **Log On**. Enter your user name and password, and then click **OK**. The Web Access Server screen opens.

- Navigate to the **Catalog > System > nworks\_VIC\_Forecasting** folder. Locate *Guest VCPU Forecast by DTT* and check the box to the right of the name.

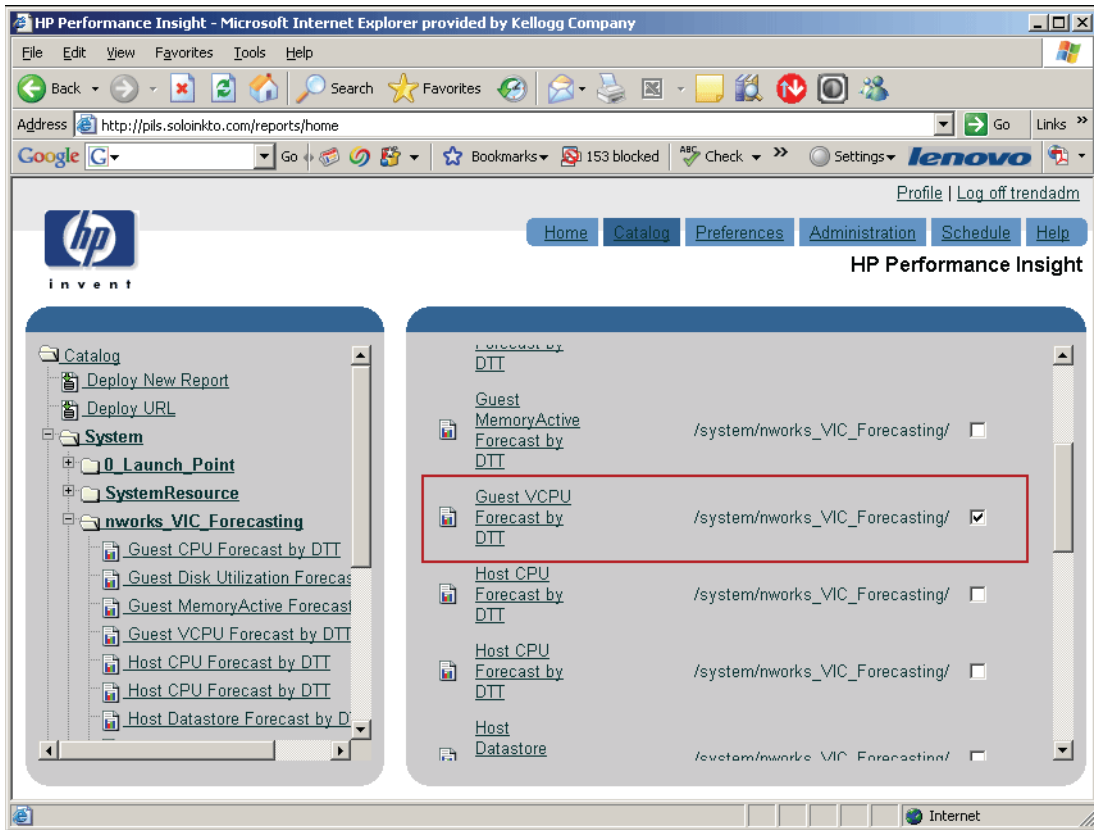


Figure 20 - nworks\_VIC\_Forecasting Folder

- Scroll to the bottom of the page and click **Undeploy**. Click **OK** in the confirmation window.
- After successful undeployment you will see the following screen:

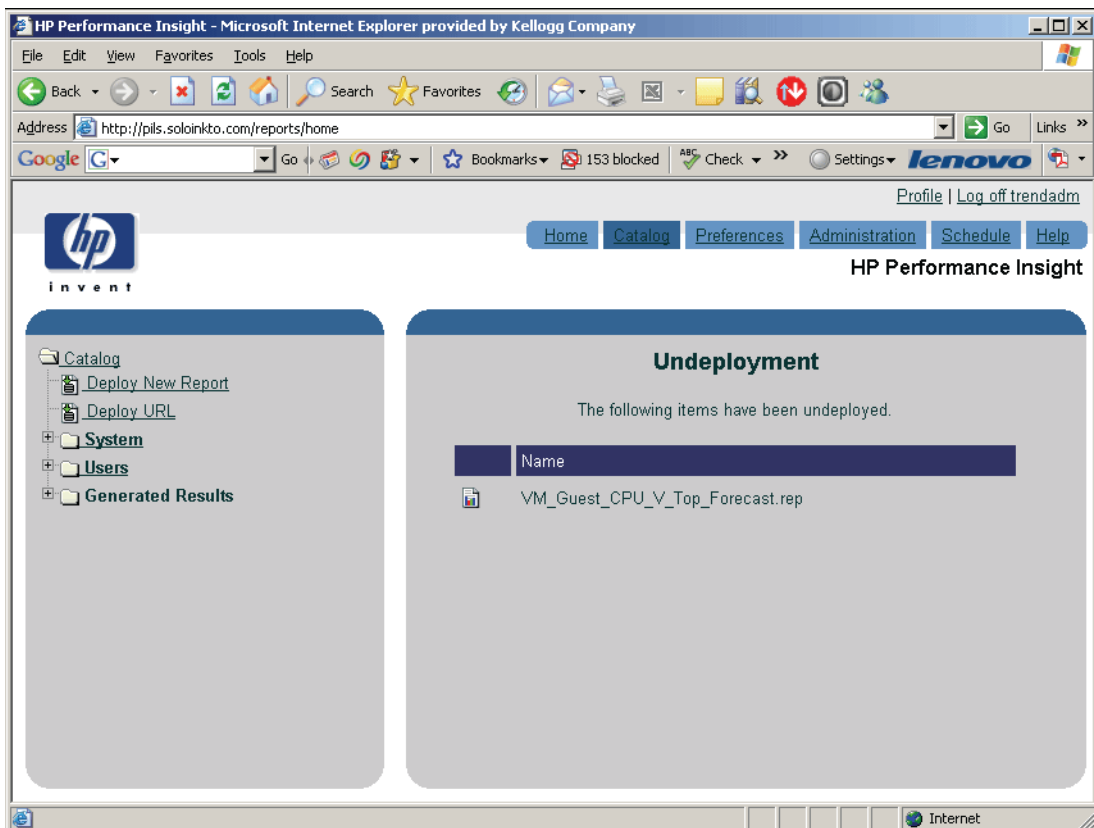
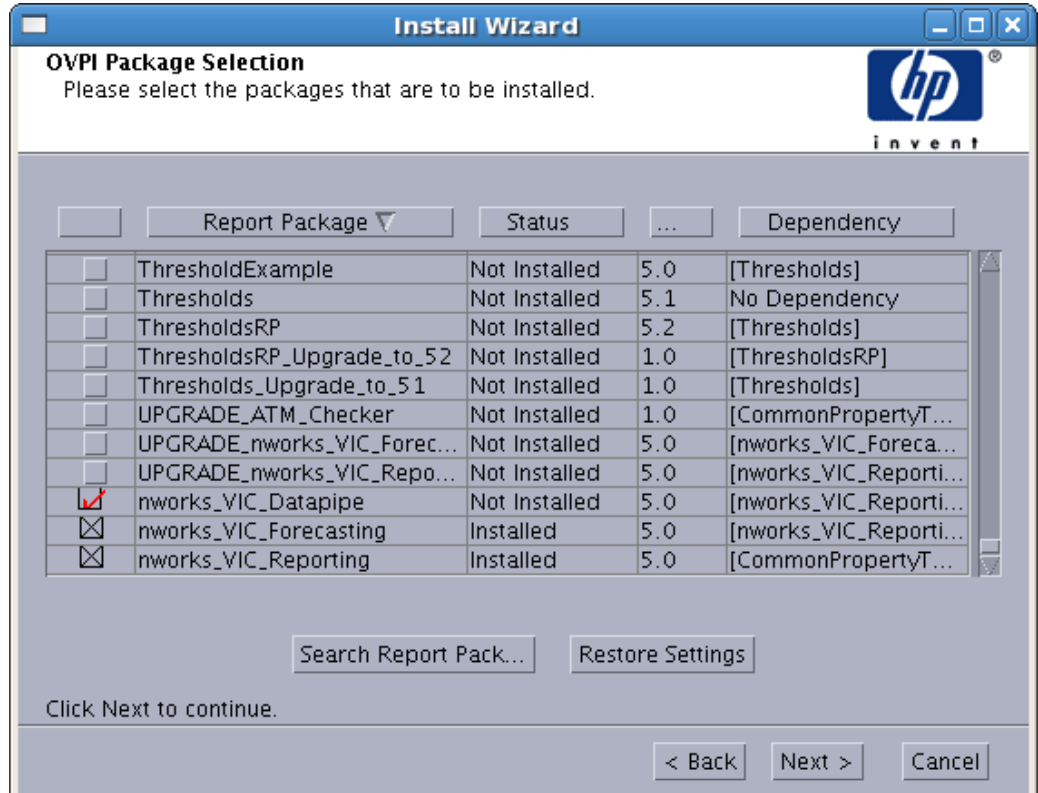


Figure 21 - Undeployment Confirmation Screen

## Install the 4.x to 5.x Datapipe Upgrade

- Repeat the first steps from the *Install the PI Report Pack* on page 6. On the **Package Selection** screen, select *nworks\_VIC\_Datapipe*, version 5.x, and then click **Next**.



**Figure 22 - Package Manager, Package Selection Screen**

- On the **Type Discover** screen, deselect **Run OVPI Type Discover**, since no new types were added. Then click **Next**.
- On the **Summary** screen, in the **Package Selection** section, confirm that only **nworks\_VIC\_Datapipe** is selected, and then click **Install**.
- On the **Installation Progress** screen, verify that the message *Report Package: Completed* appears and then click **Done**.